



THE  
CLEARING AND COLLECTION  
OF CHECKS

By  
WALTER EARL SPAHR, Ph. D.  
Assistant Professor of Economics  
New York University

---

With Introduction by  
H. PARKER WILLIS, Ph. D.  
Professor of Banking, Columbia University

NEW YORK  
THE BANKERS PUBLISHING CO.  
1926

TO WHOM IT MAY CONCERN

HC-2306  
56

Copyright 1926  
The Bankers Publishing Company

PRINTED IN THE U. S. A. BY  
THE WARREN PUBLICATIONS PRESS  
CAMBRIDGE, MASS.

## PREFACE

Among the few questions in the field of currency and banking which have not received a thorough and systematic treatment, there is none of greater importance than that of the clearing and collection of checks. It seems remarkable, when one considers the important part deposit currency plays in everyday life, that this significant aspect of currency and banking should be neglected so long. Checks and drafts, as evidences of deposits in the process of transfer, are the principal connecting links between the individual and his bank. Not only the individual, but practically every department of a bank, comes in contact with them on every side. Indeed, the principal function of commercial banks today is to receive and create deposits and to provide the proper mechanism for their transfer and collection. But even though the questions involved in the clearing and collection of checks are of such importance to the individual and to the bank, there is probably no subject in the field of currency and banking to which so much vagueness attaches. This is true not only for the layman but for the great majority of persons directly connected with banks.

Perhaps the most important controversy in the currency and banking field at present is the par collection controversy and yet relatively few people are in a position to pass a mature judgment on the merits of the questions involved. It is the purpose of this book to show not only the manner of origin and actual functioning of our present clearing and collection system, but to examine the merits of the various questions involved in the par collection controversy. As a result this book deals not only with the historical and theoretical aspects of our clearing and collection system, but with its practical operation as well and should meet the needs of the instructor, student, banker, and layman. The material has been arranged with this purpose in mind. The last chapter gives a summarized view of the clearing and collection system as it operates today and is designed primarily for those persons who have little time or inclination to inquire into the theoretical and controversial aspects of the question but who wish to get a picture of the system as it is functioning at present. For the great majority

of readers, however, the other chapters will be found necessary to give an adequate view of the problems involved. The writer has felt a great need for such material, not only in his university classes, but in classes composed entirely of persons connected with banks, and believes the book will fulfill a great need felt by instructors and students.

In making recognition of the valuable suggestions which he has received in the preparation of this book, the writer wishes to make special mention of his obligations to Professor H. Parker Willis of Columbia University; to Professors James D. Magee and Rinehart J. Swenson of New York University; to Dean Chester A. Phillips of the University of Iowa; to Dr. W. Randolph Burgess, Mr. Carl Snyder, Mr. Adolph J. Lins, and Miss Lucile Bagwell of the Federal Reserve Bank of New York; and to Mr. Clarence E. Bacon of the New York Clearing House. While the writer's obligations to others, especially to those bankers who have written long and carefully-prepared letters to the writer in response to his queries, are set forth clearly in the footnotes, he wishes to make special acknowledgment of his indebtedness to Mr. Charles A. Peple of the Federal Reserve Bank of Richmond; to Mr. H. F. Strater of the Federal Reserve Bank of Cleveland; and to Messrs. Walter W. Stewart, Walter L. Eddy and J. C. Noell, members of the staff of the Federal Reserve Board. The writer is also deeply indebted to his wife, Beulah, for her suggestions and help in reading proof.

W. E. S.

New York City, May, 1925.

## INTRODUCTION

After more than a decade of experience in developing the Federal Reserve System, American bankers are beginning to realize that the complete reform of our banking methods cannot be attained without extensive readjustment of existing practices and particularly the recognition of certain problems of a general nature whose solution must be approached upon the lines of public welfare rather than of individual business advantage.

Students of banking had already reached these conclusions; and some few of them have within the past few years given up the older type of semi-political discussion of banking legislation and the semi-dialectic analysis of abstract theories of prices and values. In their place, there have begun to come forward a series of fact-analyses designed to place current problems in their proper historical setting, and at the same time to supply the materials for a solution of doubtful or debatable questions of management. A new kind of banking study and investigation is thus being slowly developed; and the results of it are finding their way to the public in the form of monographs on fundamental questions growing out of the banking inquiry and experience of the decade past.

The Federal Reserve System has naturally attracted a large share of the attention of men with fundamental training and scientific outlook such as to enable them to appreciate banking problems from a national standpoint. Several well-conceived and thoroughly-prepared monographs dealing with varying phases of the System have already made their appearance. Among them may be mentioned recent inquiries into the fiscal functions of Federal reserve banks, into the discount policy of the Federal Reserve System, and into details of practice and method which have been analyzed from a variety of standpoints. The present volume by Dr. W. E. Spahr deals with one of the more technical and difficult phases of Federal reserve banking and seeks to set forth the elements of this branch of the problem in the detail that they deserve. Necessarily a study of the clearance and collection system of the Federal reserve banks must view the whole problem from a broad

historical standpoint, yet must be willing to take into careful account the contemporary phases, both legal and technical, in which the problem presents itself at the present time. Dr. Spahr has furnished exactly this kind of background, and has provided a wealth of material for the careful study of a branch of banking practice which has been too much neglected. He has, moreover, furnished the underlying basis for the analysis of a banking problem which in its theoretic aspects has thus far been given scarcely any weight save by a very few thinkers, of whom the late Professor Dunbar of Harvard was by far the most outstanding.

When the Federal Reserve Act was first projected, it was sought to incorporate into that measure provision for the exercise of clearing powers, in order that the System might become a Reserve System in truth as well as in name. It was recognized that, without these powers, the reserve banks would become merely the holders of dead balances carried for the member banks without any service to them; and, since the business public abhors an idle or unnecessary institution, just as nature is traditionally said to abhor a vacuum, it would not submit long to the needless burden created by such emergency institutions designed to "put out financial fire." It was realized also that such measures as the Aldrich bill, adopted by the National Monetary Commission but apparently without thought on the part of its framers regarding any system of collection and clearance, would have met only a very small fraction of the necessities of the situation, and would consequently have corrected but a few of the fundamental faults to be found in Federal reserve banking. Hence the effort, early in the history of the System, to make use of the broad clearing authority which was finally granted by the law itself for the purpose of creating a unified system of remittance and credit applicable in every part of the United States. The undertaking seems today to have been obviously necessary; yet at the time those who sought to secure success for it were obliged almost to fight for their reputations, and could maintain themselves and their cause only with the utmost difficulty.

It is a great tribute to the real service of the Federal Reserve System that it should have succeeded in some measure in overcoming this kind of hostility both from within and without its own ranks, and should have advanced as far as it has in the task of exemplifying what can be done for a nation by harmonizing its methods of collecting, clearing and remitting funds. It is not too much to say that, during the participation of the United States in

the war, the clearing mechanism which had been provided, both in the form of the Gold Settlement Fund and in that of local clearing systems in the several districts, was absolutely indispensable to the successful functioning of Treasury finance. Without it, undoubtedly, our system of financing the war would have broken down, funds would have become congested in various parts of the country and would have been correspondingly scarce elsewhere, banking embarrassment would have been common, and the tremendous load of war finance, eventually borne with considerable success, and with a minimum of suffering, would have crushed the nation's finances to the earth. And yet this conspicuous service could not be allowed to go on undisturbed. Ingratitude, more strong than traitors' arms, has more or less vanquished those who, aided by the urgent necessities of the war, had attained a partial success in installing a national system of collection and clearance. State banks in various parts of the country, irritated and aggravated as they have been by tactless methods employed by unwise Federal reserve bankers, have sought and have obtained decisions from the courts which, while ambiguous and doubtful in their meaning, have none the less aided in breaking up the plan that had already been worked out. They have thus already introduced in many parts of the country a wide diversity of practice and of method which largely interferes with the effective application of the System as first conceived.

It may be doubted whether we shall be willing long to submit to this kind of backward evolution. There are many bankers who perceive the danger of the further loss of ground, although they hardly know how to correct the situation which has thus grown up. A part of their embarrassment and difficulty is due to lack of knowledge. There is a widespread propaganda against national collection and clearance, and numerous assertions based upon perverted or erroneous ideas of the function of collection and clearance have been widely disseminated. Dr. Spahr's volume traces this lengthy and entangled history, and sets forth dispassionately and without bias the various steps in the evolution of collection and clearance systems during recent years. It thus renders a decided service to the banker who is still seeking light with regard to his own business interest in the matter of clearance, just as it provides him with the material upon which to make up his mind regarding the public aspects of the whole question in the abstract.

A reading of this volume should accordingly inform many professional students of factors in the clearance situation, and of



phases in the history of the development of the check as a medium of exchange, of which they have heretofore been ignorant, or which at all events they have ignored. The author has laboriously and carefully followed the subject back to its historic beginnings, just as he has painstakingly unravelled the threads of recent legislation and litigation which have tended to confuse the contemporary aspects of the whole problem.

Dr. Spahr's book may thus be recommended, without reservation both to the banker who needs the information it contains for his professional information, to the academic student of banking and currency who has long sought for a compact body of available data on this subject, and to the legislator who must recognize the pressing character of the entire collection question as well as the probability that he must before long act upon it in practice in one way or another. It should be widely read for its own value. But it should receive a still wider attention, and it should be still more extensively studied, as an introduction to the practical problem of providing and rendering permanent an effective system for the clearance and collection of checks throughout the United States, and hence of economizing our specie and rendering effective our whole system of banking.

H. PARKER WILLIS.

## CONTENTS

---

	Page
<b>CHAPTER I—NATURE, ORIGIN, AND USE OF CHECKS</b>	
The nature of checks .....	1
The advantages of checks .....	6
Limitations of checks .....	6
Need for a separate legal code for checks.....	7
The increasing use of checks .....	8
The origin of checks .....	9
The check originated in Italy and Sicily .....	10
The Bank of Venice .....	10
The Bank of St. George .....	12
Checks in Italy today .....	18
The check in Germany .....	14
The check in Holland .....	15
The Bank of Amsterdam .....	16
The check in England .....	18
Checks in France .....	20
The check in Austria .....	22
Checks in Hungary .....	23
Checks in Switzerland .....	23
Checks in Norway, Sweden, and Denmark .....	24
Checks in Belgium .....	26
The check in Spain and Portugal .....	26
The check in Russia .....	27
Checks in the Republics of Finland and Latvia .....	28
Checks in southern European countries .....	29
Checks in China, Japan, and India .....	30
Checks in Canada .....	32
Checks in Mexico .....	32
The use of checks in South America .....	33
Notes and deposits in the leading countries of the world in 1918 .....	36
<b>CHAPTER II—USE OF CHECKS IN THE UNITED STATES PRIOR TO 1863</b>	
The use of checks during the Colonial period.....	37
The development of banking during the Colonial period.....	37

## CONTENTS

	Page
Origin of checks, 1681 .....	38
Why deposit currency did not develop in the Colonies.....	40
Paper money and banking schemes of the Colonies.....	41
Growth of deposit currency after the Revolution.....	48
The extent to which checks were used; attempts to determine importance .....	45
Deposits as an indication of the extent to which checks were used .....	47
The use of checks, 1791-1811 .....	51
Use of checks, 1811-1816 .....	54
The second United States Bank and the use of checks, 1816-1836 .....	56
The general banking and currency situation, 1816-1836.....	58
The use of checks, 1836-1868 .....	60

### CHAPTER III — CLEARING AND COLLECTION OF CHECKS PRIOR TO 1868

Meaning of clearing and collection of checks.....	67
The origin of the practice of clearing .....	69
The origin of clearing houses .....	70
Collection of checks before the days of the clearing house...	71
The Suffolk principle of par collection .....	73
Banks must redeem their notes at once and in full when presented over the counter .....	74
The case of the Suffolk Bank v. the Lincoln Bank, 1821.....	75
The later years of the Suffolk System.....	78
Other methods of note collection .....	78
Gallatin recommended a clearing system for checks, 1841....	79
The New York City Clearing House, 1858 .....	80
The clearing house in the panic of 1857.....	82

### CHAPTER IV—THE CLEARING AND COLLECTION SYSTEM, 1868-1914

The growth of deposit currency .....	84
Inquiries to determine the importance of checks.....	87
The relation of the clearing and collection system to the system of reserves .....	96
Practice under the National Banking System. Local exchanges without clearing houses .....	98
Local exchanges with clearing houses .....	99
Inter-community clearing and collection .....	99
The defects of the old clearing and collection system.....	101
Excessive charges .....	102
Circuitous routing of checks .....	108

CONTENTS

xi  
Page

Remittance charges as a cause of circuitous routing. Legality of such charges .....	108
Typical illustrations of circuitous routing of checks.....	105
Evil effects of circuitous routing of checks.....	108
The "float"; giving immediate credit for out-of-town checks..	109
Paying interest on uncollected funds.....	110
The carrying of compensating balances with collecting banks solely for the purpose of obtaining par territory.....	110
The maintenance of reserve balances with banks for the sole purpose of getting items on which to charge exchange..	111
Excessive gold movements .....	112
The absorption of collection charges by collecting banks....	112
1. Who bore the cost? .....	112
2. The items of cost in collecting checks.....	113
3. Who should bear the cost? .....	117
Proposals for reform .....	119
Attempts at reform .....	124
The Sedalia, Missouri, plan, 1895 .....	124
The New York City plan, 1899 .....	125
The Boston country clearing house, 1899.....	126
County clearing houses .....	129

CHAPTER V—SPECIAL FUNCTIONS OF CLEARING HOUSES PRIOR TO 1914

Special functions of the clearing house .....	131
Extending loans to the government .....	131
Rendering assistance to members .....	132
Fixing uniform rates of interest on deposits.....	134
Fixing uniform rates of exchange and of charges on collections .....	134
Fixing reserve requirements .....	135
Examination of member banks by clearing houses.....	135
Gathering credit data for members.....	136
The issuing of public statements .....	137
Annual conferences .....	137
The issue of clearing house loan certificates. Their nature...	138
The use of clearing house loan certificates in 1860.....	140
The New York issues of 1861, 1863, and 1864.....	144
Clearing house loan certificates and the panic of 1873.....	145
Clearing house loan certificates in 1879, 1884, 1890, and 1891	146
Clearing house loan certificates and the panic of 1898.....	147
Loan certificates in 1895 and 1896 .....	149
Loan certificates and other currency substitutes issued during the panic of 1907 .....	150
Clearing house loan certificates in large denominations.....	151

	Page
Clearing house loan certificates in small denominations for general circulation .....	153
Clearing house checks in convenient denominations for general circulation .....	154
Cashiers' checks issued in convenient denominations and payable only through the clearing house .....	154
Certificates of deposit .....	155
Drafts on reserve banks .....	156
Pay checks payable to bearer .....	156
Official encouragement of suspension .....	158
Limiting the size of checks to be paid.....	159
The practice of requiring the larger customers to mark their checks "Payable only through the Clearing House".....	159
The plan of Group No. 2 of the Ohio Bankers' Association..	159
A general summary .....	160
Did the currency substitutes violate the 10 per cent. tax provision of the Act of 1865? .....	161
Clearing house loan certificates in 1914.....	161

## CHAPTER VI—HISTORY OF THE FEDERAL RESERVE CLEARING AND COLLECTION SYSTEM

Legal provisions .....	164
The institution of the system .....	165
Relation of the voluntary system to decentralized reserves...	166
Initial steps preceding the voluntary system.....	167
Inter-district clearing system precedes voluntary intra-district system; the Gold Settlement Fund.....	169
The establishment of the Federal Reserve Agents' Fund....	170
The voluntary intra-district system, June, 1915-July, 1916..	171
The voluntary system a failure .....	178
Objections to the voluntary system .....	174
The compulsory system under decentralized reserves, July, 1916-June 21, 1917 .....	177
Checks sent direct by a Federal reserve bank to its drawee member banks for collection .....	178
The deferred availability principle; the zone system.....	179
The nature of the time schedules .....	180
The deferred availability principle and the collection of intra-district cash items .....	185
1. Collecting intra-district cash items through the Federal reserve bank .....	185
2. Collecting intra-district cash items through Federal reserve bank branches .....	186
3. Sending intra-district items direct to drawee banks for collection .....	187
The collection of and settlement for inter-district cash items	189

## CONTENTS

xiii  
Page

1. Collecting inter-district cash items through a bank's own Federal reserve bank or branch.....	190
2. Member and non-member clearing banks may send inter-district cash items direct to Federal reserve banks and branches in other districts.....	190
3. Sending items direct to member and non-member clearing banks in other districts .....	191
Service charges .....	192
The meaning of par collection under this system.....	193
The question of reserves; the Board's proposal to concentrate.	194
The question of non-member banks; amendment of September 7, 1916 .....	196
The concentration of reserves, June-July, 1917.....	196
Non-member banks admitted to the privileges of the system, June 21, 1917 .....	197
Problem of collecting checks on non-member banks.....	198
The Hardwick Amendment, June 21, 1917 .....	200
Other attempts to develop the system.....	200
The collection of notes, drafts, and other items.....	201
Schedule for availability of proceeds of bankers' acceptances	205
Introduction of Federal reserve exchange and transfer drafts	206
The telegraphic transfer system .....	208
Service charges lowered and finally abolished July 1, 1918...	211
Absorption of other costs by Federal reserve banks.....	213
Changes in the operation of the Gold Settlement and Federal Reserve Agents' Funds .....	214
The leased wire system, June 4, 1918 .....	214
Daily gold settlement plan, July 1, 1918.....	215
Certain branches of Federal reserve banks clear directly through the Gold Settlement Fund .....	216
Relation of the Gold Settlement Fund to rediscounting between Federal reserve banks .....	216
The growth of membership in the Federal Reserve System...	218
The growth of the clearing and collection system.....	225
Opposition to the clearing and collection system.....	226
Success of the Federal reserve clearing and collection system.	229

### CHAPTER VII—THE PAR COLLECTION CONTROVERSY

Growth of opposition to the Federal reserve par collection system .....	232
The basis of opposition to par collection.....	235
Arguments for par collection .....	240
The growth of the par lists .....	243
The increased opposition to par collection .....	246
Common and concrete forms of opposition.....	249
The Atlanta par collection case.....	256

	Page
The San Francisco par collection case.....	263
The Cleveland par collection case.....	266
The Richmond par collection case.....	269
The case of the Pascagoula National Bank of Moss Point, Mississippi v. Federal Reserve Bank of Atlanta, et al. . .	277
Regulation J amended as a result of the United States Su- preme Court decisions of June 11, 1928.....	282
Federal Reserve Bank of Richmond v. Malloy et al., trading as Malloy Brothers .....	284
Regulation J, Series of 1924 .....	286
Conclusion .....	288

### CHAPTER VIII—THE GOLD SETTLEMENT FUND

Nature of the Gold Settlement Fund.....	291
Inter-district clearing before the creation of the Fund.....	291
Steps leading to the creation of the Gold Settlement Fund... ..	298
Provisions for the Gold Settlement Fund.....	294
The gold in the Fund as part of legal reserve.....	296
Provision originally made for weekly settlements.....	297
The voluntary intra-district system and the Gold Settlement Fund .....	297
Results for the year 1915 .....	298
The Federal Reserve Agents' Fund .....	299
Discontinuance of gold order certificates, June 21, 1917... ..	301
The leased wire system, June 4, 1918.....	303
The telegraphic transfer system .....	304
Relation of the Gold Settlement Fund to rediscounting between Federal reserve banks .....	304
Daily settlements supplant weekly settlements in the Gold Settlement Fund .....	305
Certain branches of Federal reserve banks clear directly through the Gold Settlement Fund .....	307
Nature of the "cash items" cleared through the Gold Settle- ment Fund .....	307
The immediate and deferred credit system.....	308
Method of making settlements through the Gold Settlement Fund .....	310
Transactions which are not included in the daily settlements. .	315
Inter-district gold movements .....	319
Gold distribution in the United States.....	321
Factors affecting inter-district gold movements.....	322
How clearings and transfers affect inter-district gold move- ments .....	322
Effect of the fiscal operations of the government on inter- district gold movements .....	323

CONTENTS

xv  
Page

Effect of rediscount operations among Federal reserve banks on inter-district gold movements . . . . .	824
Effect of inter-district movements of Federal reserve notes . .	826

CHAPTER IX—THE COMPUTATION OF RESERVES

Reserve requirements of member banks of the Federal Re- serve System . . . . .	330
Reserve requirements of the Federal reserve banks . . . . .	331
Reserve requirements of Federal reserve bank branches . . . .	332
Reserve requirements of State banks, trust companies, and private banks . . . . .	334
Reserve requirements of banks outside continental United States . . . . .	339
Reserve requirements of foreign branches of member banks . .	340
Reserve requirements of banking corporations authorized to do foreign banking business (so-called Edge Corpora- tions) . . . . .	340
What constitutes reserves . . . . .	341
Nature of the deposits against which reserves are carried . . .	343
1. In member banks . . . . .	343
2. Nature of deposits in Federal reserve banks . . . . .	347
3. Nature of deposits in non-member State banks, trust companies, and private banks . . . . .	349
4. The nature of deposits in Federal foreign banking as- sociations . . . . .	350
The computation of reserves. 1. Of member banks . . . . .	350
The analysis of reserve account by member banks . . . . .	354
The method of computing semi-monthly and daily reserve requirements in a country national bank . . . . .	355
The transit account of a country national bank . . . . .	360
Distinction between individual and bank deposits in com- puting reserves of member banks . . . . .	362
Computation of reserves against balances held in foreign banks by member banks . . . . .	362
Computation of reserve against balances due from foreign branches of domestic banks . . . . .	363
No reserves required against balances due to foreign branches by member banks . . . . .	363
Question of reserves against money paid by a customer in anticipation of acceptances . . . . .	364
"Special savings deposits" are demand deposits for reserve purposes . . . . .	364
Periods over which reserves are computed by member banks . .	365
Penalties for deficiencies of member bank reserves . . . . .	366
2. Computation of reserves by Federal reserve banks . . . .	369



	Page
The question of reserve deficiencies in Federal reserve banks	371
Method of reporting the reserve condition of the Federal reserve banks .....	374
3. Computation of reserves in non-member State banks, trust companies, and private banks.....	379
4. Computation of reserves by non-member national banks	381
5. The computation of reserves by Federal foreign banking corporations .....	381

## ✓ CHAPTER X—THE CLEARING HOUSE

Nature of clearing operations .....	388
The New York Clearing House Association .....	388
The administration of the clearing house association.....	384
The New York Clearing House committees.....	385
Membership in the association .....	387
Certain non-member banks may clear through members.....	390
Expenses of the association .....	390
Clearing house departments .....	391
Items eligible for clearing .....	391
Indorsement of items for clearing .....	392
Work of assembly racks .....	393
The mail teller's work .....	394
Forms required at the New York Clearing House.....	394
Clearing house sessions .....	396
Force for effecting clearing .....	397
The clearing procedure .....	397
Settling clerk's statement .....	398
Clearing house proof .....	400
The settlement of balances .....	402
The adjustment of errors .....	406
The city collection department of the clearing house.....	408
Other methods of collecting city items .....	409
The Federal clearing division of the Federal Reserve Bank of New York .....	410
The city collection department of the Federal Reserve Bank of New York .....	411
The country collection department .....	411
The examination department .....	414
Penalties for violating New York Clearing House rules, and for errors .....	415
Special functions of clearing houses .....	416
Regulation of interest on deposits .....	416
Regulation of exchange charges on out-of-town items.....	418
Regulation of reserves .....	421
Rendering assistance to members .....	422

## CONTENTS

xvii

Page

Gathering credit data for members .....	428
The issue of clearing house loan certificates in times of stress .....	428
Extending loans to the government .....	428
The issue of public statements by clearing house banks.....	424
Participation in annual conferences. The Clearing House Section of the American Bankers' Association.....	425
Clearings and balances of the New York Clearing House for a period of seventy years .....	428

### CHAPTER XI—BANK ORGANIZATION FOR CLEARING AND COLLECTION

Internal organization of a bank for purposes of clearing and collection .....	429
Method of handling items drawn on or payable at the bank itself. The paying teller's department .....	429
The receiving teller's department .....	431
The mail teller's department .....	433
The check desk department .....	435
The handling of clearing house items .....	437
The city collection department of a bank.....	439
Type of items handled by this department.....	439
Sources of items handled by the city collection department of a bank .....	440
Territory covered by the city collection department of a bank.	441
Procedure in collection .....	442
Disposition of the receipts of the city collection department..	443
Settling for collections .....	444
Collection of notes, matured bonds, and coupons within the city .....	444
The transit department of a bank .....	448
The night force of the transit department.....	450
The morning and afternoon force .....	451
Letters of transmittal .....	452
The numerical transit system .....	458
Methods of settling for the proceeds of collections.....	462
The collection of out-of-town items .....	463
Collection number, stamps, and record files for country items.	464
Method of sending collections through Federal reserve banks.	465
Methods of securing settlements for out-of-town collection items .....	465
Mechanism for handling telegraphic transfers .....	467
Application for and sending of telegraphic orders for transfer	467
Making payments under telegraphic transfers.....	468
The protest .....	469
The transit department of a Federal reserve bank.....	470
The receipt of items by the transit department.....	471

	Page
The outgoing sections of the transit department.....	474
Principles followed in giving credit. The float.....	474
The problem of handling checks on non-member par banks..	475

## CHAPTER XII—BANK CLEARINGS AS A BUSINESS BAROMETER

What is meant by general business conditions?.....	478
Estimate of the total volume of trade.....	479
Is there a single barometer of general business conditions?..	480
The question of clearings versus debits to individual accounts.	483
Debits to bank accounts versus debits to individual accounts.	487
Debits to individual accounts as reported by the Federal Reserve Board .....	488
The Babson Compositplot .....	498
The Annalist Barometer and Business Index Line.....	497
The Standard Statistics Company's Barometer .....	497
The Brookmire Barometers .....	500
The Harvard Index of General Business Conditions .....	501
Carl Snyder's Index of the Volume of Trade.....	504
The velocity of deposits as a measure of business activity....	510
Bank clearings as a business barometer .....	514
Conclusion .....	519

## CHAPTER XIII—RÉSUMÉ OF THE PRESENT SYSTEM

The meaning of clearing and collection .....	528
I. The Federal reserve clearing and collection system.	
A. The intra-district system. 1. Where banks are in the same town or city, but have no clearing house association .....	529
2. Where banks in the same city have a clearing house association .....	581
3. Where some banks in the same city are members of the clearing house association while others are not.....	585
4. Where banks are not in the same city but are within the same Federal reserve district .....	587
The time schedule in intra-district collections.....	589
Federal reserve banks present items direct to the drawee banks	541
Deferred debits and credits .....	542
The problem of collecting checks on non-member par banks..	543
The Immediate Credit Symbol System in the fifth Federal reserve district .....	545
Federal reserve bank branches as collecting agents.....	547
Intra-district clearing and collection through Federal reserve bank branches .....	550

# CONTENTS

xix  
Page

Direct collections within a Federal reserve bank or branch district .....	553
Member banks may collect through correspondents .....	554
Non-member par banks collect through correspondents .....	555
The handling of intra-district collection items .....	555
B. The inter-district clearing and collection system. 1. The Gold Settlement Fund .....	556
2. The types of items and transactions for which settlement may be made through the Gold Settlement Fund .....	557
(1) The collection of and settlement for inter-district cash items .....	558
(a) Member and non-member clearing banks may collect through their own Federal reserve bank or branch .....	558
(b) A member or non-member clearing bank in one district may send items direct to the Federal reserve bank or branch in another district .....	561
Abuses of the direct-routing system .....	567
(c) Sending items direct to member and non-member clearing banks in other districts .....	568
(2) The collection of and settlement for inter-district collection items .....	570
(8) Federal reserve transfer and exchange drafts .....	571
(4) Telegraphic transfers .....	572
(5) Rediscounting between Federal reserve banks .....	573
(6) Special transfers by one Federal reserve bank to another for the account of the Treasury Department .....	573
(7) Settlements resulting from the redemption of Federal reserve notes .....	578
(8) Transfers from the Gold Settlement Fund to the Federal Reserve Agents Fund and vice versa .....	574
Gold movements .....	575
The advantages of the Federal reserve clearing and collection system .....	576
Opposition to the Federal reserve clearing and collection system .....	576
II. The practices of banks not connected with the Federal reserve clearing and collection system, directly or indirectly .....	579
A. Where banks are in the same city. 1. Where the banks have no clearing house association .....	579
2. Where the banks are members of a clearing house association .....	579
3. Where some of the banks are members of the clearing house association and others are not .....	579
B. Where the banks are not in the same city .....	580

## TABLES

---

	Page
I Metallic Reserves, Total Note Circulation, and Central Bank Deposits at the End of 1913.....	85
II Number of Colonial and State Banks, their Capital, Circulation, Deposits, Specie, and Loans in the Years Mentioned from 1774 to 1838.....	49
III Condensed Statement of the Condition, at Different Intervals, of All Banks in the United States.....	50
IV Average Amount of Notes and Deposits of the Second Bank of the United States, 1819-1829.....	57
V Number and Condition of Banks of the United States, January 1, 1838.....	61
VI Number of Banks, Capital, Deposits and Circulation, 1830-1863 .....	65
VII Condition of Banks by Sections, 1860-1861.....	66
VIII Circulation and Deposits of National, State, Savings, and Private Banks, Loan and Trust Companies... 84-85	84-85
IX The Use of Checks in Retail Transactions in 1895, in States Grouped According to the Grouping of the Census .....	88
X The Percentage of Checks in 1895 to Total Receipts in Groups of Cities According to Population.....	88
XI Money (M), its Velocity (V), Deposit Currency (M'), and its Velocity (V') for the Years 1896-1909.....	91
XII Annual Rate of Turnover of Bank Deposits, 1919-1923 .....	98-94
XIII Circulation of Money and Deposits, 1881-1923.....	95
XIV Issue of Loan Certificates by New York Banks, 1860-1893 .....	140
XV Aggregate Issues of Clearing House Loan Certificates, 1873-1896, Inclusive .....	141
XVI Cash Restrictions and Currency Substitutes in Cities of More than 25,000 Inhabitants in 1907.....	156-157
XVII Currency Substitutes in Cities of Less than 25,000 Inhabitants, 1907 .....	157-158
XVIII Clearing House Loan Certificates Issued in 1914....	162
XIX Growth of Voluntary Intra-District Clearing System..	174

TABLES

xxi  
Page

XX	Growth of Membership in the Federal Reserve System, 1914-1924 .....	218
XXI	Membership in the Federal Reserve System, June 30 and December 31, 1923 .....	222
XXII	Membership in the Federal Reserve Clearing and Collection System .....	225
XXIII	Average Daily Number and Amount of Items Handled, 1916-1918, Inclusive .....	230
XXIV	Operations of the Federal Reserve Clearing and Collection System for the Years 1919-1923.....	231
XXV	Growth of Membership in the Federal Reserve Clearing and Collection System .....	247-249
XXVI	Operations of the Federal Reserve Agents' Fund. Summary of Transactions by Years, 1915-1923 .....	302
XXVII	Operations of the Gold Settlement Fund. Summary of Transactions by Years, 1915-1923 .....	318
XXVIII	Average Weekly Volume of Clearings and Transfers Combined for Each Year Since the Establishment of the Gold Settlement Fund .....	319
XXIX	Gold Reserves of Each Federal Reserve Bank on October 29, 1920, and on March 22, 1922.....	325
XXX	Distribution of Total Inter-District Accommodation on October 29, 1920 .....	325
XXXI	Inter-District Movement of Federal Reserve Notes...	327
XXXII	Reserves, Note Circulation, and Discounts of Federal Reserve Banks on Selected Dates .....	328-329
XXXIII	Clearings and Balances of the New York Clearing House for a Period of Seventy Years.....	426-427
XXXIV	Monthly Debits to Individual Accounts for Each Federal Reserve District and for the United States Since January, 1919 .....	490-491
XXXV	Debits to Individual Accounts as Reported by Banks in 141 of the Country's Leading Clearing House Centers. Summary by Months for the Years 1919-1924 .....	528-524

## CHARTS

---

	Page
I Debits to Individual Accounts in 140 Cities as a Measure of the Dollar Volume of Business in the United States .....	492
II Index of Price Level Compared with Changes in Wholesale Prices and Wages, 1875-1920.....	509
III Annual Rate of Turnover of Deposits for Selected Cities, 1919-1928.....	512
IV Velocity of Deposits in 141 Cities and in 8 Cities Compared with Index of Volume of Trade, 1919-1928..	514
V Index of the Volume of Trade Compared with Debits Outside New York and with the Velocity of Deposits in 141 Cities, 1919-1925.....	516
VI Clearing's Index of Business Compared with Velocity of Bank Deposits, 1875-1924 .....	517
VII Clearing's Index of Business Compared with Pig Iron Production, 1875-1924 .....	518

## FIGURES

---

	Page
1 The Circuitous Route of a Check (Hoboken, N. J., to Sag Harbor, L. I) .....	106
2 The Circuitous Route of a Check (Columbus, O., to Mt. Gilead, O.) .....	106
3 The Circuitous Route of a Check (Westerly, R. I., to Stonington, Conn.) .....	106
4 The Circuitous Route of a Check (Birmingham, Ala., to North Birmingham, Ala.) .....	107
5 Clearing and Collection within a Federal Reserve District...	550
6 Clearing and Collection between Federal Reserve Districts..	559



## FORMS

---

	Page
1 Form Prepared by the Federal Reserve Board for the Computation of Reserves to be Carried by Member Banks with the Federal Reserve Banks .....	351
2 Analysis of Account with the Federal Reserve Bank of New York Showing the Amount Available as Legal Reserve. 354-355	354-355
3 Auditor's Proof of Individual Ledgers (For a Country National Bank) .....	357
4 Daily Statement of Required Reserve (For a Country Bank)	359
5 Computation of Reserves in Non-Member State Banks, Trust Companies, and Private Banks .....	380
6 Computation of Reserves of Non-Member National Banks..	382
7 The Small Ticket .....	395
8 Clearing House First or Credit Ticket .....	395
9 The Nine O'clock Ticket .....	396
10 The Settling Clerk's Statement .....	399
11 The Clearing House Second Ticket .....	400
12 The Clearing House Proof .....	401
13 New York Clearing House Manager's Certified List of Debit and Credit Balances .....	408
14 Credit Ticket in Clearing for Return Items .....	407
15 Debit Ticket in Clearing for Return Items .....	407
16 Transmittal Form (Used by National City Bank of New York) .....	458
17 Form for Direct Sending of City Items (Used by Mechanics & Metals National Bank of New York).....	454
18 Form for Direct Sending of Country Items (Used by Mechanics & Metals National Bank of New York).....	455
19 Four Day Points. Report to Federal Reserve Bank of New York of Cash Letters Sent Direct (By a Member Bank)..	456
20 Recapitulation of Cash Letters Sent Direct (By National Bank of Commerce in New York) .....	457
21 Form of Advice for Direct Sending of Checks (Fifth District) .....	563
22 Statement of Cash Letters Sent Direct During a Month (Fifth District) .....	566

# THE CLEARING AND COLLECTION OF CHECKS

## CHAPTER I

### NATURE, ORIGIN, AND USE OF CHECKS

#### The nature of checks

The Negotiable Instruments Law defines a check as a "bill of exchange drawn on a bank payable on demand."<sup>1</sup> Although checks are treated under the same law as are bills of exchange, and are defined as a variety of bill of exchange, a marked difference between the two instruments is seen in the following more complete definition of the check: A check is an unconditional order in writing addressed by a person (the drawer), *to a bank*, signed by the drawer, requiring the bank to which it is addressed to pay a sum certain in money on demand to a person named or to his order or to bearer.<sup>2</sup> A bill of exchange, on the other hand, is "an unconditional order in writing addressed by one person *to another*, signed by the person giving it, requiring the person to whom it is addressed to pay on demand *or at a fixed or determinable future time* a sum certain in money to order or to bearer."<sup>3</sup> The Federal Reserve Board gives the following definition of a check: "A check is generally defined as a draft or order upon a bank or banking house, purporting to be drawn upon a deposit of funds, for the payment at all events of a certain sum of money to the order of a certain person therein named, or to him or his order, or to bearer, and payable on demand."<sup>4</sup>

Considerable confusion has existed in the interpretation of the

<sup>1</sup>Joseph Doddridge Brannon, *The Negotiable Instruments Law Annotated*, 3rd ed. (Cincinnati, 1919), Section 185.

<sup>2</sup>H. W. Magee, *A Treatise on the Law of National and State Banks*, 3rd ed. (Albany, N. Y., 1921), pp. 307-310. See also John E. Brady, *The Law of Bank Checks* (New York, 1915), *passim*.

<sup>3</sup>Brannon, *op. cit.*, Section 126. Italics are the author's.

<sup>4</sup>Regulation J on Check Clearing and Collection, issued periodically by the Federal Reserve Board. See *Federal Reserve Bulletin*, Vol. X (1924), pp. 489-491.

bank's liabilities to the drawer and to the holder of the check. Before the Negotiable Instruments Law, the question whether a check is an assignment of any part of the drawer's deposit had been considered by the courts, both with respect to the rights of the holder against the drawee bank and against the drawer or the latter's creditors or estate, and there had been a conflict of authorities on both questions. Some courts held that the check is an equitable assignment of the amount in the hands of the banker to the payee or holder, and that there is an implied contract between the bank and the holder, so as to render the bank liable to the latter for its refusal to pay the check.<sup>5</sup> The purpose of the Negotiable Instruments Law was to abrogate this conflict by declaring that a check does not operate as an assignment, and consequently it seems to have made clear that the bank's contract is with the depositor only and that the holder of a check has no right of action against the bank on which his check is drawn for refusal to pay it, unless the bank has assumed an obligation to him by certifying or accepting it; his only remedy in such a case is against the drawer and indorsers.<sup>6</sup>

It becomes obvious, therefore, that the legal tender provisions of the Federal Constitution apply only as between the bank and the depositor. In other words, only the depositor can compel the bank to pay in legal tender to himself or to the holder. These provisions do not apply as between the bank and the holder since no contract exists, unless, as stated above, the bank certifies the check, in which case the contract is transferred from the drawer to the holder. The legal tender provisions then become effective. North Carolina, for example, passed a law in 1921<sup>7</sup> authorizing its banks to pay for checks by means of drafts on reserve deposits when presented to them by the Federal reserve bank, unless the

---

<sup>5</sup>For a list of cases on both sides of the question, see Charles P. Norton, *Handbook of the Law of Bills and Notes*, 4th ed. (St. Paul, 1914), pp. 584-585.

<sup>6</sup>The Negotiable Instruments Law is based upon and largely copied from the English Bills of Exchange Act, a codification of the Law of England as to bills of exchange, promissory notes and checks, which was drawn by Judge Chalmers and enacted by Parliament. At a meeting of the National Conference of State Boards of Commissioners for Promoting Uniformity of Legislation in the United States, held in August, 1895, a committee was appointed which caused a draft of a bill codifying the law of negotiable instruments to be prepared and submitted to the Conference at its annual meeting in August, 1896. This draft, entitled "The Negotiable Instruments Law," was discussed by the Conference and was agreed upon for recommendation to the legislatures of the States. It has been adopted by the District of Columbia and all the States (Georgia adopted it as the last State in 1924), in a few cases with some modifications, but generally in the identical form recommended.

<sup>7</sup>*Public Laws of North Carolina, 1921*, Chap. 20, Sec. 2. Ratified and effective February 5, 1921. See pp. 252, 269-270 below.

depositor specifically objected, and the United States Supreme Court upheld this law on the ground that the legal tender provisions of the Constitution do not apply as between the bank and the holder.<sup>8</sup>

The requisites of a check may be set forth as follows: (1) It must be dated unless presented by and payable to the customer himself.<sup>9</sup> (2) It must be drawn on a bank. An instrument not drawn on a bank is not a check, although it may be styled so on its face.<sup>10</sup> This constitutes one of the chief differences between a check and a bill of exchange. A check is *always* drawn on a bank or banker, while a bill of exchange ordinarily is drawn on some person not a banker, although it may be drawn on a banker. On the European continent, however, checks may be drawn on a merchant if he is prepared to honor them.<sup>11</sup> (3) A check must be payable to a person named, or to his order, or to bearer.<sup>12</sup> (4) A check must specify a certain sum of money to be paid. In this respect it does not differ from a bill of exchange.<sup>13</sup> (5) It must be signed by the drawer.<sup>14</sup> (6) It purports to be drawn upon a deposit. It is to be observed that it is not always necessary that the drawer of the bill of exchange should have funds in the hands of drawee, while a check drawn against a bank in which the drawer had insufficient funds would be fraudulent.<sup>15</sup> Technically a check is only an order on the bank, but legally it is an implied promise to pay on the part of the drawer of the check, and any person giving a check upon a bank in which he has no deposit account is liable to prosecution for obtaining money under false pretense. (7) A check is payable instantly on demand. A person deposits money with his bank or banker where it is subject to his order at

<sup>8</sup>*Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 262 U. S. 649 (1923). See pp. 76-77, 272, 274 below.

<sup>9</sup>H. W. Magee, *op. cit.*, p. 307.

<sup>10</sup>*Champion v. Gordon*, 70 Pa. State Reports 475 (1872); *Amsinck v. Rogers*, 103 App. Div. 428, especially 435 (1905), 93 N. Y. Supp. 87 (1905), affirmed 189 N. Y. 252 (1907), 82 N. E. 134 (1907), 12 Lawyer's Reports Annotated (New Series) 875 (1907).

<sup>11</sup>C. A. Conant, "Development of the Check," *Bankers Magazine*, Vol. LXXXIII (1911), p. 580.

<sup>12</sup>*Negotiable Instruments Law of the New York Act*, Section 20, Subdivision 4; J. W. Daniels, *A Treatise on the Law of Negotiable Instruments*, 6th ed. (New York, 1913), Section 1571.

<sup>13</sup>Magee, *op. cit.*, p. 310; Daniels, *op. cit.*, Section 1570; *Bank of Mobile v. Brunn*, 42 Ala. 108 (1868).

<sup>14</sup>Magee, p. 310; *Bank v. Vogeli*, 78 Kan. 264 (1908).

<sup>15</sup>Daniels, Section 1569; *Champion v. Gordon*, 70 Pa. State Reports 474 (1872); *Newman v. Kaufman*, 28 La. Ann. 865 (1876).

any time. By an order he appropriates so much of it to himself or to another person, and the bank or banker in consideration for the temporary use of the money, agrees to pay it in whole, or in part, to the depositor's order when demanded.<sup>16</sup> The fact that a check, ordinarily, is not presented for acceptance, but for payment, further differentiates it from the bill of exchange.<sup>17</sup> However, where a check is certified by a bank on which it is drawn, the certification is equivalent to an acceptance.<sup>18</sup> It will be seen below that the fact that banks are required to pay *in whole* or in part, to the depositor's order when demanded has great significance.<sup>19</sup>

The check as defined above is to be distinguished from the cashier's check. A cashier's check, whether certified or not, is classed with bills of exchange payable on demand.<sup>20</sup> It is an order on a bank drawn by its own cashier and differs from a bank draft only in the fact that it is drawn by the cashier on his own rather than on some other bank. Thus a cashier's check is to be thought of as a variety of draft and is distinguished readily from the ordinary check. Like certified checks, they are commonly used by persons whose personal checks would not be accepted so readily as the check of some known bank. Cashier's checks may be used also by persons not having a bank account and, therefore, unable to draw checks of their own. Some banks prefer to use cashier's checks instead of certified checks inasmuch as there is less opportunity for a banker's check to be tampered with subsequently should it fall into the hands of an unscrupulous person.<sup>21</sup>

A check, likewise, is distinguished easily from a certificate of deposit, although a certificate of deposit issued by a bank payable to the order of the payee, in legal effect, is a check when returned properly indorsed.<sup>22</sup>

By depositing a sum of money in a bank a person may receive,

<sup>16</sup>Daniels, Section 1572; *Goodwin v. American National Bank*, 48 Conn. 530 (1881); especially *Mt. Sterling National Bank v. Green*, 99 Ky. 262 (1896), 33 S. W. 911 (1896); *Merchants and Planters Bank v. Meyer*, 56 Ark. 499 (1892), 20 S. W. 406 (1892).

<sup>17</sup>Magee, *op. cit.*, p. 309.

<sup>18</sup>Brannan, Section 187. When a bank certifies a check it acknowledges that the drawer of the check has sufficient funds on deposit to pay it. Such checks are used commonly by persons when their ordinary personal checks would not be accepted readily.

<sup>19</sup>See pp. 75-77, 272-276 below.

<sup>20</sup>Brannan, Section 185; *Singer Manufacturing Co. v. Summers*, 143 N. C. 102 (1906), 55 S. E. 524 (1906).

<sup>21</sup>D. R. Dewey and M. Shugrue, *Banking and Credit* (New York, 1922), p. 45.

<sup>22</sup>Brannan, Section 185; *State v. Garland*, 65 Wash. 666 (1911), 118 Pac. 907 (1911).

if he chooses, a certificate of deposit instead of a checking account. The certificate may be either negotiable or non-negotiable and may be made payable on demand or after a definite time. It may be drawn payable to any person whom the depositor may name. The demand certificate is used principally for the purpose of guaranteeing payment to a creditor and also as an old method followed by some banks in transferring cash to distant points.<sup>23</sup>

In analyzing the more general nature of checks, it must be noted that they are merely a means by which a deposit or a part of a deposit is transferred. *They are evidences of deposits in the process of transfer.* Checks like bank notes are demand liabilities of the bank. This one characteristic they have in common with bank notes in the United States today. Yet it must be recognized that while specie may be demanded by the presentation at the bank of either notes or checks, in practice specie is usually secured by the presentation of checks rather than notes. Furthermore, the reserve back of each in the United States today, and consequently the profit to the bank resulting from the use of each is different. Reserves in lawful money against demand deposits vary from seven to thirty-five per cent. for our national and Federal reserve banks, while those against bank notes are 100 per cent. United States bonds plus five per cent. lawful money, virtually 105 per cent. of reserve. As a result it is much more profitable for a bank to create deposits and have these circulated by means of checks than to lend the same amount of credit in the form of notes. Indeed, were the reserve against bank notes converted into lawful money and kept in the vaults of the banks as a reserve for building up loans, which, in turn, will create deposits in excess of this reserve, the bank would find it unprofitable to issue any notes whatever.<sup>24</sup> If banks could supply themselves with enough gold and silver certificates, United States notes, or Federal reserve notes to meet the demands for paper money in cash payments as a substitute for specie, it would be to the interest of the bank to have no bank notes outstanding, except in times of depressions when they have surplus reserves which cannot be invested otherwise. In such times the low interest on the government bonds may yield a small profit.

Prior to the inauguration of the National Banking System deposit currency had other characteristics in common with bank notes wherever general asset banking existed. The reserves back

<sup>23</sup>Dewey and Shugrue, *op. cit.*, p. 53.

<sup>24</sup>This same view is held by C. F. Dunbar, "Deposits as Currency," *Quarterly Journal of Economics*, Vol. I (1887), pp. 414-415.

of each tended to be the same; the profit to the bank arising from the use of each would be the same and both notes and deposit currency might originate in the same manner, that is, from the re-discounting of a note. But only under the asset banking system, in which notes are issued against the general assets of the bank, is it immaterial to a bank whether it lends its credit in the form of notes or deposits. Due to the desire of writers to show the similarity between notes and deposits, this fact has not been emphasized sufficiently.

### **The advantages of checks**

Checks have certain advantages over notes which make them desirable instruments for effecting exchanges: (1) They have a short life which means that they inject great elasticity into the currency. They are called into existence to perform certain functions and they are canceled as soon as they have performed those functions. Though the life of the check is limited it must be borne in mind that the life of the deposit continues; it has been transferred merely from one party or bank to another. When a check is deposited in a bank an additional deposit is created in that bank on which new checks may be drawn and the deposit may continue to circulate by means of new checks being drawn to replace the old. (2) Each debt is canceled by a single instrument that is made to fit the particular amount involved. Checks can be drawn to any amount and frequently are the most convenient means of payment. (3) Transactions are effected almost entirely by book entries with the minimum of money leaving the bank. This means a minimum wear and tear on the metallic and paper bases and a coincident tendency to regard them as being only theoretically present. (4) The substitution of the check for the note lessens the necessity of keeping vast hoards of money set aside. (5) Deposit currency secures the maximum of safety. The risk of loss, theft or destruction of money kept in any place outside a bank is obviated. (6) Checks have the advantage of serving as receipts for amounts paid. They constitute receipts of the best type and facilitate the keeping of records.

### **Limitations of checks**

While checks have distinct advantages they are not without certain limitations which may be briefly summarized: (1) They have a limited acceptability as compared with bank notes. This acceptability rests upon the confidence in the integrity of the

drawer which tends to be restricted to a limited circle of friends and business associates. Bank notes, on the other hand, pass freely and without regard to the integrity or credit standing of the person tendering them in payment. The reliability and stability of the bank are assumed with little, if any, thought; most persons never examine their bank notes. (2) Checks are drawn in amounts designed to liquidate some specific obligation which makes them poorly adapted for other transactions. (3) Uncertainty as to their real value tends to hasten their deposit. A check itself bears no evidence that the drawer has sufficient funds to cover the amount, or, indeed, any deposit whatever. Moreover, checks must be presented to the bank on which they are drawn in a reasonable length of time. This objection to checks has validity only in sparsely settled districts where people are not in close touch with banks. In such places bank notes afford the better type of currency. (4) Another objection to checks which also has its greatest validity in a sparsely settled country and which renders them undesirable if not entirely useless, under such circumstances, is that they cannot complete a transaction without reference to a bank, while bank notes do complete a transaction without the necessity of referring them to a bank unless it is necessary to obtain small change. (5) To pass a check or to secure creditable relations with a bank, demands a degree of moral standing and personal intelligence not possessed by all the members of a community, and for those a form of currency is needed which easily attests its own authenticity.

#### **Need for a separate legal code for checks<sup>25</sup>**

In addition to the limitations placed upon the use of checks due to their inherent qualities, there are two other limitations of an artificial nature: The one is the result of improper banking practices; the other is the legal obstacles. Only the latter will be mentioned here; the former is treated in some detail in Chapter IV.

Since checks have come to occupy such a prominent place in exchange transactions, it is urged that a uniform check law has become a necessity. They should be separated in treatment from bills of exchange as they are now treated under the Uniform Negotiable Instruments Law. In this respect the United States

---

<sup>25</sup>See also *Bills of Exchange*, 63d Cong., 1st Sess., Sen. Doc. No. 162. This is a report of the American delegate, Mr. Conant, to the International Congress on Bills of Exchange which was held at The Hague in the summer of 1912 in an attempt to secure uniformity of law on bills of exchange and on checks.



is far behind the leading European countries which have already taken such steps.

Among the present defects which appear and which should be corrected, the following are mentioned: (1) The permission under the Negotiable Instruments Law to endorse checks as bills of exchange, qualifiedly and conditionally, thus subjecting them to the complications of law, and imposing a burdensome duty on the paying bank, should be abrogated. It is contended by some that legal endorsements on checks should be simplified to include only those which are necessary to complete the transactions for which the check was issued.<sup>26</sup> (2) Lack of definiteness in the prescribed form of drawing a check is a well recognized defect. (3) There is a lack of definiteness as to the length of time that may elapse after delivery before a check is presented for payment. In Belgium, France, Switzerland, Germany and Japan the time limits are definitely set, and range from three to ten days.<sup>27</sup> (4) There are wide differences among statutes and decisions regarding the relations between banks and depositors and banks and correspondents. It has been a common practice for banks to receive checks from depositors and give immediate credit for them. Despite this common custom, the courts differ as to who is the real owner of the checks in question, and what liability the banks assume in their actions. (5) Many banks indulge in the practice of sending checks directly to the paying bank for redemption which is a violation of law.<sup>28</sup> It is contended that a uniform statute should relieve banks of their responsibility for such practices, as it is considered a sound method by many leading bankers.<sup>29</sup>

#### The increasing use of checks

With the growth in the density of population, the development of rural life, the improved means of communication, the development and extension of sounder money and banking systems, and with increasing confidence being placed in checks by the masses, deposit currency, as evidenced by checks, has assumed first place as a medium of exchange in our currency system. It

<sup>26</sup>R. B. Cox, "Needed Reforms in Check Collection Laws and Methods, *Proceedings of the American Bankers' Association* (1913), p. 564.

<sup>27</sup>*Ibid.*, p. 565.

<sup>28</sup>W. H. Magee, *op. cit.*, pp. 518-521.

<sup>29</sup>*Proceedings of the American Bankers' Association* (1909), 3rd Annual Report of the Clearing House Section, pp. 25, 40, 42; *op. cit.* (1913), p. 565. Regulation J, issued by the Federal Reserve Board, requires all banks which use the Federal reserve banks as collection agents to authorize them to send the items direct to the drawee banks.

represents the most refined type of medium. It is the cheapest and most convenient; it means that we are rapidly attaining a refined credit economy after having passed through laboriously, in succession, a barter and a money economy. But with its development have come problems, not the least of which is the method of making it work smoothly and automatically through a proper system of clearing and collection. The nature of the problem can be appreciated better and seen in a more accurate perspective after understanding first the origin and use of checks and the manner in which clearing and collection systems were introduced and developed.

### The origin of checks

Not only does the origin of the term check (English *cheque*) seem wrapped in obscurity and uncertainty,<sup>30</sup> but writers are far from agreement as to the time and place of the origin of checks. H. D. Macleod seems to stand somewhat alone when he says the Romans invented the check sometime shortly after 352 B. C.<sup>31</sup> J. J. Klein, after reviewing what other writers had learned as to the origin of checks, concludes that the check was not known among the ancients, although they were acquainted with bills of exchange and other forms of paper similar to our letters of credit.<sup>32</sup> Joseph Bachem, writing on the historical development of checks, takes Macleod to task and insists that checks had their origin in the Middle Ages.<sup>33</sup> Bachem's view seems to represent the more general one. He says that it has not been established that the Chinese, Egyptians, Assyrians and Babylonians had known the check and that "even the attempt of Macleod to recognize the check among the Romans under the designation of *attributio* or *prescriptio* in some verse of Terenz and in the letters of Cicero and Atticus must be considered as unsuccessful . . . even if it cannot be denied that the described occurrences in the mentioned places have some relation to the check today."<sup>34</sup>

There is general agreement, however, that bills of exchange

<sup>30</sup>See James W. Gilbert, "A Practical Treatise on Banking," Part I, Section III, *Bankers Magazine*, Vol. V (1850-1851), p. 480.

<sup>31</sup>H. D. Macleod, *Theory and Practice of Banking*, Vol. I (London, 1855), pp. 350-351.

<sup>32</sup>J. J. Klein, "The Development of Mercantile Instruments," *Journal of Accountancy*, Vol. XII (1911), pp. 324-325.

<sup>33</sup>Joseph Bachem, *Der Deutsche Scheck*, Inaugural Dissertation der juristischen Fakultät der Friederick Alexander Universität zu Erlanger (Borna-Leipzig, 1909), p. 2.

<sup>34</sup>Bachem, *op. cit.*, p. 2.

preceded checks. Klein learns from his investigations that bills of exchange, and written orders of transfer in forms other than that of our modern check, were known as early as the ninth to seventh centuries B. C. among the Assyrians.<sup>35</sup> Conant says, "Traces of credit by compensation and by transfer orders are found in Assyria, Phoenicia and Egypt before the system attained full development in Greece and Rome. The books of the old Sanskrit lawgiver, Manu, are full of regulations governing credit. He speaks of judicial proceedings in which credit instruments are called for, of interest on loans, of bankers, usurers, and even of the renewal of commercial paper."<sup>36</sup>

### The check originated in Italy and Sicily

Real checks, according to Bachem, originated in Italy and Sicily. The oldest ones came from Palermo in the year 1416 under the appellation *polizze* and were orders of the Office of State on the balances with bankers. Checks which were drawn by private persons against their balances with the bankers and payable at sight are found at Messina in 1543, Naples in 1573, Mailand (Milan) in 1593; those with the bearer's clause, in Bologna in 1606.<sup>37</sup>

### The Bank of Venice

The Bank of Venice, which originated in 1171, provides us with one of the earliest experiments in the use of deposit currency, regarding which there is reliable information. The Bank of Venice was a public bank based upon a forced loan from some of the most opulent citizens. The subscribers to the loan became a specially constituted board for their own protection and for the management of the loan. The book in which these loans were inscribed was authenticated by the government, and made evidence of the whole amount of the debt, with the proportion belonging to each subscriber. It was an easy step to commence the transfer of the loans in whole, or in part. Facility of transfer, coupled with the security of the State, led to a rapid circulation of this loan. The reimbursement of the loan ceased to be regarded as either necessary or desirable. Every creditor was reimbursed when he transferred his claim on the books of the bank. Such claims became, by

<sup>35</sup>Klein, *op. cit.*, pp. 324-325; see also Macleod, *op. cit.*, pp. 350-351.

<sup>36</sup>C. A. Conant, *Principles of Money and Banking*, Vol. II (New York, 1905), p. 168.

<sup>37</sup>Bachem, *op. cit.*, pp. 8-9.

a natural process, a medium of payment in transactions of commerce. All money deposited for the purpose of obtaining a credit in the bank was accounted an addition to the original loan, and as such taken into the public treasury as money lent to the State.

In 1423, it was decreed that all bills of exchange payable in Venice, whether domestic or foreign, should be paid, unless otherwise stipulated and so expressed, in the bank; and that all payments in gross, or in wholesale transactions, should be effected in the bank also. This at once brought the mass of the payments of that great commercial city to the bank. It also created at once a great additional demand for the funds of the bank, and brought large sums into the public coffers. All who had engagements to meet, found them in the bank, and all such persons either provided the bank with the funds necessary to meet them, or carried to the bank that amount of coins requisite for the purpose. Bank funds became so desirable and the premium on such funds over coins became so high, that it was fixed finally by law at 20 per cent.

There seems to be some confusion among writers relative to the method used to transfer accounts at the bank. Stephen Colwell was quite positive, after what appears to have been a careful investigation, that checks were not used, and that the rules of the bank required the presence of the party transferring, either in person or by attorney; and this was carried so far, that no endorsed bills of exchange were permitted. The payee, or his attorney, alone could receive payment.<sup>38</sup> The alphabet was subdivided, and each person applied to the bookkeeper to whose subdivision the letters of his name assigned him. Every subdivision had two clerks, by whom all transfers and entries were made. The party making the transfer appeared before these two clerks, and dictated the entry or transfer to be made, and both clerks wrote in separate books from that dictation. The entry specified what was paid, whether a bill of exchange, or a balance of account, and if a bill, where drawn, or in some way designated the bill. This made the entries on the books of the bank good evidence of all payments, and safe vouchers.

This experiment in the use of deposit currency was most successful. In some respects the methods used were similar to those adopted by the Bank of Amsterdam nearly two hundred years later. The Venetian system required personal and oral transfers;

---

<sup>38</sup>Stephen Colwell, *The Ways and Means of Payment: A Full Analysis of the Credit System, with its Various Modes of Adjustment* (Philadelphia, 1860), Chap. XIII, but especially pp. 302-305.

the Bank of Amsterdam required personal and written transfers. The Venetian system provided an elastic deposit currency and made the bank a great clearing house, or place of adjustment, for merchants of many countries. Venice was for centuries the greatest entrepôt of commerce in Europe, if not in the world, and the chief payments or liquidations of this trade were effected at the bank. Payments to a great amount thus were effected at Venice upon transactions which occurred elsewhere; it was found convenient and advantageous to have funds in Venice. Where everybody wanted funds everybody sent them. The demand, therefore, for the deposits in which the purchases of commerce were paid was as incessant as the movement of commerce itself. The bank deposits circulated on the books of the bank, precisely in accordance with the movements of trade, and the customers of the bank thus applied these credits, or the debts due them, to the discharge of the debts they owed.<sup>89</sup>

### The Bank of St. George

The Bank of St. George, commonly known as the Bank of Genoa, had its origin, like the Bank of Venice, in an attempt to reorganize the public finances. It originated in 1407 and was based upon the public debt. During the 13th and 14th Centuries the public debt had been held closely by a few powerful public creditors, known as *compere*, or purchasers. They became very powerful and saw to it that their loans were secured by the special assignment on the part of the government, of taxes, customs, or other revenue, sufficient to pay the interest. These public creditors became virtually a financial *imperium in imperio* and were both respected and feared. In 1407 it was resolved to pay off this debt. This was done by floating a new loan divided into shares, which became the basis for the Bank of St. George. This much the bank had in common with the Bank of Venice, but the remainder of its characteristics place it in striking contrast with the Venetian bank.

The Bank of St. George was as watchful of its special interests as were its predecessors, the *compere*. It hedged itself about with detailed regulations and definite security in the form of assignment of taxes and dues. The currency provided by this bank consisted of the following: (1) The circulation of its shares, each

<sup>89</sup>Colwell, *op. cit.*, Chap. XIII, *passim*. The Bank of Venice maintained a successful existence until Napoleon invaded Italy in 1797 and overthrew the Republic of Venice.

share amounting to 100 lire of the public debt, (2) certificates of deposit in denominations to suit the depositor, (3) bank deposits, like those of the Bank of Venice, and transferred in the same manner, (4) deferred dividends of the bank, the par of which was 21 lire for each share, and (5) the usual coins of gold and silver.

The outstanding feature peculiar to the Bank of St. George, in addition to the fact that it was one of the earliest banks which used deposit currency, was the fact that it issued notes. They were not issued in small amounts, nor in special denominations, but in the handwriting of the officers of the bank, and in sums requested by the depositors, or persons applying. The Bank of Venice is important as the earliest bank, of which we have records, which developed the use of deposit currency based upon the public debt; the Bank of St. George not only did this, but was the first to resort to the use of bank bills. The Bank of Genoa, by thus fully exhibiting the advantages of bank notes, is considered by Colwell, as the link which connected the deposit banks with those of circulation.<sup>40</sup>

### Checks in Italy today

Although checks may have originated in Italy, the Italian medium of exchange has been and is primarily State and bank notes. The use of checks in Italy is limited, although it is developing in northern Italy where banking institutions are more numerous. Checks are seldom used in ordinary transactions, although certificates of deposit (*bons de caisse*) and similar credit instruments, such as cash orders, are sometimes used.<sup>41</sup> Very recently the Italian government has tried to increase the use of checks in wholesale trade in order to decrease paper currency. In retail trade checks are not used at all. One of the reasons why their use is so restricted in Italy is the stamp tax imposed upon them and which very probably will be abolished.<sup>42</sup>

In February, 1924, the note circulation of the banks of issue

---

<sup>40</sup>Colwell, *op. cit.*, Chap. XIV.

<sup>41</sup>*Interviews on the Banking and Currency Systems of England, Scotland, France, Germany, Switzerland, and Italy*, United States National Monetary Commission Publications, 61st Cong., 2d Sess., Sen. Doc. No. 405, p. 528, hereafter cited as *Banking and Currency Systems*; Carlo F. Ferrararis, *Italian Banks of Issue*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 575, pp. 242-248. The legal decisions concerning checks in Italy are found in Italy's *Commercial Law Manual* of 1882. See Bachem, pp. 8-9.

<sup>42</sup>Letter from Mr. Romolo Angelone, Commercial Attaché, Royal Italian Embassy, New York City, August 4, 1924.

amounted to 8,852 million lire; the note circulation for the State was 7,749 million lire; total deposits amounted to only 2,517 million lire. For December, 1923, the banks of issue had a note circulation of 9,491 million lire; the note circulation of the State was 7,754 million lire; total deposits were 2,581 million lire. For leading private banks total deposits amounted to 11,277 million lire in December, 1923.<sup>43</sup>

### The check in Germany

Bachem, in considering the origin and development of the check, says that its forerunner in Germany was the *quittanzien* (drafts) which were used from the 13th to the 16th Century. These *quittanzien* were drafts of the emperors and princes on taxed cities (*abgaberpflichtize*), pale duties, and station duties (*stationsgelden*), drawn up in receipt form. There were others of a similar nature, as the *cessionnes* (transfers) of the imperial revenues of the city of Lubeck to the German Emperor. After 1466 the Polish kings drew against the Prussian cities, especially Dantzig. From that time on those cities had to pay heavy duties semi-annually, of which the king disposed by use of the *quittanzien*. With these they settled debts, and arranged for expenses in small or large amounts.

Related to the *quittanzien* in certain respects were the drafts which the city of Luneburg directed against the owners of the income from the salt tax.<sup>44</sup> Inasmuch as the persons drawn upon occupied a position subordinate to that of the drawer, and as the drawer could press the payment of his draft with force, the *quittanzien* were accepted willingly in payment. For the same reason, one cannot speak of this type of check in the same sense that we attach to the word today, as its payment resulted not so much because of a contract as because of the pressure of despots.<sup>45</sup> With the establishment of the transfer or "giro" banks at Hamburg in 1619, and at Nuremberg (Nurnberg) in 1621, written orders for transfers came to be used in much the same way as the modern check.<sup>46</sup>

Checks have had a slow growth in Germany. The striking feature of the German system has been and is the transfer or giro system. As a liability in 1900, bank notes stood first and trans-

<sup>43</sup>*Federal Reserve Bulletin*, Vol. X (1924), pp. 432.

<sup>44</sup>Bachem, p. 4.

<sup>45</sup>*Ibid.*

<sup>46</sup>J. T. Holdsworth, *Money and Banking*, 2d ed. (New York, 1919), p. 130.

fers second. In 1908 a law was enacted establishing a legal status for checks for the purpose of increasing their use, it being hoped that their use would increase rapidly thereafter, although at that time it was stated that they played a small part in the transaction of business, it being effected almost entirely by the transfer or giro system. The slow development of the check system has been especially marked in small business circles.<sup>47</sup>

It is difficult to appraise the present situation in Germany. Abnormality characterizes several of the important factors. It can be said with certainty, however, that government and bank notes are more common media of exchange than is deposit currency evidenced by checks. Renten marks (gold marks) and checks for the same currency are becoming common media since the extreme depreciation of government notes. Deposits become currency principally through giro or transfer transactions, although the use of checks is important. Checks are used quite extensively in wholesale trade, but up to the present time have never been used to any extent in retail transactions. Analysis of bank statements throws no light upon the relative importance of deposit as compared with note currency since deposits may be withdrawn or transferred through any sort of legal business transaction which may not involve the use of checks.<sup>48</sup>

### The check in Holland

Despite the early instances of the use of checks, Bachem considers Holland the home of the check.<sup>49</sup> It was first used in Amsterdam in the 16th Century when the people learned to deposit their cash with some third person for a small depository fee, rather than store it in their houses. These persons who received the deposits also assumed the duties of collection of obligations and cancellation of debts. From this arose the position of the so-called *cashier*. These cashiers made payments by means of *kassiers-briefje*, which were drawn up more in the form of receipts than in the form of drafts. They contained the voucher of the

<sup>47</sup>*The Reichsbank, 1876-1900*, published by the Reichsbank, translated by Dr. F. W. C. Lieder, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 408, pp. 68, 116; *Banking and Currency Systems*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 405, p. 497; *Miscellaneous Articles on German Banking*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 508, pp. 247-271.

<sup>48</sup>Letter from the German Consul General, New York City, July 24, 1924. See also the *Federal Reserve Bulletin*, Vol. X (1924), pp. 636-637.

<sup>49</sup>See also the *Bankers Magazine*, Vol. XXIII, 3rd series (1889), p. 787, which supports this view.



depositor to the effect that he had received the money from his cashier. By a *keure* of 1608, the merchants were forbidden to occupy themselves henceforth as cashiers. After this *keure* the greater part of the business of banking and dealing in money and exchange, so far as it had developed at that time, was concentrated by law in the hands of the Bank of Amsterdam (*Amsterdamsche Wisselbank*) and its agents.

### **The Bank of Amsterdam**

The Bank of Amsterdam was created by the ordinance of January 31, 1609, under the guaranty of the city and the government of its magistrates. The avowed object was to afford some relief against the intolerable nuisance of worn and defaced coins, which flowed into the great commercial mart of Amsterdam from all parts of the world. Briefly, the business of the bank was to receive, to keep and to pay. It received coins at their bullion value, that is, as valued in money of full weight and fineness; consequently, the credit upon its books was the same as though it were based upon good coin. The coins and bullion thus deposited were not reclaimable, but, according to the theory of the bank, were locked up forever. The bank, however, did receive money for safe-keeping, which was returned on demand, the depositor paying a small fee for the service.

The chief function of the bank was to keep the deposits of coin and bullion (other than the special deposits of money) and to make payments by a transfer from the account of the payer to the account of the payee. This was done by the party transferring, in person, or by his agent specially authorized, and by his delivering to the proper officer of the bank a written order or check. The following is an example of an order drawn on the bank:<sup>50</sup>

“Folio 1609.

“Messrs. Commissioners of the Bank—Please pay to Isaac DeWitt the sum of One Thousand Florins, Four Sols and Six Deniers.

“Amsterdam, 25th March, 1709.

“F. 1000 4s. 6d.

“Samuel Moses.”

<sup>50</sup>Colwell, *op. cit.*, p. 176. For an account of the Bank of Amsterdam, see C. F. Dunbar, *Chapters on the Theory and History of Banking*, 2nd ed. (New York, 1904), Chap. VIII; Adam Smith, *Wealth of Nations*, Vol. II, 10th ed. (London, 1802), Bk. IV, Chap. III. An excellent bibliography dealing with sources generally unknown today, is to be found in Colwell, *op. cit.*, pp. 186-187.

On presentation of this paper by the drawer or his special agent, the sum expressed was debited to the drawer, and credited to the party to whom the payment was directed to be made. The transfers bore some resemblance to our modern check, but they should be called transfer orders rather than checks. No payee could call at the bank and demand payment; it was necessary for the payer or his agent to appear and effect the transfer. Nevertheless, the Bank of Amsterdam took important steps towards the creation of bank credit and deposit currency as known today.<sup>51</sup>

Today specie and bank notes constitute the bulk of the medium of exchange in the Netherlands. Government notes were withdrawn several years ago. Something very similar to the check is used to some extent in wholesale trade, although hardly at all in retail transactions. There seems to be no information available as to the extent to which deposit currency is used in the Netherlands as compared with bank notes and other forms of currency. The Vice-Consul in New York City for the Netherlands points out that the general public in that country does not keep bank accounts. Those classes that save money invest it in stocks and bonds, which are either kept in the home or left with the stock brokers through which they make their purchases and sales. Nor will an analysis of bank deposits give more than a general idea of the importance of deposit currency as evidenced by checks, since a bank deposit can be drawn against by means of a letter addressed to the bank requesting it to pay out money.

In addition to the banks and stock brokers with whom current accounts may be carried, there are two other institutions that make possible the use of deposit currency, viz., the postal savings bank, and the service of postal cheques. The first-named institution works in a way similar to kindred institutions in the United States. The second institution was established some years ago in order to decrease the demand for currency. This made it possible to have a cheque account with the post office. Cheque books are issued as is also another type of book containing forms which are used in demanding the post office to credit some other cheque account with the sum filled in the blank. This latter practice is

---

<sup>51</sup>In 1790 it became known that for years favored depositors had been permitted to overdraw their accounts and that enormous loans of specie had been made to the city and to the Dutch East India Company. These disclosures destroyed confidence, the premium on bank money disappeared, and the bank became insolvent. It was closed by royal decree in 1819. The Bank of Hamburg, established in 1619, was modeled after the Bank of Amsterdam and made transfers in the same manner. See Colwell, *op. cit.*, pp. 181-183.

in nature a "giro" system. The service of postal cheques has developed rapidly following a period during which great difficulty was experienced in attempting to popularize the idea. Indeed, the system became so successful that the staff proved inadequate to handle the business and some time ago the service was temporarily discontinued. The Vice-Consul thinks it has been resumed at this time.<sup>52</sup>

### The check in England

Checks originated in England in the latter part of the 17th Century when it was the practice to make deposits with goldsmiths. The credits or the deposits with the goldsmiths were transferred by means of two forms: (1) The goldsmith gave his customer either a written promise to pay to himself, or to his order, or to the bearer on demand, a certain sum of money. These notes were in simple writing, and were called goldsmiths' notes. Out of these bank notes developed.<sup>53</sup> (2) The customer might write a note to his goldsmith directing him to pay a certain sum to any person, or to his order, or to bearer, on demand. These notes were called *cash notes* at first, but were checks in the modern sense, and differed from the modern check principally in the fact that they were less formal. English checks (*cheques*) originated in the form of these cash notes.<sup>54</sup>

Although Bachem says the oldest instrument of this sort dates from 1681, Powell gives examples of such instruments dated 1671 and 1675.<sup>55</sup> He says that as early as April 12, 1671, the check was found in the form of a letter requesting the addressee to pay to "Phil Marsh or bearer the sum of £489." In 1914 the Institute of Bankers in England added to its collection a check dated August 14, 1675. A facsimile of the check was published and there described as the oldest check in that country. It was worded:

---

<sup>52</sup>Letter from Mr. G. P. Luden, Vice-Consul of the Netherlands, New York City, July 24, 1924.

<sup>53</sup>Bachem, p. 7.

<sup>54</sup>H. D. Macleod, *A History of Banking in Great Britain* (New York, 1896), p. 2; Bachem, p. 7; H. D. Macleod, *The Theory and Practice of Banking*, 3rd ed., Vol. I (London, 1875), pp. 208-210; A. M. Davis, "Currency and Banking in the Province of Massachusetts Bay," *Publications of the American Economic Association*, Series 3, Vol. II (1901), p. 34.

<sup>55</sup>E. T. Powell, *The Evolution of the Money Market, 1385-1915* (London, 1915), p. 101.

“Mr. Thomas Ffowles.

“I desire you to pay unto Mr. Samuell Howard or order upon receipt hereof the sums of nine pounds thirteene shillings and six pence and place it to the account of  
14 Augt. 1675

Ye servant,  
Edmond Warcupp.

---

£9.13.6

---

“For Mr. Thomas fowles, Gouldsmith at his shop between the two Temple gates, Fleete-streete.”

On the back appeared the following endorsement by the payee:

“Rcd. in full of this bill the sume of nine pounds thirteen shillings sixpence.

“Saml. Howard.”<sup>56</sup>

Powell points out that at this time checks were considered simply as a means of saving a customer the trouble of personal attendance at his bankers', but were not recognized as a facile mode of achieving the innumerable adjustments of bank balances which are the ultimate outcome of each day's business or as the supremely useful form of currency, destined to predominate over both notes and gold.<sup>57</sup>

The earliest printed checks appear to be those of Childs<sup>58</sup> and are believed to date from 1762. Check books began to be issued about 1781.<sup>59</sup> During the first half of the 18th Century, while the goldsmith-bankers of London were slowly being transformed into bankers only, shopkeepers in outlying towns began to develop into bankers and by the end of the century were to be found in almost every town. Checks were known to these bankers as early as 1705.<sup>60</sup>

The Bank of England, as organized in 1694, was a bank of deposit as well as a bank of issue and provided for the use of the check.<sup>61</sup> The bank, however, became principally a bank of issue

---

<sup>56</sup>Powell, *op. cit.*, pp. 101-102.

<sup>57</sup>*Ibid.*

<sup>58</sup>From Francis Child, credited with being the first banker, in the modern sense, in England. He was the inheritor of a goldsmith's business which is traced back to 1559. See Powell, p. 112.

<sup>59</sup>Powell, p. 103.

<sup>60</sup>Powell, p. 117. Country banks undoubtedly developed from other origins also.

<sup>61</sup>W. R. Bisschop, *The Rise of the London Money Market* (London, 1910), pp. 86-92.

by 1800. The early monopoly of note issue given to the bank fostered the development of deposit banking and the use of checks by the private banks.<sup>62</sup> With the evolution of English banking, the check became the recognized credit instrument in business. As early as 1864 Sir Lubbock, making an inquiry into the character of receipts at his own bank, found that checks and bills of exchange constituted 96.8 per cent. of them. The importance of checks was evidenced by the introduction of the clearing system in London in 1873. Another and more comprehensive inquiry made by Pownall in 1881, showed a lower percentage of checks in the total amounts paid into different classes of banks. London banks showed check payments in the proportion of 97.23 per cent.; in country banks in 261 places checks constituted 72.86 per cent.<sup>63</sup> The use of checks became so highly developed that they were looked upon as a distinctively British institution, Lord Avebury dubbing them the "Union Jack of Commerce".<sup>64</sup>

Some idea of the importance of deposit currency in England may be gained from the statements of the Bank of England and the five leading joint-stock banks. The Bank of England reported as follows for December 27, 1922: Notes in circulation, £124,878,000; public deposits, £13,324,000; other deposits, £119,908,000.<sup>65</sup> The deposits of the five leading joint-stock banks on December 31, 1922, amounted to £1,537,300,000.<sup>66</sup> In March, 1924, the Bank of England reported bank notes in circulation amounting to £103,000,000; currency notes and certificates, £282,000,000; deposits, £127,000,000. Nine London clearing banks reported total deposits of £1,603,000,000.<sup>67</sup>

### Checks in France

In France the check had become of enough importance by the middle of the 19th Century to cause the drafting of legal regulations. These regulations of 1865 constituted the first legal recognition given to the check in France.<sup>68</sup> The check was actually

<sup>62</sup>There was in operation for many years in England an institution called The Cheque Bank, created for the purpose of evading the bank-note law by the issue of checks payable only over the counters of other banks with which The Cheque Bank established relations, and which had practically the character of bank notes.

<sup>63</sup>C. A. Conant, "Development of the Check," *Bankers Magazine*, Vol. LXXXIII (1911), p. 581.

<sup>64</sup>Powell, *op. cit.*, 317-318.

<sup>65</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 275.

<sup>66</sup>*Loc. cit.*, p. 333.

<sup>67</sup>*Federal Reserve Bulletin*, Vol. X (1924), p. 432.

<sup>68</sup>C. A. Conant, *op. cit.*, pp. 581-582.

known previously under the name *bon de caisse*, which is referred to by the French jurists as the *chèque à l'état embryonnaire*. For their circulation, these checks were drawn up in the form of receipts called *chèques reçus* or *chèques réceptionnés*. The chief hindrance to the extension of the use of the check was the tax on all *mandats de payment* of one-half of 1 per cent.

To meet the general demand the law of 1865 was passed by which the check was declared to be tax-exempt, but by a series of regulations its universal growth and use was retarded in order to prevent the supplanting of the highly-taxed note. By the law of 1879 the tax-exemption of the check was recalled and on the *chèques de place à place* a duty of 20 centimes, and on the *chèques sur place* a duty of 10 centimes, was placed.<sup>69</sup>

At the Bank of France, as at the Reichsbank, an enormous volume of business is done by transfer orders, but they are usually orders for the transfer of credit from one client of the bank to another client. However, the proportion of checks to coin and bank notes has steadily increased in the bank receipts since 1890. In that year transfers and checks constituted but little more than 50 per cent. of the total receipts of the Bank of France; in 1900, they constituted 68.6 per cent., and in 1910, 80.4 per cent. These proportions relate entirely to payments into banks and do not indicate the relative importance of transfer orders as compared with checks, although Conant treats the percentages as an indication of the importance of checks. The ascertainment of the proportion of checks figuring in outside transactions is more difficult and has rarely been attempted. There appears to be no valuable information available relative to the situation in France. It is generally believed that outside of Great Britain, the proportion of checks used in everyday transactions in France and other countries in Europe is much smaller than in the United States.<sup>70</sup>

In 1916 a step was taken which tended to give some impetus to the use of checks. The French Minister of Finance, in that year, announced that thereafter payment by the French government would be made largely by check and that arrangements would be introduced whereby private establishments could make payment to the government in the same manner.<sup>71</sup> Further encouragement to the use of checks was given by the passage of a law in August, 1924. Prior to that time holders of bills had been

---

<sup>69</sup>Bachem, *op. cit.*, p. 8.

<sup>70</sup>Conant, *op. cit.*, pp. 581-582.

<sup>71</sup>*Federal Reserve Bulletin*, Vol. II (1916), pp. 374-375.

reluctant to accept checks in payment, since in the event that checks were not honored, the holder had not only parted with the bill but had lost the opportunity to protest non-payment, as the law required that protest be made on the date following the due date, and checks ordinarily required at least twenty-four hours for clearance. The new law, among other things, extends the period allowed for protest to from five to eight days, and compels the debtor to restore the bill to the holder in the event of non-payment of the check.<sup>72</sup>

A general idea of the extent to which bank notes predominate in France as a medium of exchange may be gained from recent statements issued by the Bank of France. On December 28, 1922, the Bank of France reported as follows: Bank notes in circulation, 36,358,387,000 francs; government deposits, 20,482,000 francs; other deposits, 2,289,667,000 francs.<sup>73</sup> In March, 1924, the note circulation amounted to 39,950,000,000 francs, while deposits (total) amounted to but 3,242,000,000 francs.<sup>74</sup>

#### The check in Austria

It seems that the check was known in Austria as early as the 18th Century, although it has attained importance only recently. The Vienna Endorsement and Cashiers' Association, the Lower Austrian Discount Association, the Austro-Hungarian Bank and the Royal Postal Savings Bank have exerted their influence to increase the use of checks.<sup>75</sup> Nevertheless, the most common medium of exchange is the bank note issued by the Austrian National Bank which was opened January 2, 1923.

The charter of the old Austro-Hungarian Bank expired on December 31, 1919, and thereafter the business of the bank was carried on separately for each of the succession States. The Austrian section of the Austro-Hungarian Bank performed all the functions of a central bank of issue until the new Austrian National Bank was opened. This bank took over the note circulation of the Austrian section as well as its claims against the Austrian government. The charter of the new bank differs but little from those of other central banks of issue in Europe, but the influence of the government on its operations is restricted closely.<sup>76</sup>

<sup>72</sup>John P. Young, *European Currency and Finance*, Commission of Gold and Silver Inquiry, United States Senate (1925), p. 311.

<sup>73</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 275.

<sup>74</sup>*Federal Reserve Bulletin*, Vol. X (1924), p. 432.

<sup>75</sup>Bachem, pp. 8-9.

<sup>76</sup>*Federal Reserve Bulletin*, Vol. IX (1923), pp. 328-330.

In December, 1922, the Austrian section had notes circulating to the extent of 4,080,177,238,000 kronen. Deposits and other demand liabilities amounted to 327,991,960,000 kronen. Deposits of the Austrian government amounted to 528,254,403,000 kronen.<sup>77</sup> This statement of liabilities, however, throws but little light on the relative importance of deposit currency in Austria today. While checks are of some importance, the bank note is the principal medium of exchange, there being no government notes issued. Checks are used mostly in the wholesale trade in transacting large business, but hardly ever in retail trade. The amount of deposits as reported by Austrian banks is much larger than the amount for which checks are used. These deposits are usually drawn out by presenting the bank book, as is done in the United States in the case of savings accounts.<sup>78</sup>

### Checks in Hungary

Cash, composed largely of government notes, constitutes the principal medium of exchange in Hungary. Government notes were issued by the National (government) Bank until recently. Bank notes are issued at present by the the National Hungarian Bank, which was opened June 24, 1924. Checks are relatively unimportant as compared with the government notes. They are not used at all in retail trade and only by very large and well-known firms in wholesale transactions.

As in most countries outside of England and the United States, an analysis of bank statements in Hungary gives no definite indication of the extent to which checks are used. There are the following different types of deposits in Hungary: (1) There is a monthly deposit made for business purposes. It is made at the risk of the depositor and does not consist of a very large sum of money because withdrawals can be made by telegram or even over the telephone. (2) There is the regular savings bank deposit, from which money may be drawn only upon presentation of the savings bank book. (3) Deposits are made also against which checks can be drawn. But the bank must be notified of each check drawn against the account before it cashes the check.<sup>79</sup>

### Checks in Switzerland

Checks are used quite often in Switzerland, but are not as common as in England or the United States. The giro system, as

<sup>77</sup>*Ibid.*, p. 650.

<sup>78</sup>Letter from the Austrian Consulate General, New York City, July 22, 1924.

<sup>79</sup>Letter from Dr. Louis Alexy, acting Consul General of Hungary, New York City, July 23, 1924.



in Germany, is probably of far more importance, its development being encouraged by the Swiss National Bank. In the main, the medium of exchange is composed of bank checks, bank giros, postal checks, postal giros, and cash, the cash being composed, to a large extent, of bank notes issued by the Swiss National Bank. Checks are used extensively by the business world, although the retail trade is transacted principally through the medium of bank notes. Postal checks are used frequently, particularly for the payment of small transactions.<sup>80</sup> But both bank and postal giro service are of increasing importance and popularity in Switzerland.

It is probable that the bank statements issued in Switzerland give but a fair picture of the general situation relative to the importance of deposit currency in that country. The volume of circulating notes of the National Bank of Switzerland has increased considerably from 1913 to 1920—in round numbers from about 300,000,000 to 1,000,000,000 francs. This increase, however, was moderate as compared with currency increases in other countries. Before the war notes in circulation were based on gold and commercial bills of exchange. With the outbreak of the war, documentary bills of exchange largely disappeared, being supplanted by short-term treasury notes. The increase of bank note circulation was accompanied by an increase of the metallic reserve held by the bank so that even at its lowest point in 1918, the ratio of gold to notes in circulation was 40 per cent., as compared with 54 per cent. in 1913. By July, 1923, the ratio had risen to 61.15 per cent., and if silver be included, to 73 per cent. The report of the National Bank of Switzerland for December 30, 1922, was as follows: Notes in circulation, 976,426,000 francs; deposits, 165,032,000 francs. In August, 1923, the notes in circulation amounted to 860,000,000 francs, while current accounts and deposits totalled 106,000,000 francs.<sup>81</sup>

#### Checks in Norway, Sweden, and Denmark

Bank notes constitute the chief medium of exchange in all the Scandinavian countries. Nevertheless, the acting Consul General for Norway points out that checks are used frequently in that country. They are used extensively in wholesale trade, although probably very little in retail transactions. Bank notes are the most common medium for all transactions. No government notes

---

<sup>80</sup>Letter from the Consul of Switzerland, New York City, July 23, 1924.

<sup>81</sup>*Federal Reserve Bulletin*, Vol. X (1924), p. 88.

are issued. Although deposits may be withdrawn from banks by means other than checks, the acting Consul General thinks the amount of deposits as reported by the banks of that country will give some indication of the extent to which checks are used.<sup>82</sup>

The Bank of Norway reported for December 30, 1922, as follows: Notes in circulation, 384, 775, 000 kroner; deposits, 163, 429, 000 kroner.<sup>83</sup> The 103 private banks had deposits at the end of November, 1922, amounting to 2,887,000 kroner.<sup>84</sup> However, it is unsafe to assume that these figures are a true indication of the relative importance of deposit currency as evidenced by checks, since the deposits may be withdrawn by other means.

In Sweden an instrument possessing the more essential characteristics of the check was being used at the beginning of the 18th Century.<sup>85</sup> Nevertheless the most common medium of exchange today is the bank note, which is the only kind of note issued in Sweden. These are issued by the Bank of Sweden (Riksbanken), which was established in 1668. It functions as a central bank and since 1904 is the only bank which is authorized to issue bank notes. Checks are used to some extent in wholesale trade, although drafts are more common; in retail trade the check is used very little. An analysis of bank statements from Sweden, as for Norway and Denmark, gives no real indication of the extent to which checks are used. In Sweden there are several types of deposits but only one kind, the "giro-rakning," may be drawn out by means of checks.<sup>86</sup> In December, 1922, the Riksbank reported a note circulation amounting to 584,000,000 kroner and total deposits of 389,000,000 kroner.<sup>87</sup>

The same general situation obtains in Denmark. The most common medium of exchange is the bank note issued by the "Nationalbanken," which holds a government license for issuing bank notes. Government notes are not issued. Checks, however, are used to a great extent in wholesale trade, though seldom in retail transactions. Wages for laborers are sometimes paid in checks, but mostly in cash. The amount of deposits as shown by the bank statements exceeds the amount which is drawn out by

---

<sup>82</sup>Letter from the acting Consul General of Norway, New York City, July 28, 1924.

<sup>83</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 406.

<sup>84</sup>*Ibid.*, p. 134.

<sup>85</sup>A. W. Flux, *The Swedish Banking System*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 576, p. 18.

<sup>86</sup>Letter from the Consul General of Sweden, New York City, July 31, 1924.

<sup>87</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 273.

check, since deposits may be drawn out by other means. For example, many deposits are made in the bank against a bank book and are drawn out by presenting the book and having the bank make a note therein.<sup>88</sup> The Bank of Copenhagen, according to its report for December 30, 1922, had notes in circulation to the extent of 450,354,000 kroner; government deposits, 2,711,000 kroner; current account deposits, 163,557,000 kroner; and all other deposits and creditors, 30,218,000 kroner.<sup>89</sup>

### Checks in Belgium

The situation in Belgium is not unlike that in France. Since the organization of the National Bank of Belgium in 1850, deposits have constituted but a small part of the liabilities as compared with notes.<sup>90</sup> The Bank of Belgium reported for December 28, 1922, notes in circulation to the extent of 6,700,886,000 francs. Deposits in current account were as follows: Government deposits, 215,902,000 francs; other deposits, 283,010,000 francs.<sup>91</sup>

These figures will show the general situation, but nothing more; it is doubtless true that the amount of deposits, as shown here exceed the amount drawn out by means of checks.

### The check in Spain and Portugal

While the use of checks in all European countries is limited as compared with England, the United States and Canada, it seems that in the Latin countries they are limited to a much narrower field than in other European countries.<sup>92</sup> In Spain the chief medium of exchange is the bank note issued by the Banco de España. These are the only notes issued. Checks are used to some extent in wholesale trade, but not in retail transactions. Deposits, as shown by bank statements for that country, are no indication of the extent to which checks are used, since a large proportion of them becomes a medium of exchange through "credit transferences."<sup>93</sup>

<sup>88</sup>Letter from Mr. M. J. Oluf, 1st Vice-Consul of Denmark, New York City, July 25, 1924.

<sup>89</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 406.

<sup>90</sup>C. A. Conant, *The National Bank of Belgium*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 400, *passim*, but especially pp. 193-195.

<sup>91</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 276.

<sup>92</sup>Letter from Mr. Romolo Angelone, Commercial Attaché, Royal Italian Embassy, New York City, August 4, 1924.

<sup>93</sup>Letter from Mr. Alejandra Barea, Consul General for Spain, New York City, July 25, 1924.

Bank notes issued only by the Bank of Portugal, a government bank, are the chief medium of exchange in Portugal also. Checks are used to some extent in wholesale trade, but seldom in retail transactions. Bank deposits in Portugal are no indication of the extent to which checks are used in that country.<sup>94</sup>

### The check in Russia

Bank notes have been and are the most important medium of exchange in Russia. In 1910 notes were about three times as important as checks, although checks were becoming fairly well developed prior to the Revolution of 1917.<sup>95</sup>

The rather recent creation in Russia of industrial trusts and commercial enterprises on a capitalistic basis has made it necessary to introduce some stability into the currency. The chervonetz is the result. It is equal to 10 pre-war gold rubles, or approximately £1. These chervontsi are issued by the new State Bank and are supposed to have a 25 per cent. security in gold, precious metals, or stable foreign currency, the remainder of the security being readily marketable goods, short-term bills of exchange, or other specified security. Although nominally redeemable in gold chervontsi, the chervontsi notes, in practice, are redeemed in soviet rubles at the current rate of exchange. There are, in fact, two independent currencies in circulation today: The State Bank notes (chervontsi) and the soviet ruble, of which a new series has been issued almost yearly by the Treasury since the beginning of the Soviet regime.

The more or less stabilized currency has acted as a stimulus for the establishment of new banks and has encouraged the making of deposits and the extension of loans. It should be recalled that with the nationalization and liquidation of all banks during the years 1917-1919, payment for commodities and services by check or draft ceased. From that time until the beginning of 1922, all business transactions were carried on exclusively with the aid of paper notes.

The State Bank was organized in November, 1921, and absorbed the Peoples' Bank which had been created following the nationalization and liquidation of all other banks. The State Bank was not given the right of note issue until November, 1922, at which time it was given the power to issue the new chervontsi.

<sup>94</sup>Letters from the Consul General of Portugal, New York City, July 24, 1924.

<sup>95</sup>Professors Idelson and Lexis, *Organization of Banking in Russia*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 586, *passim*.

This bank is a bank with branches and resembles a central reserve bank, although it also performs the functions of an ordinary commercial bank.

With the adoption by the Soviet government of a more tolerant attitude towards private enterprise in business, it has become possible once more to engage in banking operations in Russia. During the second half of 1922 and the first half of 1923, a number of public and private banks were organized. Deposits are returning as a medium of exchange. In some banks demand deposits, by April, 1923, were equal to about five times their capital and surplus. The most important banks are owned and operated by the State or co-operative associations, the activities of the private banks being closely restricted. Most of the banking institutions are located in Moscow, about 80 per cent. of all banking resources being concentrated there. The State Bank and the Industrial Bank, the two largest banks, have a number of branches over Russia, the State Bank alone having over 100 branches in the important towns.

The Russian State Bank, according to its statement for May 1, 1923, shows roughly the relative importance of notes and deposits as follows: Bank notes (chervontsi) in circulation, 6,000,000; current account and other deposits, 1,400,670,000 (in soviet rubles, issue of 1923), and 7,094,000 chervontsi; transfer operations, 17,097,000 rubles and 931,000 chervontsi.<sup>96</sup>

### Checks in the Republics of Finland and Latvia

The most common medium of exchange in the Republic of Finland is the local currency composed principally of bank notes. The Bank of Finland, a government institution, is the only bank of issue. Commercial remittances are made largely by use of an equivalent to cashier's checks in the United States. Checks are used in the wholesale, but very little in retail trade. The Bank of Finland reported as follows for December 30, 1923: Notes in circulation, 1,420,920,000 Finnish marks; government deposits, 239,311,000 marks; current account deposits, 110,551,000 marks.<sup>97</sup> But deposits, as shown in this statement, do not indicate the importance of checks, since deposits may be withdrawn by presenting the pass book as well as by check.<sup>98</sup>

<sup>96</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), pp. 936-942, 1200-1205; Vol. IX (1923), pp. 1114-1119.

<sup>97</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 653.

<sup>98</sup>Letter from Mr. Edvin Lundstrom, Vice-Consul for Finland, New York City, July 24, 1924.

The Republic of Latvia, one of the Baltic States which became separated from Russia after the 1917 Revolution, presents a somewhat similar situation. The Consul for that country reports that the use of checks in Latvia is being extended even though they play but a minor role as yet. The principal currency is the notes issued by the Bank of Latvia, a government institution, established November 1, 1922, with the exclusive right of issue. Rubles, which were issued before lats, were issued by the Treasury Department. These are being replaced by the lats, which are virtually gold certificates in nature. Checks are favored for use by the government and are winning popularity gradually with the people. Their use in wholesale trade is limited as yet to persons who are well known, cash being the customary means of settling accounts. In retail transactions the part played by checks is negligible. Deposits may be drawn out by various means other than checks, such as letters of credit, special orders, or by presentation of the pass book.<sup>99</sup>

#### Checks in southern European countries

What has been said for the other European countries may be said, in general, for the Baltic States and other southern European countries. No effort will be made to describe in detail the nature of the currencies in the remainder of the European countries. For no country is the exact information obtainable. At the best only estimates and general statements can be secured, all of which may be summarized in the general statement that local currencies are the principal media of exchange, checks occupying a minor place.

In Roumania, for a typical example, cash and bank notes are the most common medium of exchange, checks being used very little. The only notes in Roumania are those issued by the National Bank of Roumania. These are the only legal currency aside from gold, silver, and nickel coins minted by the State Treasury. Checks are seldom used even in wholesale trade and then only when it just happens that both parties are dealing with the same bank. Deposits, as shown by the Roumanian banks, may be withdrawn by other means than the check, as, for example, the letter of credit. Mr. Drutz, the Vice-Consul of Roumania, in summarizing the situation in that country points out that the conditions as described above are due to the fact that the practice

<sup>99</sup>Letter from Mr. Arthur B. Lule, Consul of Latvia, New York City, July 25, 1924.

of using the check can hardly be said to have been introduced in Roumania. This is partially responsible for the actual lack of currency in that country. The reason for this general situation is that the Roumanian government thus far has not passed any protective laws which would guard the banks against heavy losses in case of forgery, etc. He also points out that ". . . the matter has lately been discussed even in France, and should it prove successful we are hopeful that in the near future the application of the French law will be studied by the Roumanian government with a view to introducing the practice of using checks in Roumania."<sup>100</sup>

### Checks in China, Japan, and India

It is difficult to generalize with respect to the media of exchange in China. Almost anything can be found there. China has no unified system of currency. It is approximately true to say that she has parallel standards, silver and copper coins being used side by side, but with no fixed legal ratio between the two metals. Chinese currency, in reality, is composed of a number of systems. There is the copper cash; the currency of silver bullion based on the tael unit; silver coins, the dollars of foreign as well as of provincial mintage; and finally there are the minor silver coins, fractional parts of the dollar circulating independently of the mint and with no limitations upon their legal tender quality. A large proportion of the business transacted in the interior of China is carried on by means of silver payments; what little gold is used is restricted almost entirely to international commerce. Bank notes occupy an important place in the currency, but the use of checks is virtually negligible. Only the merchants in the treaty ports have any dealings with them.<sup>101</sup>

Silver is the principal medium of exchange in India. The use of bank notes is increasing, but the use of checks is increasing at a much greater rate. The use of checks is confined principally to such cities as Calcutta, Bombay, Madras, Cawnpore, Rangoon, and Karachi, and here checks are far more important than specie and notes. Legal tender money is required only for the purpose

<sup>100</sup>Letter from Mr. S. Drutz, Vice-Consul of Roumania, New York City, July 24, 1924.

<sup>101</sup>C. F. Remer, *Readings in Economics for China* (Shanghai, 1922), pp. 315-355; R. O. Hall, *Chapters and Documents on Chinese National Banking* (Shanghai, 1920), *passim*; *Federal Reserve Bulletin*, Vol. IX (1923), p. 1014; E. T. Williams, *China Yesterday and Today* (New York, 1923), pp. 195-196, 588; D. K. Lieu, "Gold Currency Scheme," *The Chinese Social and Political Science Review*, Vol. III (1918), pp. 225-277.

of actual public circulation in connection with retail transactions, the payment of wages, and for reserves held by the banks against deposits. All the cities mentioned except Karachi have clearing houses. European merchants and the educated classes are the chief users of checks. A large proportion of the inland remittances are carried on by bills of exchange called *hundis*.

The average growth of the check in India from 1900 to 1919 was greater than the growth of business; especially was this true during the War. Its growth was more than twice as great as all other circulation combined. Bank deposits increased 65 per cent. from 1913 to 1917. Outside of the towns, however, checks cannot circulate to any extent; 94 per cent. of the population is illiterate, which is the main key to the reasons for the absorption of the precious metals. Were it not for the fact that stamps on checks are required and that signatures may not be in the vernacular but must be in English, the development of the check in India, undoubtedly, would be more rapid.<sup>102</sup>

The currency situation in Japan is quite different from that in China and India; it is more akin to that in the United States. While it cannot be said that the use of checks in Japan is as general or as highly developed as in the United States, checks are probably as important a medium of exchange as notes. The check seems to have been known in Japan as early as the 17th Century, although modern banking in that country really dates from about 1872.<sup>103</sup> Banking development has been very rapid in Japan in recent years, the development assuming the form of larger banks with branches, rather than a mere increase in the number of independent banks. In fact, the number of independent banks is decreasing.<sup>104</sup>

The Bank of Japan, which is the central bank of issue, reported as follows for May, 1924: Note circulation, 1,347,000,000 yen; government deposits, 511,000,000 yen; private deposits, 46,000,000 yen. The Tokyo banks reported deposits for the same date amounting to 1,838,000,000 yen. The combined deposits exceed the note circulation.<sup>105</sup>

<sup>102</sup>G. Findlay Shirras, *Indian Finance and Banking* (London, 1920), pp. 9, 23, 230, 407; B. Ramachandra Rau, *Present-Day Banking in India* (University of Calcutta, 1922), pp. 271-275; H. Stanley Jevons, *Money, Banking and Exchange in India* (Simla, 1922), pp. 86, 90, Chap. VIII; *Federal Reserve Bulletin*, Vol. IX (1923) pp. 1011-1014.

<sup>103</sup>Bachem, pp. 8-9; O. M. W. Sprague, *The Banking System of Japan*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 586, Part IV, *passim*.

<sup>104</sup>*Federal Reserve Bulletin*, Vol. IX (1923), pp. 804-810.

<sup>105</sup>*Federal Reserve Bulletin*, Vol. X (1924), p. 432.



### Checks in Canada

Although checks and clearing houses developed somewhat later in Canada than in the United States, checks were in use in Canada by 1825. The circulation there is not unlike that in the United States with the exception that exchange is charged uniformly on checks, which tends to restrict their use somewhat. The use of checks is extensive, however, and is growing more rapidly than is the use of notes.<sup>106</sup> In February, 1924, the bank note circulation amounted to \$163,000,000; dominion note circulation was \$227,000,000; and individual deposits amounted to \$2,000,000,000.<sup>107</sup>

### Checks in Mexico

It was learned in the investigations of 1910 that checks played an important part in the medium of exchange in Mexico, this being partly due to the extensive operations of Americans in that country. It was observed, also, that the use of bank notes had developed slowly and that hard money was preferred for small transactions.<sup>108</sup> Today the general situation does not differ widely. Gold and silver coin are the principal medium of exchange, but the use of checks is quite common. The Consul General of Mexico in New York City insists that the use of checks in Mexico is as common as in the United States.

During the ten years of internal struggle following 1910, the Mexican system of banks was disrupted almost totally, and there developed a tendency among the people either to hoard their funds or to deposit them in banks abroad. This situation made the monetary system virtually metallic and very inelastic. Formerly, banks under government concession issued notes, but the internal struggles caused this practice to be discontinued. Consequently, no bank notes are issued and only recently have provisions been made for a resumption of their issue. A law authorizing a central bank of issue, known as the Banco de Mexico, was approved by the legislative bodies of Mexico, January 20, 1923.<sup>109</sup> When this bank begins to function Mexico will have bank notes once more,

<sup>106</sup>Joseph French Johnson, *The Canadian Banking System*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 583, pp. 99-100; Victor Ross, *A History of the Canadian Bank of Commerce*, Vol. I (Toronto, 1920), p. 60.

<sup>107</sup>*Federal Reserve Bulletin*, Vol. X (1924), p. 432.

<sup>108</sup>C. A. Conant, *The Banking System of Mexico*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 493, pp. 54-57.

<sup>109</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 590.

and these may add some elasticity to the otherwise hard metallic base. Government notes are not issued.

The Mexican Consul General reports that checks are used in both wholesale and retail trade in that country, and that deposits, especially current account deposits, as reported in Mexico, indicate fairly accurately the extent to which checks are used. He also pointed out that as in the United States, such deposits may be withdrawn by means of checks, drafts and other commercial documents.<sup>110</sup>

### The use of checks in South America

It would carry us too far afield to examine in any detail the monetary systems used in the various South American countries. Only Colombia and Brazil will be examined as perhaps typical of the countries of that continent.

Until quite recently, Colombia has been dependent upon various unsecured note currencies, both government notes and bank notes, but mostly government notes, for its medium of exchange. In July, 1923, a new central bank, called the Banco de la Republica, was organized as the result of the work of a mission of American financial counsellors, headed by Professor E. W. Kemmerer of Princeton University. This new bank, with a life of twenty years, and with one-half of the capital owned by the government, is to enjoy the exclusive privilege of note issue. The notes may be issued against specie, commercial paper, and for the purchase and retirement from circulation of a certain amount of treasury certificates. The gold reserve against the combined note and deposit liability must not be less than 60 per cent.<sup>111</sup> These new notes are replacing the old and undoubtedly will be accepted as the currency of the country.

It cannot be said that the use of checks in Colombia is very general. Sometimes checks appear in wholesale trade, but not frequently. Other documents, such as drafts, promissory notes, bills of exchange, etc., are the more common media. The use of checks in wholesale trade is confined principally to the large cities. In retail trading, checks are seldom seen, it being the custom to make settlements in cash. Deposits, as reported by banks in Colombia give no definite idea of the extent to which checks are used. Only the accounts current are indicative. But in addition to this type

<sup>110</sup>Letter from Mr. Alberto Mascareñas, Consul General for Mexico, New York City, July 24, 1924.

<sup>111</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 1123.

of account, there are certain special accounts, such as the savings accounts (*Caja de Ahorros*), installment deposits (*A termino*), and other special deposits, which may be withdrawn by presenting the pass book or "title". There are also deposits which may be withdrawn by means of telegraphs, cables, and letters. It is hoped and expected that the use of checks will become more general as soon as the proper protective legislation can be enacted.<sup>112</sup>

The monetary system of Brazil is composed principally of inconvertible paper money, the use of checks not being widespread, although on the increase. While Brazil is nominally on a gold basis, paper money has been issued to such an extent since 1918 by the National Treasury and the Institution for the Permanent Protection of Coffee and Other Produce, that gold reserves against circulation dropped to 4 per cent. in May, 1923. In the latter part of 1922, the Banco do Brasil was transformed into a bank of issue with the exclusive right to issue notes which are designed to replace the government issue. These notes are issued against commercial credits and are redeemable in gold at a fixed rate.<sup>113</sup>

One can do no better than quote directly from a letter from the Brazilian Consulate General relative to the use of checks in that country, who says, ". . . the use of checks has not become widespread in Brazil, as it has in European countries and in the United States. This is mainly due to the great distances which separate the commercial centers of Brazil. From Rio Janeiro, going north to Bahia, it is 750 miles; from Bahia to Pernambuco, fully 400, and Pernambuco to the Amazons, 1,150 miles. In going south, Rio Grande do Sul is 875 miles. The two great centers, Rio Janeiro and São Paulo, are linked by rail 350 miles, but communication between those other centers mentioned above is by sea. Owing to these distances, each center is, to a great extent, isolated and, therefore, banks at these outports, whether local or branches of the great institution, have to rely mainly upon their own resources and retain a strong reserve of cash locked up in their safes.

"Payment by check in Brazil is, however, coming into general practice, and, thanks to the initiative of the Banco do Brasil, clearing houses have been established in the two great centers, Rio Janeiro and São Paulo. At the outports the trader still looks with a certain amount of suspicion upon a check and looks for payment in cash and this involves a constant strain upon the

<sup>112</sup>Letter from the Consul General of Colombia, New York City, July 31, 1924.

<sup>113</sup>*Federal Reserve Bulletin*, Vol. IX (1923), pp. 592-595, 706-707.

TABLE I  
Metallic Reserves, Total Note Circulation, and Central Bank Deposits at the  
End of 1913<sup>1</sup>

	[In thousands of dollars converted at par.]				Per cent of metallic reserves to Total total note and deposit liabilities	
	Metallic reserves	Gold	Notes in circulation	Deposits	liabilities	to billies
Austria-Hungary .....	304,410	251,421	505,212	24,119	539,331	54.4
Belgium .....	58,941	48,062	206,010	24,450	230,460	25.6
Denmark .....	21,287	19,666	40,618	1,842	42,468	50.1
Finland .....	7,394	6,973	21,810	5,094	26,904	27.5
France .....	802,388	678,856	1,102,715	188,886	1,291,601	62.1
Germany .....	244,339	278,453	617,240	188,763	806,003	42.7
Great Britain .....	170,245	170,245	144,086	347,193	491,279	34.7
Greece .....	5,746	5,211	54,256	49,006	103,262	5.6
Italy:						
Banks of issue...	287,791	265,456	440,717	63,513	504,230	57.1
Treasury .....	22,627	22,627	96,321	.....	96,321	23.5
Total .....	310,418	288,082	537,038	63,513	600,551	51.7
Netherlands .....	64,523	60,899	125,703	1,742	127,445	50.6
Norway .....	12,846	12,846	28,840	3,372	32,212	39.9
Portugal .....	17,692	8,760	112,372	11,667	124,039	14.3
Rumania .....	29,493	29,242	110,239	5,793	116,032	25.4
Russia .....	812,788	780,902	859,293	300,761	1,160,054	70.1
Spain .....	230,772	92,489	371,385	122,081	493,466	46.8
Sweden .....	28,766	27,372	62,838	29,309	92,147	31.2
Switzerland .....	36,823	32,802	60,568	11,389	71,957	51.2
Total, Europe...	3,268,871	2,792,281	4,960,221	1,388,980	6,349,201	51.3
Canada:						
Chartered banks...	27,142	27,142	108,646	1,170,651	1,279,297	2.1
Treasury .....	115,375	115,375	118,461	.....	118,461	97.4
Total .....	142,517	142,517	227,107	1,170,651	1,397,758	10.2
United States:						
Fed. Reserve Bks. <sup>2</sup>	241,408	204,949	1,220	227,880	229,100	105.4
Total, No. Amer.	383,925	347,466	228,327	1,398,531	1,626,858	23.6
Argentina .....	313,497	313,497	349,488	.....	349,488	99.7
Brazil .....	89,577	89,577	290,933	.....	290,933	30.8
Uruguay .....	12,499	10,826	22,275	9,187	31,462	39.7
Total, So. Amer.	415,573	413,900	662,693	9,187	671,880	61.9
Australia .....	21,899	21,899	43,212	.....	48,212	45.4
New Zealand .....	25,325	25,325	8,147	126,230	133,377	19.0
Total, Australasia	47,224	47,224	56,359	126,230	181,589	26.0
India .....	209,093	109,170	321,728	.....	321,728	66.0
Japan:						
Bank of Japan...	111,846	.....	212,555	61,397	273,952	40.8
Government .....	24,427	.....	.....	.....	.....	..
Total .....	136,273	.....	212,555	61,397	273,952	49.7
Java .....	21,587	10,027	45,016	3,901	48,911	44.1
Total, Asia ....	366,953	119,197	579,293	65,298	644,591	56.9
South Africa .....	236,828	26,581	10,619	198,947	209,566	113.0
Grand total ...	4,709,374	3,756,649	6,497,512	3,186,173	9,683,685	48.6

<sup>1</sup> From the *Federal Reserve Bulletin*, Vol. VIII (1922), p. 758. An excellent table showing the amounts of notes in circulation in the principal countries of the world at different dates since 1913 is given in the *Federal Reserve Bulletin*, Vol. IX (1923), p. 1283. Unfortunately, the table gives no information relative to deposits, and for that reason will be omitted here. It is unsafe to infer from the data given in Table I that deposits serve as anything like an exact indication of the extent to which checks are used in any country. Only in the roughest way do they show the general tendencies.

<sup>2</sup> Date of first statement of Federal Reserve Banks, Nov. 20, 1914.

banks' resources, especially during those seasons of the year when the crops have to be moved. In any case, checks are only current in the towns in which they are issued and the financing of the shipments between ports is done by means of bills of exchange, generally drawn at 30, 60 and 90 days. The banker then when negotiating these bills during the busy crop season will find his funds being withdrawn and accumulated at some other part of the republic, perhaps 1,000 miles away, and these funds have to be got back. Transfers may occasionally be arranged, but as the movement is generally all one way in given seasons of the year, all the banks find themselves in the same position and the only alternative left to them is to have their accumulated balances shipped back, the cash being packed in boxes and placed on board the ship under bill of lading. These shipments naturally incur considerable expense for freight and insurance, and this charge, together with the delay in receiving back their funds, has to be reckoned in the rate of discount in the negotiation of the bills.<sup>114</sup>

#### Notes and deposits in the leading countries of the world in 1913

A rough picture of the general situation as it prevailed in the principal countries of the world at the close of the year 1913 is given in Table I. This table probably presents a better view of the general situation in the leading nations of the world than do more recent data. The orgy of inflation through which the principal countries of the world have passed in the last few years has tended to obscure what would be the usual practices under more normal conditions. Table I will give also some information with respect to certain countries not mentioned above.

---

<sup>114</sup>Letter from Mr. J. C. Muniz, Deputy Consul for Brazil, New York City, July 21, 1924.

## CHAPTER II

### USE OF CHECKS IN THE UNITED STATES PRIOR TO 1863

#### The use of checks during the Colonial period

In order to appreciate more fully the conditions under which checks originated in what is now the United States, it is necessary to survey briefly the development of banking institutions in the American Colonies. It is here that we are to find the origin of checks, although the banking institutions of the Colonial period were of such a nature that bank notes as compared with checks were by far the more common medium of exchange.

#### The development of banking during the Colonial period

The history of banking in the Colonies is primarily a history of paper money issues and of the so-called land banks. The term "bank" as originally used in the Colonies had a peculiar connotation; the issue of paper money on the security of land or merchandise was spoken of as "raising a bank." The term bank had reference to the issue rather than to any particular institution or building.

Being destitute of specie as a medium of exchange, and feeling a need for a convenient and cheap medium, the Colonists resorted to almost every known expedient to supply it. The idea of using land and merchandise as security for paper emissions was borrowed from England, Scotland and France. Not only did the scarcity of specie as a basis for the development of deposit banking or the issue of notes probably furnish the prime reason for the creation of such notoriously bad banking schemes, but there was a general prevalence of fallacious theories advocating land banks and other unsound schemes. Mr. A. M. Davis finds that the prevailing monetary theories were an echo of what the same generation was then, or had just been, saying in the old countries.<sup>1</sup>

<sup>1</sup>A. M. Davis, "Currency and Banking in the Province of Massachusetts Bay," *Publ. Amer. Econ. Assoc.* (May, 1901), p. 187. The pamphlet literature of this time supports Mr. Davis' conclusion. Benjamin Franklin was among the prominent persons who supported such theories. In 1729, he contended

Although almost every conceivable type of banking and paper money scheme could be found in the Colonies, there were a few outstanding and common ones which will be described briefly.

Mr. Davis finds that a plan for a private bank was presented in 1671. The scheme for the bank was entitled, "A Proposal for erecting a Fund of *Land*, by Authority or Private Persons, in the nature of a *Money-Bank*; or *Merchandise Lumber*<sup>2</sup> to pass Credit upon, by *Book-Entries*; or *Bills of Exchange*, for great *Payments* and *Change-bills* for running Cash."<sup>3</sup> The rules laid down relative to the methods of issuing the bills and keeping the accounts of the depositors contemplated the establishment of a sort of clearing house where dealings between depositors could be adjusted by transfers of accounts. But virtually nothing is known as to the detailed manner in which the business was carried on. It seems to have lasted but a few months.<sup>4</sup>

#### Origin of checks, 1681

In the second experiment of which we have reliable information, is to be found the origin of the check in this country. This early instrument was devised in New England in 1681 in connection with a banking scheme called "The Fund at Boston in New England."<sup>5</sup> The plan stands forth among the pioneers in the financial experiments of the world. The purpose of this Fund was to furnish credits similar to our modern deposit credit, which should be available for business transactions through transfers of accounts between members of the Fund, and which might be accepted, ultimately, by the public for use.

Certain individuals (grantors) mortgaged their lands to the

---

that bills issued on land would be "coined land" and as a result of the nature of the underlying security, would be more stable than those issued on the security of gold and silver which he considered more likely to fluctuate in value. He thought the value of the land would increase with the population which would permit the issuing of more bills, thus securing stabilization. See *Works of Benjamin Franklin*, Edited by John Bigelow, Vol. I (New York, 1887), pp. 374-376.

<sup>2</sup>The word "Lumber" was a corruption of Lombard according to Davis, *op. cit.*, p. 10. It was frequently an adjunct of a land bank, staple merchandise of various sorts rather than land being used as security for issues.

<sup>3</sup>Davis, *op. cit.*, p. 69; J. H. Trumbull, *The First Essays at Banking and the First Paper-Money in New England* (Worcester, Mass., 1884), pp. 10-11.

<sup>4</sup>W. G. Sumner, *History of Banking in the United States* (New York, 1896), p. 3.

<sup>5</sup>A. M. Davis, *The Fund at Boston in New England*. Reprinted from the *Proceedings of the American Antiquarian Society* (Worcester, Mass., April 29, 1903). Much of the vagueness attaching to this experiment has been cleared up due to Mr. J. H. Trumbull, who found a rare pamphlet in the Watkinson Library, entitled *Severals Relating to the Fund*, which was published in 1682.

Fund, the mortgages including the power to sell, and received from the Fund a credit upon the books of the company. This credit was to be passed by book entries similar in principle to the method employed by the Bank of Amsterdam except that the credit in the latter rested upon coin, while the credit in the Fund rested upon land and merchandise. Two methods of passing credit were provided: "*Bills of Exchange for great Payments*" and "*Change-bills for running cash.*" The bills of exchange are supposed to have been change-bills of large size. The second means of transferring credit was provided by pass-bills. After credit on the books had been extended to the borrower on the basis of his mortgaged land, he could use his credit by securing change-bills. To get these bills he made out ". . . the equivalent a counter check in modern use, in the following words, Charge my accompt, fol.— Debtor,—for — Change bill now received, Number—." This change-bill, which was largely in the nature of the modern letter of credit, was circulated in a cumbersome manner by entering the amount of the transactions on the back of the change-bill until the credit was exhausted.<sup>6</sup>

But the significant fact is that credit could be transferred in the Fund, "either at the Office or elsewhere, without the necessity of taking out change-bills. This was accomplished through the medium of the pass-bill, which consisted in an order on the manager of the Fund to make the necessary transfers, couched in the following language: 'Place of my credit in Fund, fol. — to account of — the Sum of —:.'" For all practical purposes this constituted a check. Here was developed a system of credits which was used in a limited way among persons who had confidence in each other and faith in the judgment of the management of the Fund, but which did not comprehend the idea of the emission of a denominational paper currency in such form as to be of general use in trade.

This credit was made to circulate outside of the banks in the form of change- or pass-bills, the latter in the shape of checks. It is not known how far the business men of Boston joined in the enterprise, but the fact that some of the mortgages were kept alive for nearly four years shows that the acceptors found some use for their credit and would indicate that the scheme must have met with some support from sources not specifically set forth in any evidence at hand. It was the prototype of the proposed Land

<sup>6</sup>Davis sets forth in detail the transactions in which change-bills were used. See *op. cit.*, pp. 14-15.



Bank of 1686; of the similar project in 1714; of the Connecticut Land Bank in 1732; and of the well-known experiment made in 1740. It is not known whether pass-bills or checks gave way to denominational currency in 1686 or not, but it seemed to be the intention to use them in payments exceeding twenty shillings. By 1714, however, the public had become familiarized with paper money which was used and considered more simple than the quasi-letters of credit and pass-bills or checks.<sup>7</sup> From this time until the last quarter of the 18th Century we learn nothing more of checks. Paper money occupied the field for nearly a century and brought upon the people all the ills that can result from wild paper money schemes. Before completing the survey of the monetary history of the Colonial period it will be instructive to learn why deposit currency did not develop until almost a century after this first experiment.

#### **Why deposit currency did not develop in the Colonies**

In order to have deposit banking there must be something to deposit that is in general demand, something that has stability of value, is readily transferable and into which the deposit can be converted at will; in other words, specie. The Colonists had very little specie to deposit, and land and merchandise could not meet the above requirements. Deposit banking implies that the inhabitants be in close touch with their banks in order to test readily the validity of their checks. Checks cannot develop easily in a sparsely settled country. Deposit banking implies good government, security of personal and property rights, and confidence on the part of the people in the government as well as in the banking institutions. It implies a high degree of activity and competition in the pursuits of men, and of advancement in prosperity and wealth, a country relatively exempt from invasion and free from revolution. Where deposit banking is carried on, the banker is largely passive; his deposits depend largely on the favor of others. In the issue of notes, however, the banker can do something. A paper circulation requires little effort on the part of the public and where the people are scattered, as is the case in most colonies, they can exercise little concerted effort and need the aid of the banker. Thus, as Walter Bagehot points out, paper issue is the natural prelude to and promotes deposit banking. No nation as

---

<sup>7</sup>Davis, *op. cit.*, pp.16-17.

yet, he says, has arrived at a great system of deposit banking without first going through the preliminary stage of note issue.<sup>8</sup>

### Paper money and banking schemes of the Colonies

Whatever the cause assigned for the issue of paper money, whether lack of specie or some unsound monetary theory, virtually every conceivable type was issued either by private individuals, banks, or the Colonial governments. The first paper money antedates the first banking scheme according to Mr. J. H. Trumbull, who mentions money passing current in 1652.<sup>9</sup> In 1686 a Mr. Blackwell and others proposed to issue notes and make loans on the security of land and merchandise. Reference was made to this scheme again in 1714.<sup>10</sup> The first bills of public credit found in the Colonies were issued by Massachusetts in 1690 in order to pay the soldiers who engaged in the expedition against Port Royal and Quebec in the French War; they were virtually exchequer bills in anticipation of taxes. There is evidence that there were paper bills in circulation in 1684, but whether they were issued by the Colony or were merely the promises of individuals to pay is not known.<sup>11</sup> The first issue against mortgage security was in Massachusetts in 1711 and repeated in 1714.<sup>12</sup>

Ordinarily, such notes as those issued by the government on mortgage security were loaned for a period of time, as five years, at about 5 per cent. interest, one-fifth of the principal to be repaid each year. Opportunity was given for a general subscription by the public. Unlike the scheme of 1690, no provision had to be made for redemption by laying taxes, and another advantage was found in the interest which the public treasury would receive without any outlay of capital. Similar issues of loan bills took place in Massachusetts in 1716, 1721 and 1728; these circulated side by side with the ordinary bills of credit.<sup>13</sup> In Rhode Island loan

<sup>8</sup>Bagehot, *Lombard Street*, 14th ed. (New York, 1920), pp. 82-88; C. A. Conant, "Banking and Business Assets," *Sound Currency*, Vol. IV, No. 23 (New York, 1897), pp. 4-5.

<sup>9</sup>J. H. Trumbull, *The First Essays at Banking and the First Paper-Money in New England* (Worcester, Mass., 1884), p. 7.

<sup>10</sup>W. G. Sumner, *History of Banking in the United States* (New York, 1896), pp. 3-4.

<sup>11</sup>Trumbull, *op. cit.*, pp. 14-15; F. F. Macleod, "The History of Fiat Money and Currency Inflation in New England from 1620-1789," *Annals of the American Academy*, Vol. XII (1898), p. 233; A. M. Davis, "Currency and Banking in the Province of Massachusetts Bay," *Pubs. Amer. Econ. Assoc.* (May, 1901), p. 61.

<sup>12</sup>C. W. Macfarlane, "Pennsylvania Paper Currency," *Annals of American Academy*, Vol. VIII (1896), p. 72; D. R. Dewey, *Financial History of the United States*, 6th ed. (New York, 1918), p. 23.

<sup>13</sup>Dewey, *op. cit.*, p. 23.

bills, loaned out at interest to the people on mortgage security, were designated as "banks." Nine such "banks" were issued in Rhode Island as a Colony and another by the State of Rhode Island, ten in all during the years 1710-1786.<sup>14</sup>

In the issue of paper currency, Massachusetts was quickly followed by New Hampshire, Rhode Island, Connecticut, New York, and New Jersey—all these previous to 1711. South Carolina followed in 1712, Pennsylvania in 1723, Maryland in 1734, Delaware in 1739, Virginia in 1755, and Georgia in 1760. To use the words of Professor Dewey, ". . . they were monotonously alike in character, in origin, and in results. Ingenuity in devising variations of the main principle appears to have been exhausted. There were interest-bearing notes, some of which were legal tender, while others were not; there were non-interest-bearing notes, some of which were legal tender for future obligations, but not for past debts; some were legal tender for all purposes, and others not legal tender between private persons, but receivable for all public payments. In some instances funds arising from certain sources of taxation were pledged for the redemption of the notes, in others not. In some cases they were payable on demand; in others at some future time. Sometimes they were issued by committees, and sometimes by a specially designated official."<sup>15</sup> Usually, where the Colonial governments issued bills of credit on the security of taxes or lands, the security was supposed to be at least double the amount of the issue. Such issues were ordinarily made general legal tender. In addition to the above methods of issuing paper money, bills were frequently issued by loan offices.

The well-known land banks were becoming common by 1737, and Mr. Davis says accounts were opened at the land banks and transfers of credit made upon the books of the banks.<sup>16</sup> Perhaps the best known land bank was that created in Massachusetts in 1740. A rival bank known as the Silver Bank was created at the same time.<sup>17</sup> The land bank of 1740 was quite similar to the scheme of 1681 described briefly above. All these schemes were attempts to "coin" land or staples in order to get a substitute currency for the scarce specie.

Private and public banks of every degree of insecurity were

<sup>14</sup>E. R. Potter and S. S. Rider, "Some Account of the Bills of Credit or Paper Money of Rhode Island from the First Issue in 1710, to the Final Issue, 1786," *Rhode Island Historical Tracts*, No. 8 (Providence, 1880), p. 17.

<sup>15</sup>Dewey, *op. cit.*, pp. 23-24.

<sup>16</sup>A. M. Davis, *op. cit.*, p. 173.

<sup>17</sup>See Davis, Chap. VII.

organized to emit bills of credit. Notes of every description circulated and these bankers were the inventors of practically every abuse known to banking. Banks were conceived primarily as a means of creating wealth, and the banking mania continued until the Bubble Act of 1741 put a temporary end to the Massachusetts Land Bank and the Silver Bank. In 1751 Parliament prohibited any further issue of legal-tender bills of credit by the New England Colonies, and in 1764 this prohibition was extended to all the Colonies. The restriction, however, did not apply to treasury notes not legal tender which were issued for very brief periods in anticipation of taxes. During this period some of the Colonies endeavored to redeem their notes, usually at a great discount. But notes of loan banks which had not been suppressed, continued to circulate along with temporary treasury notes, so that in 1774 it was estimated that \$12,000,000 were in circulation.<sup>18</sup>

As a result of these earlier experiences it hardly could be expected that the Colonists would turn away from paper money in the Revolution. The Continental Currency, first issued in May, 1775, was to be sunk by means of taxes, each Colony to find ways and means to sink its proportion of bills issued by the Congress. These notes were made legal tender in July, 1776, as were the notes of the several Colonies. In addition to the notes of the various Colonies and those of the Continental Congress, there circulated notes of the Bank of North America, notes of Robert Morris, and bills of exchange. The Continental Currency sank in value till it passed at 500 to one, and, to quote Pelatiah Webster, "finally run itself out to nothing and [died] not only without any tumult, but with the general satisfaction of the people."<sup>19</sup>

### Growth of deposit currency after the Revolution

At the close of the Revolution, we find checks again in use in the large centers and from this time on their use steadily increased. With the assumption of the modern functions of deposit banking as well as the functions of note issue by the Bank of North America chartered by Congress December 21, 1781, and by the State of Pennsylvania April 1, 1782, and by the Bank of New York started by Hamilton in 1784, it is not difficult to find evidence of a rather extensive use of checks.

Pelatiah Webster, writing in 1786 concerning the Bank of

<sup>18</sup>Davis, pp. 29-30.

<sup>19</sup>Pelatiah Webster, *Political Essays on the Nature and Operation of Money, Public Finances and other Subjects* (Philadelphia, 1791), p. 4.

North America and the advantages of banking in general, says: "The advantages would be still greater, if, instead of bank bills, the owner would take a *bank credit*, and *draw checks* on the bank whenever he needed his money; this would enable him to pay the sum *exactly*, without trouble of *making change*; he would be able in any future time to *prove his payments*, if he preserved his checks which he received cancelled from the bank, as every man ought to do; this would at once free him from all danger of loss by *fire, robbers, mislaying, dropping them on the road, etc., etc.* This practice is found by experience to be so very convenient, that it is almost *universally adopted* by people who keep their cash in our present bank."<sup>20</sup>

In another place Webster writes: "The present funds of the BANK of North-America, or the cash which supports it, is, 1st, the *bank-stock*, or the money paid in by the stock-holders, which is about 900,000 dollars: and, 2d. the *money deposited* by men of all descriptions, who may draw it out by checks on the bank whenever they please."<sup>21</sup> In still another place he points out the advantages that are experienced by the State when public payments are made by checks on the bank.<sup>22</sup>

In Domett's history of the Bank of New York are found some fac-similes of checks in use as early as 1784. Two of them read as follows:

"Cashier of the Bank,

"Pay to the Bearer John Bush one Hundred and Seventy four Dollars

"New-York, the 24th Day of August, 1784- - -

"Aaron Burr"

"Cashier of the Bank,

"Pay to .....or Bearer, fourteen pounds.....Paper.

"New-York, the 2d Day of April, 1789.

£.14

"Gulian Verplanck."<sup>23</sup>

<sup>20</sup>P. Webster, *op. cit.*, p. 434. Taken from the *Essay on Credit*, written in 1786, and incorporated in the larger work of 1791.

<sup>21</sup>*Ibid.*, p. 440.

<sup>22</sup>*Ibid.*, pp. 433, 440.

<sup>23</sup>H. W. Domett, *A History of the Bank of New York, 1784-1884*, 3rd ed. (Cambridge, Mass., 1884), p. 48. Among the rules adopted by the bank at the time of its opening, June 9, 1784, and in Article 19 of its constitution one finds mention of checks. See Domett, *op. cit.*, pp. 14, 20; J. C. Hamilton, *Works of Alexander Hamilton*, Vol. II (New York 1851), p. 333.

We find in some old account books, dated 1790 and 1791, of one John Stille of Philadelphia, many accounts of checks drawn in favor of different persons. In the book recording his account with the Bank of North America in 1790-1793, we find that practically all of the transactions were carried on by check. The same was true for his accounts with the Bank of the United States in 1791 and 1792, and with the Bank of Pennsylvania in 1794.<sup>24</sup>

Hamilton, in his report on the proposed Bank of the United States in 1790, said: "Every loan which a bank makes, is, in the first shape, a credit given to the borrower on its books, the amount of which it stands ready to pay, either in its own notes, or in gold or silver, at his option. But, in a great number of cases, no actual payment is made in either. The borrower, frequently, by a check or order, transfers his credit to some other person, to whom he has a payment to make; who, in his turn, is as often content with a similar credit, because he is satisfied that he can, whenever he pleases, either convert it into cash, or pass it to some other hand, as an equivalent for it. And in this manner the credit keeps circulating, performing in every stage the office of money till it is extinguished by some person who has a payment to make to the bank, to an equal or greater amount. Thus large sums are lent and paid, frequently through a variety of hands, without the intervention of a single piece of coin."<sup>25</sup>

Thus, it will be seen that the use of checks was fairly common in the United States by the beginning of the 19th Century and even before the creation of the first United States Bank in 1791. This was especially true in the cities, but to almost no degree in the smaller towns and rural districts.

#### **The extent to which checks were used; attempts to determine importance**

Only general estimates have been relied upon thus far to indicate the relative importance of checks. It is important to learn whether there is any method for determining the extent to which checks are used at any particular time. This is one of the greatest statistical problems in the field of banking and currency.

Various attempts have been made at different times to estimate the relative amount of checks used. The earliest inquiries

---

<sup>24</sup>These books are in the possession of Professor Thurman Van Metre of Columbia University, who kindly loaned them to the author.

<sup>25</sup>"Hamilton's Report on the National Bank, Dec. 13, 1790," *American State Papers*, Vol. VII, p. 68; *Works of Alexander Hamilton*, Vol. I (New York, 1810), p. 62.

were made in England. The first was the Babbage inquiry of 1855. Babbage used what has been called the "clearing house method," that is, noting the volume of clearings from time to time and their relation to the estimated volume of business. He attempted, among other things, to determine the proportion of payments made in bank notes by the public, both in town and in the country. In 1857 William Slater analyzed the operations of a single banking house. The Lubbock inquiry of 1865 rested upon the operations of a single bank. Palgrave, in 1873, relied upon the clearing house and the operations of a few banks. The Pownall inquiry of 1864 was based upon the investigations of several banks, while the Martin inquiry of 1880 rested upon the operations of one bank.<sup>26</sup>

It must be obvious, even to the casual reader, that these English investigations are not valuable as a basis for conclusions applicable to this country. The bases for the inquiries were too narrow and in some instances not representative enough to yield valuable conclusions even for that country. The classes of people who used the banks in England at the times the investigations were made were chiefly the larger merchants, the great business firms and wealthy individuals.

The first inquiry as to the relative importance of checks in the United States was the Garfield inquiry of 1877. Fifty-two banks, classified into three groups, were investigated, to determine the amount of transactions carried on by checks, drafts and commercial bills.<sup>27</sup> In 1881, John J. Knox, Comptroller of the Currency, made an investigation into the proportion of bank receipts composed of credit paper on two dates, June 30 and September 17, 1881. His investigation rested on about 2,000 national banks which showed for June 30 that 91.77 per cent. and for September 17, 91.85 per cent. of the national bank receipts were in the form of checks, drafts and bills.<sup>28</sup> A third inquiry was made in 1890 by Comptroller E. S. Lacey; a fourth in 1892 by Comptroller A. B. Hepburn; a fifth in 1894 by Comptroller Eckels; a sixth in 1896 by the same Comptroller; and a seventh in 1910 by the United States National Monetary Commission under the editorial supervision of Dr. David Kinley. This last inquiry was based upon the clearing house reports, deposits of

<sup>26</sup>See David Kinley, *The Use of Credit Instruments in Payments in the United States*, U. S. Nat. Mon. Com. Pubs., 61 Cong., 2d Sess., Sen. Doc. No. 399, pp. 12-19. See also pp. 87-95 below.

<sup>27</sup>Kinley, *op. cit.*, p. 20.

<sup>28</sup>*Ibid.*, p. 21.

checks by retailers, wholesalers and all others in the different types of banks.

This last method has provided, doubtless, the most reliable data that we have for any particular time. It was sound in principle and extensive in scope. Unfortunately, space does not permit a review at this point of the searching criticisms made by Dr. Kinley of the earlier American inquiries, although some attention will be given to them below.<sup>29</sup> But regardless of their merits or defects, it is sufficient to note that for the period we now have under review there are no data which will show in any exactness the extent to which checks were used. We are compelled to rely upon general statements of contemporary writers which, on the whole, give a fair picture of the situation in general. In reviewing the various writers of the period one is struck with the frequency with which they resort to the comparative importance of the two items, "circulation" and "deposits" in bank statements as an indication of the extent to which checks or notes were used.<sup>30</sup> This raises the question whether any valuable information can be gathered as to the relative importance of checks and bank notes by a study of the changes in the items "circulation" and "deposits" during any period of time.

#### **Deposits as an indication of the extent to which checks were used**

When considering the value of the items as a rough indication of the growth of deposit currency, it must be borne in mind that during the period under consideration such reports were most irregular, were lacking in uniformity, and usually were not to be had at all. Banking at this time was largely shrouded in secrecy. Mr. Bland, a member of Congress from Maryland, in a speech made previous to the dissolution of the first United States Bank, said: "The nature of the loans, the deposits, and all the bargains, dealings and contrivances, between the Government and the Bank, are wholly invisible to the public."<sup>31</sup> Mr. Carey, attempting to investigate banking about the same time, complained of the discouraging destitution of materials.<sup>32</sup> "A Friendly Monitor,"<sup>33</sup> writing

<sup>29</sup>See below, pp. 87-95.

<sup>30</sup>Gallatin relied upon these items as criteria, as did such writers as Condy Raguet, C. F. Dunbar, C. A. Conant, and others.

<sup>31</sup>W. M. Gouge, *A Short History of Paper Money and Banking in the United States* (Philadelphia, 1833), Part II, p. 219.

<sup>32</sup>Gouge, *op. cit.*, p. 219.

<sup>33</sup>"A Friendly Monitor" published a pamphlet in Philadelphia in December, 1819, and was supposed to have been William Jones, the first President of the second Bank of the United States.



in 1819, and finding considerable embarrassment in obtaining information relative to the second United States Bank, said: "If I ask a director, the seal of his finger is significantly impressed on his lips. There is a species of masonry in banking which to a certain extent is highly proper and necessary. It implies a mutual pledge among the directors that nothing shall be divulged which may be prejudicial to the interests of the Bank."<sup>84</sup> Mr. Niles, during the excitement of 1818-1819, attempted to collect information respecting all banks then in existence, and though his correspondence was extensive, he apparently failed in his object, as the tables, which he gave notice of his intention of publishing, did not appear in his *Register*.<sup>85</sup> Before suspension of specie payments in 1814, no regular returns were received by the legislature of Pennsylvania from the banks of that State and after that time, though accounts were published annually, some of the important banks for many years made no returns.<sup>86</sup> In 1820, Mr. Crawford, the Secretary of the Treasury, made a report on the state of the currency, in which he gave incomplete tables intended to show the amount of capital paid in, the notes in circulation, the public and private deposits, and the specie in the banks in 1819. In 1831 Mr. Gallatin published his *Considerations on the Currency and Banking System of the United States* and his estimates vary widely from those of Crawford. Moreover, there was ambiguity in the bank statements that rendered them useless, not considering the fact that some of the banks were accused of rendering false and padded statements.<sup>87</sup> Gouge, himself, after attempting for a period of seven years to collect the accounts of banks, decided in 1833 that they were not worth publishing.<sup>88</sup> Gallatin, writing in 1831, said: "The mystery with which it was formerly thought necessary to conceal the operations of those institutions, has been one of the most prolific causes of erroneous opinions on that subject and of mismanagement on their part."<sup>89</sup> The following tables may serve as an illustration of the type of data available, as well as afford some idea, though a very incomplete one, of the banking situation during the period covered by the tables (Tables II and III).

<sup>84</sup>Gouge, pp. 219-220.

<sup>85</sup>*Ibid.*

<sup>86</sup>*Ibid.*

<sup>87</sup>*Ibid.*, pp. 220-222.

<sup>88</sup>*Ibid.*, p. 223.

<sup>89</sup>Albert Gallatin, *Considerations on the Currency and Banking System of the United States* (Philadelphia, 1831), p. 70.

TABLE II

Number of Colonial and State Banks, their Capital, Circulation, Deposits, Specie, and Loans, in the Years Mentioned from 1774 to 1833<sup>a</sup>

Year	No. of banks	Capital (In millions)	Circulation (In millions)	Deposits (In millions)	Specie (In millions)	Loans (In millions)
1774.....	..	....	...	...	4.0	....
1784.....	3	2.1	2.0	...	10.0	....
1790.....	4	2.5	2.5	...	9.0	....
1791.....	6	12.9	9.0	...	16.0	....
1792.....	16	17.1	11.5	...	18.0	....
1793.....	17	18.0	11.0	...	20.0	....
1794.....	17	18.0	11.6	...	21.5	....
1795.....	23	19.0	11.0	...	19.0	....
1796.....	24	19.2	10.5	...	16.5	....
1797.....	25	19.2	10.0	...	16.0	....
1798.....	25	19.2	9.0	...	14.0	....
1799.....	26	21.2	10.0	...	17.0	....
1800.....	28	21.3	10.5	...	17.5	....
1801.....	31	22.4	11.0	...	17.0	....
1802.....	32	22.6	10.0	...	16.5	....
1803.....	36	26.0	11.0	...	16.0	....
1804.....	59	39.5	14.0	...	17.5	....
1805.....	75	40.4	...	...	...	....
1806.....	15 <sup>b</sup>	5.4	1.6	2.0	.9	7.0
1807.....	16 <sup>b</sup>	5.5	1.4	1.7	.7	6.8
1808.....	16 <sup>b</sup>	5.9	1.0	2.5	1.0	7.4
1809.....	29 <sup>b,c</sup>	7.2	1.7	2.7	1.2	9.7
1810.....	29 <sup>b,c</sup>	6.6 <sup>d</sup>	2.5	2.8	1.6	11.1
1811.....	88	42.6	22.7	...	9.6	....
1812.....	29 <sup>b,c</sup>	7.9	2.6	5.3	4.0	12.9
1813.....	..	65.0	66.0	...	28.0	117.0
1814.....	..	80.3	...	...	...	....
1815.....	208	82.2	45.5	...	17.0	150.0
1816.....	246	89.8	68.0	...	19.0	....
1817.....	..	90.6	...	...	...	....
1818.....	27 <sup>b</sup>	9.7	2.6	2.9	1.1	12.5
1819.....	..	72.3	45.7	11.1	9.8	73.6
1820.....	307	102.1	40.6	31.2	16.7	....
1821.....	28 <sup>b</sup>	9.8	3.0	5.4	3.0	13.0
1822.....	33 <sup>b</sup>	10.8	3.1	3.2	.9	14.5
1823.....	34 <sup>b</sup>	11.6	3.1	3.1	1.0	15.6
1824.....	37 <sup>b</sup>	12.8	3.8	5.2	1.9	17.4
1825.....	41 <sup>b</sup>	14.5	4.0	2.7	1.0	21.9
1826.....	55 <sup>b</sup>	16.6	4.5	2.6	1.3	23.6
1827.....	60 <sup>b</sup>	18.2	4.9	2.9	1.4	24.2
1828.....	108 <sup>b,c</sup>	25.4	5.6	3.0	1.4	34.5
1829.....	329	110.1	48.2	40.7	14.9	....
1830.....	329	110.1	48.4	39.5	14.5	159.8
1831.....	91 <sup>b,d</sup>	23.4	8.8	4.6	1.3	38.9
1832.....	172 <sup>b,d,e</sup>	35.5	10.2	4.7	1.6	53.2
1833.....	175 <sup>b,d,e</sup>	37.8	10.2	5.4	1.7	57.6

<sup>a</sup>These data which are found in the *Report of the Comptroller of the Currency*, Vol. II (1915), p. 958, were compiled from data taken from the *Report of the Comptroller of the Currency for 1876* and from *Sound Currency*, Vol. II, No. 13 (New York, 1895). This table is in sad conflict with tables appended to the *Report of the Secretary of the Treasury*, March 3, 1841, which are presented here in the form of Table III.

<sup>b</sup>Massachusetts.

<sup>c</sup>Rhode Island.

<sup>d</sup>Capital stock of Massachusetts only.

<sup>e</sup>New Hampshire.

<sup>f</sup>Maine.

TABLE III

Condensed Statement of the Condition, at Different Intervals, of All Banks in the United States<sup>1</sup>

Date	No. of banks <sup>2</sup>	Loans and discounts	Specie	Circulation	Deposits	Capital
Jan. 1						
1811	89	.....	15,400,000	28,100,000	.....	62,601,901
1816	203	.....	17,000,000	45,500,900	.....	82,269,690
1816	246	.....	19,000,000	68,000,000	.....	89,822,422
1820	308	.....	19,820,240	44,863,344	35,960,470	137,110,611
1830	330	200,451,214	22,114,917	61,323,898	56,569,928	146,192,268
1834	506	324,119,499	.....	94,834,670	75,666,986	200,006,944
1836	558	365,163,834	43,937,625	103,692,495	83,081,366	231,250,337
1836	567	467,506,080	40,019,694	140,301,038	115,104,440	261,876,292
1837	634	525,115,702	37,915,340	149,185,890	127,397,185	290,772,091
1838	663	485,631,687	35,184,112	116,138,910	84,691,184	317,636,778
1839	662	492,278,015	45,132,673	135,170,995	90,240,146	327,132,512
1840	722	462,896,523	33,105,155	106,968,573	76,696,967	358,442,692

<sup>1</sup>Extract from tables appended to the "Report of the Secretary of the Treasury, March 3, 1841;" also in J. R. Hurd, "A National Bank or No Banks" (New York, 1842), appendix.

<sup>2</sup>The number of branches is not given in this table, as it was not the practice to enumerate them prior to 1836. The whole number of banks and branches at the commencement of 1840 was 901.

Were the materials available in sufficient quantity the following considerations must be borne in mind: (1) In the reports as given, various items are blended, vague, and confused, which make them misleading, and errors in interpretation unavoidable. (2) The items "due from banks" and "due to banks" may also represent checks, drafts and notes. (3) The term "deposits" in different reports is found sometimes to mean demand deposits, sometimes demand and time, sometimes individual, which are both time and demand, and sometimes government deposits are included which fluctuate widely and have little connection with business transactions or serve in any sense as an indicator of the relative importance of deposit currency. Moreover, some banks used government deposits as a basis for note issue. (4) Deposits may be built up by the deposit of either bank notes or checks. If such deposits represented bank notes or cash deposited, one might say that these deposits were subject to check and to that extent an evidence of the use of checks. But these deposits may have been built up largely by the deposit of checks on other banks as well as on the same bank and these deposits are equally subject to check. In the latter case nearly twice as many checks are used as in the former case. In addition to the fact that these primary (cash) deposits may be built up in varying proportions by either notes or checks or both, it must be borne in mind that a large or small amount of the deposits may be derivative (those resulting from loans) which may be drawn out in the form of notes or checks and

which represent neither notes or checks deposited.<sup>40</sup> (5) During a period of expansion the ratio of loans to deposits will steadily increase in many cases. This is especially true where banks lend for speculative purposes, as, for example, on call with Wall Street brokers. Loans tend to mount up, but the derivative deposits are drawn down. Deposits are relatively small, but they are drawn down by the use of checks, and the size of the deposits at such times would not be an indication of the extent to which checks are used. In 1893, for example, the ratio of loans of the New York Clearing House banks to deposits rose to 109 per cent. and the percentage of cash to loans fell to 13 per cent., causing call rates to rise to 74 per cent. As a result of the drastic liquidation which followed, the ratio of loans to deposits became 80 per cent., and that of cash to loans, 30 per cent. Certainly the increase of deposits in this case did not indicate an increased use of checks.<sup>41</sup>

As a result of these observations, it is obvious that deposits, even demand deposits, are no exact indication of the extent to which checks are used during any period. They can serve, in conjunction with the item "circulation," only over a long period of time, as a rough indicator of general tendencies. For any particular period we are compelled to rely upon the general statements, estimates, and approximations of the various contemporary writers.

### The use of checks, 1791-1811

During the period of the life of the first United States Bank we find ample evidence of the use of checks in the larger centers. In writing of the advantages which came to the community from the establishment of the bank at Hartford, Connecticut, in 1792, a Mr. P. H. Woodward says: "Merchants and others learned to adjust by checks, balances due on mutual accounts. A large proportion of domestic settlements was made by transfers of credit on the bank ledger without the handling of a dollar. Thus the

---

<sup>40</sup>In 1909, for instance, Dr. David Kinley presented a diagram which showed that the percentage of checks in aggregate deposits by States ranged from 75 to 98 per cent. But this percentage had reference, apparently, to primary deposits—deposits in the sense of receipts—and not to derivative deposits also. Since derivative deposits were not included Dr. Kinley's data can give but an indefinite conclusion as to the extent to which demand deposits are represented by checks. See David Kinley, *The Use of Credit Instruments in Payments in the United States*, p. 220. Today derivative deposits are estimated to be nine or ten times larger than primary deposits. See C. A. Phillips, *Bank Credit* (New York, 1920), Chap. VI; Dewey and Shugrue, *Banking and Credit* (New York, 1922), p. 151.

<sup>41</sup>S. S. Huebner, *The Stock Market* (New York, 1922), p. 302.

institution put into operation a set of appliances that manifolded the volume and effectiveness of the funds within reach of the community."<sup>42</sup> He also gives a fac-simile of a check drawn by Noah Webster on the bank in 1793 as follows:

"Hartford Bank

"Hartford, *Jany. 30th, 1793*

"Pay to N W ..... or Bearer,  
20 Dollars ..... Dollars  
"Noah Webster."<sup>43</sup>

Another interesting check drawn in 1798 was as follows:

"Mount Vernon, May 18, 1798.

"The Cashier of Discount and Deposit—Baltimore,

"Will please pay Robert Morris, Esq., or bearer the  
sum of one thousand dollars and chg. same to my acct.

(Signed)

"George Washington.

"1,000 dollars."<sup>44</sup>

Mr. Erick Bollman, in analyzing the first six months' activities of the first United States Bank, concluded: "These observations establish the important fact that six hundred and fifty thousand dollars specie [the first quarterly installment required] or active capital, were sufficient to do business to the amount of six million dollars. And, as it would hardly have been prudent to issue notes much beyond the means of the bank to answer them, the greatest part by far of these six million dollars loaned by the bank must have remained in the form of bank credits."<sup>45</sup> In another place he says: "Banking rests on the experience that bank credits are a more convenient circulating medium than specie, or even than bank notes. In consequence of which banks absorb specie, giving out some notes, but above all, much credit, portable, transferable and divisible, in the form of checks; and by re-employing part of the specie absorbed, they double their profits."<sup>46</sup> He thought it

<sup>42</sup>P. H. Woodward, *One Hundred Years of the Hartford Bank* (Hartford, Conn., 1892), p. 80.

<sup>43</sup>*Ibid.*, p. 49.

<sup>44</sup>*New York Times* (July 1, 1923), p. 1. This check is in the possession of a Mr. Albert Bauer, Brookville, Pa.

<sup>45</sup>Erick Bollman, *Paragraphs on Banks* (Philadelphia, 1810), pp. 32-33.

<sup>46</sup>*Ibid.*, p. 34.

highly improbable that the subsequent payments of the installments resulted in much additional specie, as they would be paid largely in notes or checks on the bank itself. Further he says: "The most favorable situation of a bank, therefore, would be to be the only one in the country, and to have for customers all the merchants in it, because then all payments would be made in checks on the same bank and the call for notes would be extremely limited. For this reason the Bank of the United States was able to do so much business with so little specie when it was just established. As banks increase the custom naturally divides, which tends . . . to cause the issue of more paper. . . ."47

Noah Webster estimated in 1801 that the gold in the vaults of the 39 banks in the United States (including the six branches of the United States Bank) was about 23 millions, about the amount of their aggregate capital, and that the banks lent about one and one-half times their capital, or something over 34 millions in 1801. "But," he says, "it must not be inferred from this fact that bank notes to the amount of 34 millions are constantly in circulation. So far is this from the truth, that in general the notes in circulation do not exceed the amount of the capital stock. To understand this, it must be considered, that in all trading towns, the merchants deposit their money in the bank—there they receive and make payments—and the payments are made without ever moving a cent of money from the vaults. The money of the merchants is lodged in the bank, and the property is transferred by *check*, or draft, payable to the bearer, the amount of which is debited to the drawer and credited to the bearer. The operation is simply a change of credit from A to B and the money is never touched by either party. The bank lends a thousand dollars to A, who has credit for the amount—A draws upon the bank in favor of B—and the amount is carried to his credit—no money is taken from the bank."<sup>48</sup> Webster estimated that about one-fourth to one-third of all the money lent by the principal banks was never removed, either in specie or notes, but stood on the books to the credit of the borrowers, or of those who receive it in payments through the use of checks. The notes in circulation, he thought, rarely exceeded the amount of the capital stock.<sup>49</sup>

Writing in 1810, Erick Bollman says: "The bank discovers

---

<sup>47</sup>*Ibid.*, p. 37.

<sup>48</sup>Noah Webster, *Miscellaneous Papers on Political and Commercial Subjects* (New York, 1802), pp. 46-47.

<sup>49</sup>*Ibid.*

that the greatest part of its actual disbursements are merely those required for the *petty cash* and *house expenses* of its customers, but that all the great payments are made in bank credits and are effected by transcribing certain sums from the accounts of one description of customers to the accounts of others."<sup>50</sup> In another place he says: "Invariable experience shows that the public prefers bank notes to specie, and bank credits to both, and *must* prefer them, because they answer the same purpose with less risk and much less trouble."<sup>51</sup>

The Treasury officials, during the entire time of the first United States Bank's existence, gave out no statement of its affairs except when Congress called for information. Only two reports which show notes and deposits seem to be in existence; these were made to Congress in 1809 and 1811 by Gallatin and were as follows:<sup>52</sup>

	January, 1809	January, 1811
'Capital stock .....	\$10,000,000	\$10,000,000
'Circulating notes outstanding .....	4,500,000	5,037,125
Individual deposits .....	8,500,000	5,900,423
United States deposits .....		1,929,999

In addition to acting as a government depository the Bank transferred government funds from place to place without charge and gave the government immediate credit at any branch for funds deposited at any other branch. In Philadelphia, the United States Bank maintained close relations with the Bank of North America and the Bank of Pennsylvania, making daily settlements and exchange of notes. The same co-operation existed at first between the New York branch of the United States Bank and the Bank of New York.<sup>53</sup>

#### Use of checks, 1811-1816

Soon after the expiration of the charter of the first United States Bank, a large number of local banks sprang up under the pecuniary exigencies produced by the withdrawal of so large an amount of bank credit, as necessarily resulted from the winding up of the affairs of the United States Bank—an amount falling

<sup>50</sup>Erick Bollman, *op. cit.*, pp. 15-17.

<sup>51</sup>*Ibid.*, p. 36.

<sup>52</sup>J. T. Holdsworth, *First Bank of the United States*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 571, p. 112.

<sup>53</sup>J. T. Holdsworth and D. R. Dewey, *First and Second Banks of the United States*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 571, pp. 40, 51, 62, 63; Henry Adams, *Writings of Gallatin*, Vol. I (Philadelphia, 1879), p. 171.

little short of \$15,000,000. In 1811 there were 89 banks in the United States; in 1815 there were 208; and in 1816, 246. Circulation increased from \$28,100,000 in 1811 to \$45,500,000 in 1815, and to \$68,000,000 in 1816. There are no data relative to deposits.<sup>54</sup> These banks, released from the salutary control which the United States Bank had exercised over local institutions, commenced the system of imprudent trading and excessive issues, which speedily involved the country in all the embarrassments of a disordered currency. The extraordinary stimulus of a heavy war expenditure, derived principally from loans, and a corresponding multiplication of local banks, hastened the catastrophe awaiting the government. "The last year of the war presented the singular and melancholy spectacle of a nation abounding in resources, a people abounding in self-devoting patriotism, and a government reduced to the very brink of avowed bankruptcy, solely for the want of a national institution which, at the same time that it would have facilitated the government loans and other treasury operations, would have furnished a circulating medium of general credit in every part of the Union."<sup>55</sup>

The depreciation of the currency ranged from various low degrees to as high as 25 per cent.<sup>56</sup> Gouge, in writing on the condition of the currency and banking during the years 1814-1816, quotes from a contemporary writer: ". . . we are subject to some inconveniences in our transactions at market, and in petty dealings; but as we become accustomed to the use of paper money, the disadvantage will vanish. All large mercantile negotiations are conducted as they have hitherto been, by bank notes, or checks upon banks."<sup>57</sup>

Although checks were used during this period, especially in the larger transactions, the period is noted primarily for the rapid growth of weak banks and the issue of depreciated bank notes. Note brokers sprang up and the shaving of bills began to be a regular business. This general system of brokerage in the buying and selling of notes flourished from 1811 on down to the '30s and

---

<sup>54</sup>Extract from tables appended to the *Report of the Secretary of the Treasury, March 3, 1841*; also in J. R. Hurd, *A National Bank or No Banks* (New York, 1842), appendix.

<sup>55</sup>"McDuffie's Report on Bank of United States, April, 1830," in T. H. Goddard, *A General History of the Most Prominent Banks of Europe, etc.* (New York, 1831), p. 143.

<sup>56</sup>Niles in his *Weekly Register* said that the rates of depreciation ranged from  $\frac{1}{2}$  of 1 per cent. to 75 per cent. See *Niles' Weekly Register*, Vol. XIII (Oct. 17, 1817), p. 97.

<sup>57</sup>Gouge, *op. cit.*, Part II, p. 70.



'40s. The merchant receiving bank notes sorted them into current and uncurrent and could tell how great the discount would be by consulting the "Bank Note Reporter".<sup>58</sup>

#### The second United States Bank and the use of checks, 1816-1836

The second United States Bank, like the first, was a bank of deposit, discount and issue. The note issues rested upon the general assets of the bank. In addition to receiving general and special deposits, it and its 19 branches acted as government depositories, and transferred the public funds from place to place without charge. To individuals it furnished exchange at rates ranging from par to 1½ per cent., the most common being ½ of 1 per cent. This bank was responsible for restoring the State currencies to their face value; this was done by driving out of circulation all that could not be made payable in specie on demand. It used its notorious branch drafts as one means of forcing State banks to contract their currency. These drafts were exchanged for State bank notes which were then presented to the State banks for redemption.<sup>59</sup> It was also the practice of this bank to exchange notes with the neighboring banks once each week, and for the creditor bank to receive the difference in specie. This tended to prevent State banks from enlarging their issues beyond the limits of prudence.<sup>60</sup>

The United States Bank was the center of a "single banking reserve system," due not to the fact that State banks kept their reserves in its vaults, but to the fact that they made no particular effort to keep an adequate reserve and trusted the United States Bank to protect them in case of an unusual call for the precious metals.<sup>61</sup> However, it was the announced policy of this bank not to furnish the State banks the facilities of exchange, the facilities for the clearing and collection of checks and drafts, or for the transporting of specie to liquidate balances, on the ground that "an accommodation of this sort would enable the State banks to extend to their customers all the facilities and advantages in exchange which the Bank of the United States could do. . . ."<sup>62</sup>

<sup>58</sup>D. R. Dewey, *State Banking Before the Civil War*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 581, pp. 107-112.

<sup>59</sup>R. C. H. Catterall, *The Second Bank of the United States*, (Chicago, 1913), pp. 441, 444.

<sup>60</sup>*Ibid.*, p. 430.

<sup>61</sup>See George Tucker, *The Theory of Money and Banks* (Boston, 1839), p. 277.

<sup>62</sup>President Jones of the Bank of the United States to the office at New York, June 28, 1817, *American State Papers*, Vol. LX, pp. 328-329.

As a result of this policy the New York branch was instructed to decline, in the future, to receive for collection the drafts or checks of the banks in that city upon banks in other cities until authorized by the board of the head office.<sup>63</sup>

Catterall, in a chart, shows deposits of the second Bank of the United States exceeding its note issues from January, 1817, to about June, 1830, after which date they dropped rather abruptly while note issues continued to increase.<sup>64</sup> He says: "The deposits, which constituted by all odds the most important of these elements [credit instruments] in the bank's circulation, were almost or quite as large a part of the circulation as the note issue."<sup>65</sup> But a large part of the deposits consisted of government deposits. Bearing in mind the limitations<sup>66</sup> to the value of any table as a true indication of the extent to which deposit currency is used, the following table may offer additional support to Catterall's contention (Table IV):

TABLE IV  
Average Amount of Notes and Deposits of the Second Bank of the United States, 1819-1829<sup>a</sup>

	Deposits	Notes (gross) <sup>b</sup>
1819.....	5,734,682	5,056,829
1820.....	6,581,628	4,410,332
1821.....	6,990,073	5,609,220
1822.....	6,365,570	5,562,335
1823.....	10,401,786	4,671,271
1824.....	12,918,108	5,935,496
1825.....	12,885,829	8,836,646
1826.....	12,578,523	10,235,528
1827.....	13,727,274	10,808,244
1828.....	14,454,169	12,414,390
1829.....	15,172,164	15,011,352

<sup>a</sup>This table was taken from Henry Adams, *Writings of Gallatin*, Vol. III (Philadelphia, 1879), p. 363.

<sup>b</sup>The actual amount of circulation is generally four-fifths of the gross amount, the rest being notes in transitu, or accumulating in offices where they are not payable.

The circulation of bank notes was principally in the South and West and since the greatest business was in the East and North it seems fair to conclude that checks played a prominent part in those sections. The following statement shows the places where the notes of the United States Bank in actual circulation were payable in September, 1830:

<sup>a</sup>*Loc. cit.*, p. 329.

<sup>b</sup>Catterall, p. 427.

<sup>c</sup>*Ibid.*, pp. 428-429.

<sup>d</sup>See above, pp. 47-51.

Payable in New England.....	\$834,492
Payable in New York.....	834,733
Payable in Philadelphia.....	1,367,180
Payable in Baltimore and Washington.....	1,176,240
Payable in Southern States.....	3,074,045
Payable in Northwestern States including Buffalo and Pittsburgh .....	3,261,547
Payable in Southwestern States.....	4,799,420
	\$15,347,657 <sup>m</sup>

### The general banking and currency situation, 1816-1836

The character of the local banks during this period varied greatly, depending upon the available amount of surplus capital in different sections of the country and the degree of past commercial experience of the communities in which they were established. Each State worked out for itself a system which presented with some degree of accuracy the current stage of economic thought and development.

Substantially three systems of note issues were tried in different parts of the country: (1) Issues based only upon the general assets of a particular bank as in New England; (2) issues based upon a general safety fund, introduced in New York in 1829 to supplement general asset banking; and (3) issues based upon the credit and faith of the States, as in the South and West.<sup>68</sup>

In a general way it may be said that deposits were more important than notes in the larger cities while the reverse was true for the smaller cities and country towns. The city banks depended upon the deposits resulting from discounts rather than upon the circulation of notes for profit, while the reverse was true for the country banks. The following report for the years 1820 and 1824 shows in a rough way the relative importance of deposits and notes for a few country banks in New York:

	Capital (paid in)	Notes	Deposits
3 country banks, 1820.....	\$319,888.05	\$394,018.00	\$36,178.01
6 country banks, 1824 .....	642,816.05	1,096,974.07	133,138.43 <sup>m</sup>
8 New York City banks and 3 Al- bany banks, 1829.....	11,252,160.00	3,528,623.00	4,448,088.00
11 country banks, 1829.....	2,906,413.00	3,137,510.00	1,042,865.00 <sup>m</sup>

### Distinguishing the seven large cities of Boston, Salem, New

<sup>m</sup>Adams, *Writings of Gallatin*, Vol. III, p. 453. See also Dewey, *Financial History of the United States*, 8th ed. (New York, 1922), p. 153.

<sup>m</sup>Dewey, *op. cit.*, pp. 154, 155.

<sup>m</sup>R. E. Chaddock, *Safety-Fund Banking System in New York*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 581, p. 237.

<sup>m</sup>*Ibid.*, pp. 239-240.

York, Philadelphia, Baltimore, Charleston, and New Orleans from the other cities, Gallatin showed the situation to be as follows in 1829:

	Capital	Notes	Deposits	Specie
Seven large cities.....	\$53,211,605	\$17,144,422	\$23,137,129	\$7,258,025
The U. S. Bank.....	34,996,270	13,148,984	14,778,809	7,175,274
Remaining banks.....	56,980,663	31,130,492	17,643,990	7,681,618 <sup>71</sup>

Eleazor Lord, writing in 1834, said: "The notes circulated by the banks in the principal cities probably do not amount to more than a quarter of one per centum of the amount of deposits and of payments received by those banks, that is, payments of notes discounted, and notes collected by them."<sup>72</sup> In another place he estimated the annual amount of transactions in the country to be eight or ten billions of dollars; the whole amount of currency in specie and bank notes was reckoned at about one hundred millions. This, he thought, illustrated the great extent to which credit was used.<sup>73</sup>

From January, 1830, to January, 1837, 300 new banks were created with a capital of 145 millions. This increase was due partly to the great demand for capital applicable to commercial accommodation and other purposes and partly to the anticipation of and the expiration of the charter of the United States Bank.<sup>74</sup> In fact, they increased their capital far beyond what might have been wanted for useful purposes, but the proportion of notes to deposits in 1837 was no greater, if as great, as in 1829. The following data will show the situation at the respective dates:

1829				
	Capital	Notes	Deposits	
329 banks ascertained and estimated..	\$110,192,268	\$48,274,914	\$40,781,119	
United States Bank.....	35,000,000	13,048,984	14,778,809	
<b>Total</b> .....	<b>\$145,192,268</b>	<b>\$61,323,898</b>	<b>\$55,559,928<sup>75</sup></b>	
1837				
No. of banks and branches (769) ....	\$255,772,091	\$137,737,922	\$125,064,776	
Pa. Bank of the U. S. (19).....	35,000,000	11,447,968	2,332,409	
<b>Total 788</b> .....	<b>\$290,772,091</b>	<b>\$149,185,890</b>	<b>\$127,397,185<sup>76</sup></b>	

<sup>71</sup>Adams, *Gallatin*, Vol. III, p. 295; for additional data supporting this view, see *op. cit.*, pp. 280, 296.

<sup>72</sup>Eleazor Lord, *Credit, Currency and Banking*, 2d ed. (New York, 1834), p. 20.

<sup>73</sup>*Ibid.*, pp. 34-35.

<sup>74</sup>Adams, *Gallatin*, Vol. III, pp. 386-387.

<sup>75</sup>*Ibid.*, p. 296.

<sup>76</sup>*Report of the Secretary of the Treasury, January 8, 1838, 25th Cong., 3rd Sess., Sen. Doc. No. 2, Vol. I (1838-1839), pp. 39-42; also in George Tucker, The Theory of Money and Banks (Boston, 1839), p. 404. It will be noted that the total of banks in 1837 which is given as 788, does not harmonize with data in Table VI on p. 65 below.*

### The use of checks, 1836-1863

In this period, distinguished for its wildcat banking, we find the practice of using checks in cities and bank notes in rural districts continuing as in the earlier periods, with the difference that the use of deposit currency increased to such an extent that deposits surpassed notes before the end of the period.

The definite determination in 1837 of the right of a State to establish under its control a bank with power of note issue in the case of *Briscoe v. The Commonwealth of Kentucky*,<sup>77</sup> together with the dissolution of the second United States Bank, and the introduction of the free banking system, which had its origin in New York in 1838 and was soon adopted in the West by other States, seemed to give an impetus to wildcat banking. The number of banks, which, in 1830, had been 330, with \$145,000,000 of capital, had increased to 829 with a capital of \$317,000,000 by January 1, 1838. So great an increase of banks and the consequent distention of the circulation, contributed, with other circumstances, to the general suspension of 1837.<sup>78</sup>

Wildcat currency secured a new lease on life; this was especially true in Indiana, Illinois, and Wisconsin where notes could be issued on the security of various types of bonds. The great weaknesses of the banking and currency systems manifested themselves in the panics of 1837, 1857, and 1861. The general suspension of specie payments in 1837 began in New York and soon reached to the other States, the New England banks holding out the longest. In 1838 a rather general resumption took place, but was followed by a second suspension in 1839, which was accompanied by many failures especially in the West and South. This was the real collapse of the system; 343 out of 850 banks closed entirely, and 62 partially. This second suspension lasted in Pennsylvania until January, 1841.<sup>79</sup>

The western free banks had a large circulation outstanding, when most of them went down in the crash of 1857, which was due partly to heavy railway expenditures and partly to general business expenses. Out of the 94 free banks in Indiana, 51 had suspended even before the panic of 1857. These banks went down again in the crash of 1861 and their securities pressed on the market sank to low figures, the notes falling even lower than the securities. In writing of these banks Horace White said: "What-

<sup>77</sup>11 Pet. 257 (1837).

<sup>78</sup>Tucker, *op. cit.*, p. 362.

<sup>79</sup>W. G. Sumner, *History of American Currency* (New York, 1884), p. 132.

ever may have been the design of the law-makers . . . it turned out to be a mere scheme to enable speculators to sell bonds to the public, and continue to draw interest themselves. It was possible under these laws for a man to borrow, say, \$100,000 of state bonds, deposit them with the auditor, receive from him circulating notes, buy wheat with these notes, send the wheat to New York, and sell it for money with which to buy more bonds to deposit with the auditor; and so round and round. This was actually done in some cases, and it was considered an effective way of procuring an adequate supply of money."<sup>80</sup> This was not the experience, however, of those banks which issued notes on the basis of the general assets of the banks, as did the New England or the Louisiana banks, for example.<sup>81</sup>

Space will not permit even a general description of the characteristics of the banking institutions as found in the different sections of the country during this period.<sup>82</sup> Table V will give a fair picture of the sectional differences in 1838:

TABLE V  
Number and Condition of Banks of the United States, Jan. 1, 1838<sup>a</sup>

Local Division <sup>b</sup>	No.	Capital	Notes in Circulation	Deposits
Eastern States .....	321	\$65,257,540	\$18,307,544	\$11,412,803
Middle States .....	213	81,169,776	29,631,248	31,999,806
Southern States .....	89	32,111,573	20,156,891	9,707,821
Southwestern States .....	94	75,048,052	25,194,559	18,874,996
Western States .....	92	29,049,837	16,080,601	10,073,505
Pa. Bank of U. S.....	90	35,000,000	6,768,067	2,617,253
<b>Total .....</b>	<b>829</b>	<b>\$317,636,778</b>	<b>\$116,138,910</b>	<b>\$84,691,184</b>

<sup>a</sup>Tucker, *op. cit.*, p. 405. From the *Report of the Secretary of the Treasury* [Woodbury], June 7, 1838, 25th Cong., 2d Sess., Sen. Doc. No. 471, Vol. VI (1837-1838), p. 2.

<sup>b</sup>Eastern States—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut. Middle States—New York, Pennsylvania, New Jersey, Delaware, Maryland, District of Columbia. Southern States—Virginia, North Carolina, South Carolina, Georgia, Florida. Southwestern States—Alabama, Louisiana, Mississippi, Arkansas, Tennessee. Western States—Kentucky, Missouri, Illinois, Indiana, Ohio, Michigan, Wisconsin.

The descriptions of the use of checks during the period, 1836-1863, are not strikingly different from those of the preceding period. Condy Raguét, writing in 1839, said: "So true is it, that deposits [*sic*] constitute currency as much as bank notes, that in

<sup>80</sup>Horace White, "National and State Banks," *Sound Currency*, Vol. IV, No. 10 (New York, 1897), pp. 8-9.

<sup>81</sup>C. A. Conant, "Banking on Business Assets," *Sound Currency*, Vol. IV, No. 23 (New York, 1897), p. 15.

<sup>82</sup>Such a description has been given by George Tucker, *op. cit.*, pp. 362, 365, 366, 370-374.

all our commercial cities, no other currency is used in all extensive transactions. In all the cities of the United States, nearly all payments of money, except in very small sums in retail transactions, are made in checks on banks, and it is very clear that if deposits were not as much currency in the money market as bank notes, all dealers and traders would be furnished with the latter, instead of the former."<sup>83</sup> Deposits in large commercial cities constituted the largest portion of the currency. In the city of New York, on the 1st of June, 1837, shortly after the stoppage of specie payments, the amount of notes in circulation outstanding for all the city banks, was \$5,283,950, while the amount of deposits, public and private, was \$15,843,171. By the contraction which subsequently took place, the notes in circulation were reduced, by the 1st of April, 1838, to \$2,322,186, and the deposits to \$11,492,486.<sup>84</sup> He pointed out, moreover, that a large part of these notes were circulating at a distance from New York at all times.

Condy Raguet said, further, that on November 3, 1838, the fifteen banks in Philadelphia, exclusive of the Pennsylvania Bank of the United States, had notes in circulation to the amount of \$4,522,883, while the amount of the deposits was \$6,813,503. "On the 1st of November of the same year," said Mr. Raguet, "the circulation of the [Pennsylvania] Bank of the United States (exclusive of post notes) was \$8,499,378, and the deposits \$8,591,235, but of these notes by far the largest proportion were circulating at a distance from Philadelphia, and, consequently, formed no part of the currency of that city."<sup>85</sup> The fact that in cities a very small amount of business was done by either bank notes or specie as compared with checks, while smaller towns used more notes and specie, and the isolated communities still more, was pointed out by H. C. Carey in 1840.<sup>86</sup> Professor Dewey says that ". . . after 1840 there began to be an increase in deposits and a relative decrease in the use of bank notes. In that year deposits, for example, in New York amounted to only \$16,000,000, but by 1860 they had increased over sevenfold, while capital and circulation increased only threefold. Specie holdings were about four times as much, but if the great increase in demand obligations of depositors is considered, this increase was entirely

<sup>83</sup>Condy Raguet, *A Treatise on Currency and Banking*, 2nd ed. (Philadelphia, 1840), p. 185.

<sup>84</sup>*Ibid.*, p. 186.

<sup>85</sup>*Ibid.*, p. 187.

<sup>86</sup>H. C. Carey, "Medium of Exchange," *Hunt's Merchants' Magazine*, Vol. III (New York, 1840), p. 50.

inadequate. In 1857, when the panic occurred, the specie reserve amounted to only about 13 per cent. of the combined obligations of depositors and note holders. It was then realized as never before that deposits constituted a liability which it might be extremely difficult to meet in times of a crisis."<sup>87</sup>

Writing in 1841, Gallatin pointed out that deposits constituted the principal currency in the larger cities but that country banks could not exist unless they had the right to issue notes.<sup>88</sup> He insisted that the excess of note issues occurred principally in the western States and generally wherever country banks were established; this was explained, as in Colonial days, on the ground of the lack of specie or capital.<sup>89</sup>

Stephen Colwell, writing in 1860, likewise pointed out that deposit currency constituted the principal medium of exchange and that after about 1835, bank notes steadily became of less importance in the United States as compared with deposit currency. He said: ". . . that the proportion of bank notes employed in Great Britain is decreasing, and has been for fifty years. A comparison of bank returns, in this country, for the last twenty-five years will exhibit a similar result. . . . That which has been most extensively employed, and which, to the greatest extent, supplanted the circulation of bank notes in Great Britain, and in the United States, is bank credits, which operate under the name of deposits. A very large proportion of the individual paper of men of business, in the United States, is discounted by the banks without taking the form of bank-notes, or being included in the circulation of the banks. The proceeds of the discounted paper are merely placed to the credit of the party, and take their place as deposits."<sup>90</sup>

In another place he says: "The deposits in the principal cities greatly exceed in amount the circulation of the banks, and their operation or working is far more efficient and active than that of the bank-notes."<sup>91</sup> He points out that the deposits consisted in part of bank notes absorbed from the circulation, but chiefly of credits granted upon the discount of commercial paper, and estimated that probably not more than one per cent. of the deposits

<sup>87</sup>D. R. Dewey, *State Banking Before the Civil War*, p. 215.

<sup>88</sup>Adams, *Gallatin*, Vol. III, pp. 374-376.

<sup>89</sup>*Ibid.*, p. 379.

<sup>90</sup>Stephen Colwell, *Ways and Means of Payment: A Full Analysis of the Credit System, with its Various Modes of Adjustment* (Philadelphia, 1860), p. 240.

<sup>91</sup>*Ibid.*, p. 241.



were made in gold or silver.<sup>92</sup> In still another place, he pointed out that in the exercise of the agency of payment by banks, bank notes played but a small part.<sup>93</sup> Further on he remarks: "The fund employed to effect payment of these great sums is mainly that which is called deposits in the banks. For, however great the amount of payments effected by the circulation of bank-notes . . . deposits are the chief agent of the bank."<sup>94</sup> Finally he adds: "A distinction should be made between country and city banks. The former issue bank-notes more largely, in proportion to their capital and business, than the latter. The country banks, which rely for their business and profits upon their circulation, have more to answer for, in reference to the over-issue of bank-notes."<sup>95</sup>

After the establishment of the Sub-Treasury System in 1846, the Federal government went on its way using specie in all its transactions, and gave up all responsibility for the currency used by the people. From this time until the Civil War, the country depended entirely on the local banks. But banking capital reached its lowest ebb in 1846, \$196.9 millions; bank note currency was at its lowest ebb in 1843, \$58.6 millions. Banks during this period had changed considerably as compared with anything in their previous history. They ceased almost entirely to be political; this was in part a consequence of their great number and the smallness of each. Banks also had ceased to be so mysterious. In spite of their opposition, they had been brought in this period to submit to the visitorial powers of the State and to make public statements of their affairs. In older parts of the country also the accumulation of capital had now become so great that the old banking system of paper-mongering was out of date, though the system was not given up by the banks in the country towns, by any means. "The banker's art consisted still to a great extent, in getting a 'good circulation' for his notes, and when to put them out and when to take them in; but, at least in the large centers, the accumulation of capital was such as to feed the deposits and give the banks an opportunity for a higher art of banking. In such places the circulation sank in importance. The

---

<sup>92</sup>*Ibid.*, p. 242.

<sup>93</sup>*Ibid.*, p. 445.

<sup>94</sup>*Ibid.*, p. 445.

<sup>95</sup>*Ibid.*, p. 479.

check began to supersede the bank note, and the predominance of the currency over the affairs of men began to decline."<sup>96</sup>

TABLE VI  
Number of Banks, Capital, Deposits and Circulation, 1830-1863  
(Capital, deposits and circulation in millions)

Year	No. of banks	Capital	Deposits	Circulation
1830.....	394	182	58	51
1831.....	426	186	62	57
1832.....	448	191	67	62
1833.....	472	198	71	68
1834.....	506	200	75	94
1835.....	704	231	83	103
1836.....	713	251	115	140
1837.....	758	290	127	149
1838.....	829	317	84	116
1839.....	840	327	90	135
1840.....	907	358	75	107
1841.....	784	313	64	107
1842.....	692	260	62	83.0 <sup>1</sup>
1843.....	691	228.9	56.2	58.6
1844.....	696	210.9	84.6	75.2
1845.....	707	206.0	88.0	89.6
1846.....	707	196.9	96.9	105.6
1847.....	715	203.1	91.8	105.5
1848.....	751	204.8	103.2	128.5
1849.....	782	207.3	91.2	114.7
1850.....	824	217.3	109.6	131.4
1851.....	879	227.8	129.0	155.2
1852.....	...	....	....	....
1853.....	750	207.9	145.6	146.1
1854.....	1208	301.4	188.2	204.7
1855.....	1307	332.2	190.4	187.0
1856.....	1398	343.9	212.7	195.7
1857.....	1416	370.8	230.4	214.8
1858.....	1422	394.6	185.9	155.2
1859.....	1476	402.0	259.6	193.3
1860.....	1562	421.9	253.8	207.1
1861.....	1601	429.6	257.2	202.0 <sup>2</sup>
1862.....	...	....	296.3	183.7
1863.....	...	....	393.7	238.7 <sup>3</sup>

<sup>1</sup>Data for the years 1830-1842 from W. G. Sumner, *A History of Banking in the United States* (New York, 1896), p. 456.

<sup>2</sup>Data for the years 1843-1861 from D. R. Dewey, *Financial History of the United States*, 8th ed. (New York, 1922), p. 260.

<sup>3</sup>Data for the years 1862-1863 from W. G. Sumner, *History of American Currency* (New York, 1884), p. 188; *Report of the Comptroller of the Currency* (1907), p. 409.

A general picture of the situation from 1830 to 1863 may be seen from Tables VI and VII. Although Table VI shows that

<sup>96</sup>W. G. Sumner, *History of Banking in the United States* (New York, 1896), pp. 414-415.

while deposits exceeded notes during the four years, 1830-1833, they did not succeed in passing them permanently until 1855.<sup>97</sup>

TABLE VII  
Condition of Banks by Sections, 1860-1861<sup>1</sup>

Section <sup>2</sup>	No. of banks and branches	Capital (paid in)	Deposits	Notes
Eastern States .....	506	\$123,706,708	\$40,822,523	\$44,991,285
Middle States .....	488	160,085,360	156,899,656	52,873,851
Southern States .....	147	56,282,622	16,480,480	39,552,760
Southwestern States .....	141	62,941,011	30,576,820	34,600,785
Western States .....	319	26,577,012	12,450,083	29,987,086

<sup>1</sup>*Treasury Report of the United States on Finances for year ending 1861, pp. 278-280.*

<sup>2</sup>Eastern States—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut. Middle States—New York, New Jersey, Pennsylvania, Delaware, Maryland. Southern States—Virginia, North and South Carolinas, Georgia, Florida. Southwestern States—Alabama, Louisiana, Mississippi, Tennessee, Kentucky, Missouri. Western States—Illinois, Indiana, Ohio, Michigan, Wisconsin, Nebraska Territory, Minnesota, Kansas.

It must not be supposed from the above discussion that all banks of issue were bad. Among the good banks of issue may be mentioned the Bank of Indiana, the banks of Louisiana and the banks in the Suffolk System of New England. But with the passing of the National Bank Act and the subsequent Act of 1865 the issues of all State banks alike were driven out. This created a different situation. Left without a medium which responded readily to the demands of trade, an extensive use of checks began, obviously not new in itself, but new in the sense that it took on an importance that has steadily increased. To the problems of this period a separate chapter is devoted.

<sup>97</sup>Data and conclusions in Hunt's *Merchants' Magazine*, Vol. V (New York, 1841), p. 186, do not harmonize with the data given by Sumner as set forth in Table VI. In the *Merchants' Magazine* it is said that from 1830 to 1840, circulation exceeded every year the deposits commonly 20 per cent., and sometimes more. George Tucker in an article, "Banks or No Banks," Hunt's *Merchants' Magazine*, Vol. XXXVIII (New York, 1858), p. 150, says: ". . . from 1850 to 1856, while the circulation of all the banks in the United States had increased from \$105,000,000 to \$175,000,000—equal to an increase of 66 2-3 per cent., the deposits had increased in the same period from \$90,000,000 to \$240,000,000—equal to 166 2-3 per cent., which last increase a recent English writer (Tooke, on Prices) notices as a most remarkable result." Such lack of harmony can be explained only on the ground of the inadequacy of official data.

## CHAPTER III

### CLEARING AND COLLECTION OF CHECKS PRIOR TO 1868

#### Meaning of clearing and collection of checks

In order to prevent confusion of thought, it is necessary, at the outset, to distinguish between the clearing and the collection of checks. A check is said to be collected when it reaches the bank on which drawn and arrangement is made to remit the proceeds. The actual payment of the debt is designated as collection. Suppose there are but two banks, Bank A and Bank B, in a small town. Bank A receives checks on Bank B drawn by Mr. X, who is a depositor in Bank A. Bank A sends the checks by messenger to Bank B. The messenger presents the checks over the counter and Bank B, finding the checks valid, pays the messenger the amount called for. The checks are now collected. Suppose Bank B had checks on Bank A for the same amount; Bank B would offset the claims of Bank A by presenting to the messenger an equal amount of claims. No money would be needed. The checks would now be cleared, but not collected so far as Bank A is concerned, as that bank has had no chance to examine the checks delivered to the messenger. The messenger returns to Bank A with his checks and there it is learned that one is a forgery, another constitutes an overdraft, and still another has had payment on it stopped. These checks will not be paid, and will be returned to Bank B, either with or without protest, according to the practice of protesting. This should make clear the fact that clearing, which, in short, is an offsetting of claims, is quite distinct from collection. With these checks returned to Bank B, Bank B is now obliged to settle the further claims of Bank A. When these claims are settled all the checks are not only cleared but collected.

It has just been said that the actual payment of a check is designated as collection. At what time in the physical handling of the check by the drawee bank is it paid? The check is paid at the time it is charged to the drawer's account, and is cancelled; thereafter the fund is held for the credit of the holder, the control of

the drawer ceases, and he has no right to stop payment, even though actual remittance has not been made.<sup>1</sup> Where a check against sufficient funds is received by the drawee through the mail, it is paid at the time it is charged to the drawer's account and cancelled; so that thereafter the drawer cannot stop payment, nor can a receiver or assignee of the drawer claim the fund, although remittance has not been made. Some courts hold the check paid even before charged to account, where it has been cancelled and filed as paid. But where a check against insufficient funds or a forged check received through the mail is marked "paid" by mistake and the mistake corrected before it is charged to the account, some authorities support the conclusion that the check is not paid finally, but that the mistake may be corrected and the check returned.<sup>2</sup>

Clearing, on the other hand, means an offsetting of claims, leaving only the net differences to be paid in some satisfactory manner. Clearing houses are perhaps our best examples of the offsetting process. All banks which are members of the clearing house association meet together, present their claims on each other and receive or pay favorable or unfavorable balances. Perfect clearing means a complete offsetting of claims with no payment of balances. If all banks in the United States could be brought into one clearing organization the offset would tend towards perfection, and all obligations resulting from the use of checks could be liquidated without the use of a more expensive medium. This would bring about the most effective use of deposit currency.

Collection of checks must be effected regardless of whether there is a clearing mechanism. If there is a clearing of checks they yet remain to be collected, that is, sent to the drawee banks where arrangement is made for their payment. If the collection of checks is unaccompanied by any provision for offsetting, however, a great waste of time and money is involved. Under such a system, checks would be sent in every direction; their paths would cross and recross one another; messengers from one bank would be obliged to call at every other bank with all the attendant waste in time and energy. Consequently, it is of the utmost importance that the clearing principle be introduced wherever practicable in

---

<sup>1</sup>T. B. Paton, Jr., *Digest of Legal Opinions* (New York, 1922), p. 198. Numerous cases are cited by Paton to uphold these views.

<sup>2</sup>*Ibid.* See also pp. 528-529 below.

order to eliminate to the greatest possible extent all collections which are not subsequent to clearings.<sup>3</sup>

It has been a general practice in the past to deposit checks for credit and collection, a practice that has given rise to one of the most serious problems in our clearing and collection system, of which more will be said later. These items must be distinguished from the items usually spoken of as "collection items" or simply "collections" which are deposited for collection and credit, instead of credit and collection as is the usual case with checks. Collection items are more often notes, time and sight drafts, etc., although they may consist also of checks and bank drafts.

### The origin of the practice of clearing

The clearing system is a development of a principle of Roman commercial law known as *compensatio*—the setting off of a debt one owes to another by a claim against him. This system attained a high degree of perfection in the Middle Ages at the fairs of Lyons. Under an ordinance of Louis XI (March 8, 1463) four fairs were authorized at stated intervals in each year, each of which was followed by a day of settlement fixed at the fair next preceding. Every banker came to these settlements prepared with a balance-sheet of his debts and credits. Three steps were required in completing settlements; first, the acceptance of bills by those upon whom drawn. This was necessary in order to determine what items actually could be cleared. Then came the comparison of accounts, and finally the settlement in money, of which very little was ultimately required.<sup>4</sup>

Rates of exchange for western Europe were fixed largely at Lyons, until the end of the 16th Century and the beginning of the 17th Century; then the Genoese attained predominance in financial matters, and the fairs of Placenzia became the clearing house of Europe. Admission to the clearings at Lyons required a guarantee of 2,000 crowns, and paper to be settled there rested in a meas-

<sup>3</sup>H. P. Willis, *The Federal Reserve* (New York, 1915), p. 223; J. T. Talbert, "Clearing-House and Domestic-Exchange Functions of the Federal Reserve Banks," *Proceedings of the Academy of Political Science*, Vol. IV (1913-1914), pp. 193-194; O. Howard Wolfe, *Practical Banking* (Chicago, 1920), Chaps. V, VI, XIII; L. H. Langston, *Practical Bank Operation*, Vol. I (New York, 1921), Chaps. IV-VII.

<sup>4</sup>C. A. Conant, *Principles of Money and Banking*, Vol. II (New York, 1905), Bk. V, pp. 239-240. For an excellent account of the principal Mediaeval fairs, see Stephen Colwell, *Ways and Means of Payment: A Full Analysis of the Credit System with its Various Modes of Adjustment* (Philadelphia, 1860), Chap. XII.

ure upon the combined credit of all the great exchange houses of Europe. The quarterly settlements were made in a handsome building (*a loge des changes*) erected by Soufflot, and were continued until the Revolution. The last settlement was in April, 1793.<sup>5</sup> Knowledge of the methods of clearing practiced at Lyons was spread in the 18th Century over Europe by the translation of the work of Savary, *Le Parfait Negociant*.<sup>6</sup>

### The origin of clearing houses

The business of the clearing house is defined to be "the effecting, at one place, of the daily exchanges between several associated banks, and the payment at the same place of balances resulting from such exchanges."<sup>7</sup> To be more exact, a clearing house is an association of banks, ordinarily voluntary,<sup>8</sup> to simplify and facilitate the exchanges of such items as notes, checks, bills and drafts, to facilitate settlements of balances among the banks, and to serve as a medium for united action upon all questions affecting their common welfare. In the words of Macleod, "The Clearing system is a device by which all the Banks which join in it are formed, for the purpose of transferring credits from one bank to another without the use of coin; just in the same way as credits are transferred in the same bank from one account to another, without the use of coin."<sup>9</sup> Clearing is, beyond all question, the simplest, the most economical, and when applicable, the most efficient of all modes of paying debts.

The first modern clearing house is said to be that founded at

<sup>5</sup>C. A. Conant, "The Extension of the Clearing System," *Bankers' Magazine*, Vol. LXX (1905), pp. 438-441.

<sup>6</sup>C. A. Conant, *Principles, etc.*, Vol. II, Chap. V; Stephen Colwell, "Principles of Finance," *Bankers' Magazine*, Vol. XIII, old series (July, 1858-June, 1859), pp. 790-791. H. D. Macleod takes issue with those who find in the old Mediaeval fairs the origin of our present clearing system. He insists that the present system has to do with bank credit and consequently could have had its origin only after bank credit came to be used generally. This system, he says, is not to be confused with the "set-off" of debts which was practiced at the great Mediaeval fairs like those at Lyons. It seems, however, that Macleod's distinction between commercial credit set-offs and the clearing of bank credit has little value or validity and that it can be said that the germ of the clearing idea was to be found at the old Mediaeval fairs. See H. D. Macleod, *The Theory and Practice of Banking*, Vol. II (London, 1876), pp. 461-462.

<sup>7</sup>O'Brien v. Grant, 146 N. Y. 163, 166 (1895).

<sup>8</sup>Banks are prohibited by statute in Mississippi (Code Section 3628 et seq.) from becoming members of unincorporated clearing house associations. See T. W. Paton, Jr., *Digest of Legal Opinions* (New York, 1922), p. 225.

<sup>9</sup>H. D. Macleod, *The Theory of Credit*, Vol. II (London, 1890), p. 380.

Edinburgh, Scotland, in 1760.<sup>10</sup> The London Clearing House was founded in 1773; Dublin followed in 1846; New York City, 1853; Paris, 1872; Vienna, 1872, although some local banks cleared as early as 1864; Berlin, 1883; St. Petersburg in 1898. In the United States there were but six clearing houses in existence at the outbreak of the Civil War. They were organized in the following order: New York City, 1853; Boston, 1855; Philadelphia, 1858; Baltimore, 1858; Cleveland, 1858; and Worcester, Massachusetts, 1861.<sup>11</sup>

### Collection of checks before the days of the clearing house

Before the days of the clearing house in this county, the clearing or liquidation among banks of all mutual claims, except those arising from their circulation, was accomplished mainly on their ledgers, and by correspondence. Whatever sum was received for the account of any bank by another, was credited accordingly; whatever claim was received by one bank on another, was charged. These debtor and creditor transactions thus became items of book account, the accounts running from year to year, being balanced as often as necessary to make out the balance sheet. So far as the respective charges and credits balanced each other, the mutual indebtedness of the banks was paid, and the claims held by the customers of one bank against the customers of another were discharged, due solely to bookkeeping operations and correspondence among the banks involved. The effect was much the same as if all

<sup>10</sup>C. A. Conant, "The Extension of the Clearing System," *Bankers' Magazine*, Vol. LXX (1905), pp. 433-441. Mr. Conant receives no support for this statement. William H. Howarth, *Our Clearing System and Clearing Houses* (London, 1897), p. 24, does not mention the Edinburgh Clearing House, but says that there seems to be ". . . no doubt that the Clearing System was established before 1773, though its early days are shrouded in the darkest and most profound mystery." The year 1775 frequently is given as the date of origin of the clearing house in London. W. Stanley Jevons, *Money and the Mechanism of Exchange* (New York, 1876), pp. 263-264, says it originated about 1775. Mr. R. M. Holland, *The London Bankers Clearing House*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 492, pp. 268-269, says that about the year 1770, according to tradition, the walk clerks from the city and West End banks had made a practice of meeting at lunch time at a public house and exchanging checks, the balances being settled in notes and cash. He finds proof that a room was rented in 1773 for this purpose. Mr. Ralph Van Vechten says it is not certain just when clearing houses originated, but claims that there was one in Florence in 800 A. D., and something very similar to a clearing house in Tokio about 2600 B. C. No authority is cited for these statements, and the writer has been unable to find any support for them. See his statements in *Proceedings of the American Bankers' Association* (1912), p. 506.

<sup>11</sup>D. P. Bailey, *The Clearing House System* (New York, 1890), pp. 4, 36; *Bankers' Magazine*, Vol. XLIV (1890-1891), pp. 606, 660, 919; Vol. XLV (1890-1891), pp. 25, 28, 108, 684-685.



the customers had kept their accounts with one central bank and had all their claims offset on its books. The practice of keeping mutual accounts (not deposits) was widespread, and most of the settlements were effected in this manner, thus reducing to a minimum the shipments of actual money required to liquidate adverse balances. Roughly, the result of these accounts and the correspondence by which they were maintained was much the same as if they all had had a clearing office, except, of course, that the system was much less effective and economical. At the best, there were many shipments of money to liquidate adverse balances.

The banks also kept deposits with each other. The position of many banks and the nature of the trade among their customers made it necessary for such banks to keep deposits in financial centers. Against these deposits the banks drew bills to meet the distant obligations of their customers, or built them up by having distant sums collected and credited to their accounts. Most banks found it necessary to carry deposits in leading financial centers. Some bore interest, while others did not; various arrangements were made, many favors and concessions were granted. Such correspondent relations are still common among banks in this country, despite the fact that the Federal Reserve System is attempting to provide a more ideal and effective system.<sup>12</sup>

During certain seasons of the year, it frequently became difficult to maintain sufficient balances in the financial centers to meet the demands of their customers for drafts on those centers. Funds in those centers then would command a premium. At such times, banks frequently would dispose of checks which they held drawn on banks of such cities at a profit.<sup>13</sup> On checks drawn on New York funds and payable in eight or ten days, the National Bank of Providence during the '30s frequently charged  $\frac{1}{2}$  of 1 per cent. premium and interest. Providence banks were known to have taken as high as 1 per cent. on checks in addition to the time the checks had to run, while the Newport Exchange Bank charged as much as  $1\frac{1}{2}$  per cent. on New York checks payable at sight.<sup>14</sup>

<sup>12</sup>Colwell, *op. cit.*, pp. 269-272.

<sup>13</sup>J. J. Klein, "The Development of Mercantile Instruments," *Journal of Accountancy*, Vol. XII (1911), p. 537.

<sup>14</sup>*Report of the Committee Appointed by the General Assembly of the State of Rhode Island and Providence Plantations to Visit and Examine the Banks in this State* (Newport and Providence, 1836), pp. 15, 19, 22.

In connection with discounting, a practice which seemed to be common prior to about 1820 was for banks, such as those in Baltimore, for example, which had eastern funds in excess, to refuse to discount notes unless the owners would take checks on Philadelphia instead of receiving credit on the banks' books for the result of the discount. See Klein, *op. cit.*, p. 440.

Rates of exchange and discounts and premiums on checks seemed to vary with the avarice of the dealers in exchange, the necessity of the borrowers, the state of the money market, and the charges of other banks.

With but few exceptions it was the general practice, prior to the introduction of the clearing house, for banks with checks on other banks within the same city to effect their collections by presentation over the counters through the agency of messengers. It is definitely known, however, that by 1793 the United States Bank maintained close relations with the Bank of North America and the Bank of Pennsylvania, making daily settlements and exchanging notes daily. The same co-operation existed at first between the New York branch of the United States Bank and the Bank of New York. It is presumed that checks were included in the settlements.<sup>15</sup>

#### The Suffolk principle of par collection

One of the best-known instances in which the principle of speedy collection was applied in this country was under the so-called Suffolk Bank System of New England where it was applied to bank notes. This principle which has proved so important not only in note collection but more recently in the collection of checks, deserves a brief study.

The Suffolk Plan was inaugurated in 1819 by the Suffolk Bank of Boston in order to force country banks to redeem at par their notes which were circulating in Boston at a discount and against which the notes of the Boston banks could not make headway, as the Boston notes were speedily redeemed over the counters of the Boston banks. In that year the Suffolk Bank announced that if any bank would deposit with it \$5,000 as a permanent deposit, with such further sums as would be sufficient from time to time to redeem its bills taken by the Suffolk Bank, such bank should have the privilege of receiving its own bills at the same discount at which they were purchased. Should any bank refuse to make such a deposit its bills were to be sent home for payment at such times and in such manner as the Suffolk Bank might see fit.

The Suffolk Bank, competing with the New England Bank, which since 1813 had been doing much to reduce the rate of discount on country bank notes by offering to send them home for customers at cost, failed to drive country bank notes out of Bos-

<sup>15</sup>J. T. Holdsworth, *First Bank of the United States*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 571, p. 40.

ton. In 1824 the Suffolk Bank entered into an agreement with six other Boston banks by which they were to subscribe to a fund of \$300,000, to be kept in the Suffolk Bank, and to be used for the purpose of buying up country bank notes at a discount to send home for redemption, thus creating a vacuum for the currency of the seven Boston banks.

After a year's experience the Suffolk Bank agreed to receive the notes of any New England bank at par provided it would carry a minimum permanent deposit of \$2,000, free of interest, the amount depending upon the capital and business of the depositing bank. "In consideration of this deposit the Suffolk Bank redeemed all the bills of that bank which might come in from any source, charging the redeemed bills to the issuing bank once a week, or whenever they amounted to a certain fixed sum; provided, the bank kept a sufficient amount of funds to its credit, independent of the permanent deposit, to redeem all of its bills which might come into possession of the Suffolk Bank; the latter charging interest whenever the amount redeemed should exceed the funds to its credit; and if at any time the excess should be greater than the permanent deposit, the Suffolk Bank reserved the right of sending home the bills for specie redemption. In payment the Suffolk Bank received from any of the New England banks which kept an account with it the bills of any New England bank in good standing, at par, placing them to the credit of the bank sending them on the day following their receipt."<sup>16</sup>

When any bank refused to join in the Suffolk System, the Suffolk Bank simply presented its notes for payment at its counter. Most of the State banks soon gave up the struggle against the system with the result that bank note currency was soon circulating at par and on a sound basis throughout New England. This established the system of par collection of notes for New England. The United States is now endeavoring to apply the same principle to the collection of checks.

**Banks must redeem their notes at once and in full when presented over the counter**

Out of the opposition to the establishment of the system of par collection of bank notes came another principle which has its significance today with reference to checks, that is, that a bank

<sup>16</sup>L. Carroll Root, "New England Bank Currency," *Sound Currency*, Vol. II, No. 13 (New York, 1895), p. 278.

must redeem its notes at par, to any amount, and at once when presented over its counter if there is no statute to the contrary.

**The case of the Suffolk Bank v. the Lincoln Bank, 1821<sup>17</sup>**

Action was taken by the Suffolk Bank in 1821 against the Lincoln Bank at Bath, Maine, for dilatory practices which resulted in an important decision relative to the prompt redemption of notes. An agent from the Suffolk Bank presented at the Lincoln Bank bills to the amount of \$3,000 very soon after the commencement of the usual banking hours. The cashier immediately offered to pay the amount in the bills of the banks in Boston, and among others, partly in those of the Suffolk Bank, or by check or draft on a bank in Boston, both of which proposals were declined by the agent, who demanded payment in specie. The cashier then began to count small pieces of silver change in denominations no larger than a quarter of a dollar. At the rate of counting he could not count more than \$1,000 before closing time. The Suffolk Bank agent offered to take the specie at the count of the bank, but the cashier declined to deliver it. The agent left the bank with his bills and the Suffolk Bank entered suit in the Circuit Court of the United States at Portland.

Associate Justice Story, in summing up to the jury, said, among other things: "The act of Massachusetts (Stat. 1809, ch. 38), under which this suit was brought,<sup>18</sup> declares, that, 'if any incorporated bank shall refuse or neglect to pay on demand any bill or bills by such bank issued, such bank shall be liable to pay to the holder of such bill or bills after the rate of two per cent. per month on the amount thereof from the time of such neglect or refusal, to be recovered as additional damages in any action against the bank for the recovery of the said bill or bills.' It is the duty of every bank to pay its bills in specie on demand, if such demand is made at the bank within the usual banking hours, and the omission to pay under such circumstances, is a neglect or

<sup>17</sup>*The President, Directors, and Company of the Suffolk Bank v. The President, Directors, and Company of the Lincoln Bank*, 3 Mason 1 (1821). See also J. D. Magee, "Historical Analogy to the Fight Against Par Check Collection," *Journal of Political Economy*, Vol. XXXI (1923), pp. 433-445.

<sup>18</sup>It will be noticed that this suit was brought against a Maine bank at Bath under a Massachusetts law. Maine became a State separate from Massachusetts in March, 1820, and apparently carried into the new State this law until such time as it could develop its own laws. The Veazie Bank of Bangor, which offered strenuous opposition to the Suffolk Bank System, later succeeded in getting a law passed giving the banks of Maine a certain delay, after the demand at their counters, in which to redeem their notes in specie. See D. R. Whitney, *The Suffolk Bank* (Cambridge, 1878), p. 49.

refusal within the meaning of the act. There is no pretense to say, that a bank has a right to delay the holder of its bills, day after day, while its officers can count out change so as to make up the amount in the smallest species of coin in their own way. Every bank is bound either to have its specie counted or weighed, and ready for delivery, or to have servants sufficient to count and weigh it, and to pay it out for all demands made during the usual banking hours. I do not say, that if a very large demand be made just before the closing of a bank, so that a reasonable time may not exist to count, weigh, or deliver it, an omission to pay until the next day would, under the circumstances, be unjustifiable. . . . But on this point, I give no opinion, as it is not necessary in the present case. . . .

“It is said . . . that the cashier offered to pay the amount in *Boston* bills, or by draft on *Boston*. But this constitutes no legal excuse. Every bank is bound to pay specie for its bills, and nothing else is of good tender. Every other arrangement is a matter of courtesy, and not of right. . . . Now as a matter of prudence it may be admitted to have been proper for the cashier to count his specie before delivery; but as matter of right, his conduct cannot be justified, if his intention was thereby unreasonably to delay payment to the agent, and thus to create an impossibility of his receiving the amount on that day. I go farther and hold, that if in fact, by such conduct, the payment of the amount on the day of demand was necessarily defeated, it comes within the provision of the act, whether there was wrongful intention or not. It was a neglect to pay, and occasioned by the want of due diligence on the part of the officers of the bank. . . . It has been intimated that each bank-bill should have been separately presented for payment and separately paid. But there is no foundation in law for that suggestion. The holder had a right to demand the whole at once as an aggregate sum, and the bank was bound to pay the whole.” The verdict was for the plaintiff with 2 per cent. damages. The same principle was upheld in *Massachusetts* in 1827 in the case of the *Suffolk Bank v. The Worcester Bank*.<sup>19</sup>

The principles set forth in the above cases are important not only because of the clearness with which the court established the liabilities and responsibilities of banks with respect to their note issues, but because of the indirect bearing of these principles upon the banks' liabilities and responsibilities with respect to deposit

<sup>19</sup>22 Mass. 106 (1827).

currency as evidenced by checks. Writers in the field of banking have emphasized continually the similarity between notes and deposits as demand liabilities of the bank; indeed, some of them have entered into lengthy arguments to demonstrate the practical identity of the two types of demand liabilities so far as the bank is concerned. This view has been held generally. Consequently, the natural conclusion has been that if the holder of bank notes has the right to demand the whole at once as an aggregate sum, and the bank is bound to pay the whole, the same principle applies to checks when presented over the counter. In general, this principle has been applied to checks by various courts which have long held that when checks are presented directly over the counters of the drawee banks they must be paid at once and in full without deduction. The reasoning from this analogy frequently has been that just as bank notes are demand liabilities of the bank and payable in lawful money to the holder upon demand, so are checks payable in lawful money to the holder when presented directly over the counter of the drawee bank. In fact, the definition of the check might lead to such conclusions; the usual definition being something like the following: A check is an unconditional order in writing addressed by a person (the drawer) to a bank, signed by the drawer, requiring the bank to which it is addressed to pay a sum certain in money on demand to a person named or to his order or to bearer.<sup>20</sup> The United States Supreme Court has taken a different position recently with respect to the drawee bank's liability to any holder other than the depositor for checks presented directly over its counter.<sup>21</sup> It holds that the bank's liability is to the depositor only, and not to the holder, and may pay the holder in drafts on reserve deposits provided the depositor does not object, and he is assumed to agree unless he specifies to the contrary on the check when he draws it on the bank. This decision is in harmony with the majority of opinions interpreting the Negotiable Instruments Law with respect to the nature of checks and makes it obviously unsafe to be insistent upon the similarity between the two types of demand liabilities of banks.

<sup>20</sup>J. D. Brannan, *The Negotiable Instruments Law Annotated*, 3rd ed. (Cincinnati, 1919), Sections 126, 185; H. W. Magee, *A Treatise on the Law of National and State Banks*, 3rd ed. (Albany, N. Y., 1921), p. 310. See also pp. 1-2 above.

<sup>21</sup>*Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 262 U. S. 649 (1923). See Chapter VII, but especially pp. 272-274 below.

### The later years of the Suffolk System

The suspension of specie payments in 1837 put an end to the coercive measures on the part of the Suffolk Bank, and consequently each bank was left to its own volition. Many of them continued to redeem their bills at the Suffolk Bank as they had done in the past, with the result that these bills passed current all over the country and in some places even commanded a premium. At the resumption of specie payments the Suffolk Bank was able to take its old place at the head of the redemption system which it maintained until about 1858, when it gave way largely to the Bank of Mutual Redemption. This bank had been organized to take over the functions of the Suffolk Bank; it was to be owned by the New England banks so that they could share in the profits which had gone exclusively to the Suffolk Bank. Although the Bank of Mutual Redemption assumed most of the redemption functions of the Suffolk Bank, both banks shared the business until the suspension of specie payments in 1861 which practically broke down the system, although the currency was of well-recognized soundness when the National Banking System appeared upon the scene.<sup>22</sup>

### Other methods of note collection

No effort will be made to give an account of the methods used in other sections of the country for the collection of bank notes except to say that collection agencies were commonly established for the purpose. By 1850 there were two agencies in New York State and seventy in the western States.<sup>23</sup> Some of the notes of every bank were returned to it through the agency of brokers, who, "like separate and peculiar absorbents, soaked up, by purchase at a small discount, bank notes which had been casually carried out of their proper sphere of action, and thereby became a sort of merchandise more or less depreciated in value, as the notes wandered far from home, and lost their properties as currency."<sup>24</sup> Special arrangements were made in different localities at different times for note redemption. For example, the second United States Bank, as a means of securing resumption of specie pay-

<sup>22</sup>D. R. Whitney, *op. cit.*, *passim*; L. Carroll Root, *op. cit.*, *passim*.

<sup>23</sup>*Bankers' Magazine*, Vol. V (1850-1851), pp. 467, 514. See also *Merchants' Magazine*, Vol. XXII (1850), pp. 225-226; Vol. XXV (1851), pp. 112-113; Vol. XXXIII (1855), pp. 475-477; Vol. XXXVI (1857), pp. 727-728; and Vol. XXXVIII (1858), pp. 733-734.

<sup>24</sup>A. B. Johnson, "A Treatise on Banking," *The Bankers' Common-Place Book* (New York, 1857), p. 23.

ments, made an arrangement with the State banks establishing a rule by which they were to settle for their notes at least once each week.

#### Gallatin recommended a clearing system for checks, 1841

Gallatin, writing in 1841 relative to the situation following suspension of specie payments in 1837, said: "Few regulations would be more useful in preventing dangerous expansions of discounts and issues on the part of the city banks than a regular exchange of notes and checks, and an actual daily or semi-weekly payment of the balances."<sup>25</sup> After mentioning the Scotch and English clearing systems, he continued: "The principal difficulty in the way of an arrangement for that purpose is the want of a common medium other than specie for effecting the payment of balances. These are daily fluctuating; and a perpetual drawing and redrawing of specie from and into the banks is unpopular and inconvenient.

"In order to remedy this it has been suggested that a general *cash office* might be established in which each bank should place a sum in specie proportionate to its capital, which would be carried to its credit in the books of the office. Each bank would be daily debited and credited in those books for the balance of its account with all the other banks. Each bank might at any time draw for specie on the office for the excess of credit beyond its quota, and each bank should be obliged to replenish its quota whenever it was diminished one-half, or in any other proportion agreed on."<sup>26</sup> He thought that some similar arrangement might be made in every other county or larger convenient district of the United States, without the necessity of establishing there a general cash office, the balances to be paid by drafts on New York.<sup>27</sup>

In the same year a Mr. Wetmore of New York City proposed a plan for a National Bank with branches, and among the provisions in the plan was one for the clearing and collection of checks

<sup>25</sup>Adams, *Writings of Gallatin*, Vol. III, (Philadelphia, 1879), p. 424.

<sup>26</sup>*Ibid.*, pp. 424-425.

<sup>27</sup>*Ibid.* James G. Cannon in his *Clearing Houses* (New York, 1900), pp. 130-131, says Gallatin recommended clearing houses in 1831. He is in error on this point since he relies for his authority upon a pamphlet written by Gallatin in 1841, entitled, "Suggestions on the Banks and Currency of the several United States, in reference principally to the suspension of specie payments." The same article is in Adams, *Writings of Gallatin*, III, pp. 424-425. Cannon may have relied upon Gibbons for this information as the quotations are identical in every respect with the exception of the date. See J. S. Gibbons, *The Banks of New York, Their Dealers, The Clearing House and the Panic of 1857* (New York, 1859), pp. 339-340.



at par. Balances were to be settled daily by the bank and branches, at their places of business, and weekly with those banks at a distance.<sup>28</sup>

Although no clearing house was established before 1853, Philadelphia had taken steps to simplify city clearings and collections by 1852. The clerks of the various banks met every morning at the Philadelphia Bank to make the exchanges by reception from each other of notes and checks received the day previous. The cashiers met twice each week to settle balances, with the exception of the months of July and August when they met but once each week. At these meetings the banks were called over by the chairman, each cashier announcing how he stood, either debit or credit; when all were called over by the chairman, the aggregate credits and debits balanced. The debtor banks gave checks for the amount of their indebtedness to the creditor banks.<sup>29</sup>

#### **The New York City Clearing House, 1853**

The banks of New York City, in 1853, organized the first clearing house established in the United States. According to James C. Hallock, Jr., the plan was devised by his father, although there are evidences of many similar, if not identical, plans suggested during the few years just prior to 1853.

At that time each of the fifty-two banks had daily received over its counter, or by mail, checks on every other bank in the city. To collect them the banks had opened deposit accounts with one another; each bank had become a depositor in fifty-one other banks. The pass-books used were of the ordinary form. Each bank, however, did not send a messenger to fifty-one banks daily; they had simplified that work by one-half. For many years prior to 1853 the banks had tacitly agreed that each would send messengers to the other half for six months. For example, the Chatham Bank would have checks on the Merchant's Bank. It would list them on a deposit slip, charge the Merchant's Bank with the amount in its pass-book and place the checks on the book which the messenger would carry to the Merchant's Bank and deliver to its receiving teller. The latter would remove the checks and, having some on the Chatham Bank with list attached, he would credit his bank with the amount in the pass-book, place the package in it and hand it back thus refilled to the messenger.

<sup>28</sup>W. S. Wetmore, "Plan of a National Bank," *Merchants' Magazine*, Vol. IV (New York, 1841), pp. 531-533.

<sup>29</sup>*Bankers' Magazine*, Vol. VI (1851-1852), pp. 657-658.

When banks exchanged checks in the above manner the amounts were almost always unequal, leaving a balance for one to pay and the other to receive. Had each bank settled daily there would have been fifty-one balances to pay and receive. Instead of attempting to settle balances daily, which would have consumed hours and caused much annoyance, as balances were payable in coin, the banks made weekly settlements after the exchange of Friday morning. On settlement day the cashier of each bank would draw drafts for every debt due him by other banks, and send out the messengers to collect them. "Over fifty porters were out at once . . . with an aggregate of several hundred bank drafts in their pockets, balking each other, drawing specie at some places, and depositing it in others; and the whole process was one of confusion, disputes and unavoidable blunders, of which no description could give an exact impression."<sup>20</sup>

The institution of the New York Clearing House in 1853 altered the entire situation. Every bank sent to the clearing house by messenger all the checks it had on all the other member banks and charged the whole amount against the clearing house. Every bank received there all the checks which all the other banks had on it, the sum representing the total of the claims which the clearing house had against it. A balance was struck and if the bank had a debit balance, it paid the clearing house; if it had a credit balance the clearing house paid the bank.

Since the original clearing house was in principle and daily routine practically the same as the one of today, a detailed description of the clearing house will be reserved until a later chapter in which the operations of the modern clearing house will be studied.<sup>21</sup>

The newly-organized clearing house saved every bank in the city, on the average, about twenty-five daily trips to exchange checks with other banks; it saved every bank in the association the payment or receipt, mostly in coin, of approximately fifty balances on settlement day; it substituted daily for weekly settlements and at the same time saved the banks all the drudgery, irritation and anxiety which had made daily settlements impracticable; it saved all the banks the trouble of keeping accounts with one another; it relieved them of the risk of transporting

---

<sup>20</sup>J. S. Gibbons, *op. cit.*, pp. 293-294; also quoted by J. C. Hallock, Jr., *Clearing Out-of-Town Checks* (St. Louis, 1903), pp. 7-8.

<sup>21</sup>See Chapter X below. An excellent account, with cuts, of the original clearing house, is given by J. S. Gibbons, *op. cit.*, Chap. XVIII; for another account see *Merchants' Magazine*, Vol. XLII (1860), pp. 213-214.

money from place to place; it freed them from all injurious dependence on each other; and finally, the books of the clearing house afforded facility for knowing at all times the management and standing of every bank in the association. Regular periodic statements as to condition were required from the associated banks by the clearing house—at that time weekly and quarterly statements—which tended to secure greater reliability and accuracy than was accomplished prior to that time when the banks “dressed up” weekly statements before publishing them in the newspapers, and quarterly statements before sending them to the Bank Department at Albany. This situation was changed because the clearing house transactions revealed their conditions and forced the banks to liquidate among themselves.

Aside from requiring regular reports from the associated banks the clearing house assumed few of the special functions and practices so common with modern clearing houses. The settlement of balances was effected in clearing house certificates, the gold to which the certificates constituted claims, being deposited in one of the banks designated as a depository. But of clearing house loan certificates as a means of meeting times of stress, the association knew nothing.

### **The clearing house in the panic of 1857**

The newly-organized clearing house was virtually helpless in the panic of 1857 which was precipitated so suddenly in August of that year by the failure of the Ohio Life Insurance & Trust Company. Indeed, it was not only helpless, but contributed somewhat to the hard times through its exactions from the struggling member banks.

The failure of the Ohio Life Insurance & Trust Company was followed rapidly by the failure of the Bank of Pennsylvania in Philadelphia, which, in turn, was followed by other banks in that city, by those in Baltimore, and by those in the southern Atlantic States generally. Commercial business was suspended everywhere. The avalanche of discredit swept down merchants, bankers, moneyed corporations, and manufacturing companies, without distinction. Old houses, with accumulated capital which had withstood the violence of former panics, were prostrated in a day, when they believed themselves safe against misfortune. The bank suspension of New York and New England, in the middle of October, caused primarily by the calls of interior depositing banks and

- the action of the home depositors, was the climax of this commercial hurricane.<sup>32</sup>

In the midst of this panic the New York Clearing House was helpless. The reports of the clearing house were watched by the community with anxiety, which had every effect other than that of creating confidence. The clearing house daily settlements in coin exerted a crushing influence on the commercial interests and became a new source of terror. "What in ordinary times was a safeguard against the unwise expansion of bank credits, was now a remorseless power compelling the smaller banks—the majority of the whole—to a violent contraction of their loans to dealers, forcing them into the sacrifice of property, and finally into bankruptcy; thus sending out through a thousand channels new streams of misfortune. *Default at the Clearing House*, was the presiding spectre at every Bank Board of the smaller institutions."<sup>33</sup>

It did not occur to the managing committee of the clearing house to relax its destructive energy while there was yet a chance of preserving specie payments. They thought of it after it was too late to be of any material service to the merchants. They later admitted bank currency, representing the State debt and the debt of the United States, as a substitute for coin in the daily settlements, and found it of great service in preventing further depreciation, and in repairing the mischief that had been done. Gibbons summarized the situation by saying: "It is often the case, that things good in themselves become hurtful by a change of circumstances which destroys their fitness. This may be said of the clearing house, without detracting from its real value to our financial interests."<sup>34</sup>

In subsequent panics, however, the clearing houses resorted to loan certificates and similar instruments as the most effective weapons at their command and were more successful in aiding the member banks. An account of the use of such emergency measures as well as other special functions assumed by clearing houses after the establishment of the National Banking System is given in Chapter V.

<sup>32</sup>Gibbons, *op. cit.*, Chap. XIX.

<sup>33</sup>*Ibid.*, p. 363.

<sup>34</sup>*Ibid.*, p. 364.

## CHAPTER IV

### THE CLEARING AND COLLECTION SYSTEM, 1868-1914

#### The growth of deposit currency

As we have seen, deposits definitely passed bank note currency in 1855 and according to the data given in Table VIII below, have maintained that supremacy and steadily increased in importance since that time. By taxing State bank notes out of existence in 1865, a vacuum was created which gave an added impetus to the use of deposit currency. Other factors which were responsible for the increasing use of deposit currency, and consequently, checks, were the inelastic note currency, better means of communication, the cheap and uniform postage rates,<sup>1</sup> and the denser population.

**TABLE VIII<sup>a</sup>**  
**Circulation and Deposits of National, State, Savings, and Private Banks,  
 Loan and Trust Companies**  
 [Amounts in millions]

Year	Circulation	U. S. deposits	Individual deposits	Total deposits
1855	186.9	.....	.....	190.4
1856	195.7	.....	.....	212.7
1857	214.8	.....	.....	230.4
1858	155.2	.....	.....	185.9
1859	193.3	.....	.....	259.6
1860	207.1	.....	.....	253.8
1861	202.0	.....	.....	257.2
1862	183.8	.....	.....	296.3
1863	238.7	.....	.....	293.7
1864	163.4	.....	355.7	355.7
1865	131.5	58.0	640.0	698.0
1866	267.8	39.1	815.8	854.9
1867	291.8	33.3	876.6	909.9
1868	294.9	28.3	968.6	996.9
1869	292.7	12.8	1,032.2	1,034.8
1870	291.8	13.2	1,051.3	1,064.5
1871	315.5	11.1	1,251.6	1,262.7
1872	327.1	12.4	1,353.8	1,366.2
1873	340.2	15.1	1,421.2	1,436.3
1874	338.7	10.6	1,526.5	1,537.1

<sup>a</sup>With the establishment of the penny postage in London in 1840, country checks began to stream into London. J. C. Hallock, Jr., *Clearing Out-of-Town Checks* (St. Louis, 1903), p. 28.

TABLE VIII—(Continued)

Year	Circulation	U. S. deposits	Individual deposits	Total deposits
1875	\$18.8	10.9	1,787.0	1,797.9
1876	994.8	11.1	1,778.6	1,789.7
1877	990.4	10.9	1,813.6	1,824.5
1878	900.4	25.6	1,717.4	1,743.0
1879	907.7	252.1	1,694.9	1,946.3
1880	918.4	10.7	1,951.6	1,962.3
1881	912.5	12.2	2,296.8	2,309.0
1882	909.2	12.6	2,460.1	2,472.7
1883	912.2	13.9	2,568.4	2,582.3
1884	995.3	14.2	2,566.4	2,580.6
1885	969.2	14.0	2,734.3	2,748.3
1886	938.0	17.1	2,812.0	2,829.1
1887	166.8	23.2	3,308.2	3,331.4
1888	155.5	58.4	3,422.7	3,481.1
1889	199.0	26.7	3,778.1	3,824.8
1890	126.5	30.6	4,062.5	4,093.1
1891	124.0	25.9	4,196.8	4,222.7
1892	141.2	14.2	4,664.9	4,679.1
1893	155.1	13.7	4,627.3	4,641.0
1894	171.8	14.1	4,651.2	4,665.3
1895	178.8	13.2	4,921.3	4,934.5
1896	199.2	15.4	4,945.1	4,960.5
1897	196.6	16.4	5,094.7	6,111.1
1898	189.9	52.9	5,688.2	5,741.1
1899	199.4	76.3	6,768.7	6,845.0
1900	265.3	98.9	7,238.9	7,337.8
1901	319.0	99.1	8,460.6	8,559.7
1902	309.4	124.0	9,104.7	9,228.7
1903	359.2	147.3	9,553.6	9,700.9
1904	399.6	110.3	10,000.5	10,110.8
1905	445.5	73.3	11,350.7	11,426.0
1906	510.9	89.9	12,215.8	12,305.7
1907	547.9	180.7	13,099.6	13,280.3
1908	613.7	130.3	12,784.5	12,914.8
1909	636.3	70.4	14,035.5	14,105.9
1910	675.6	54.5	15,283.4	15,337.9
1911	681.7	48.5	15,906.3	15,954.8
1912 <sup>a</sup>	745.1	58.1 <sup>a</sup>	17,024.0	17,082.1
1913 <sup>a</sup>	759.2	49.3 <sup>a</sup>	17,475.8	17,525.1
1914 <sup>a</sup>	750.7	65.8 <sup>a</sup>	18,517.7	18,583.5
1915	867.1 <sup>a</sup>	49.0 <sup>a</sup>	19,135.4	19,184.4
1916	902.5 <sup>a</sup>	39.5	22,873.5	22,913.0
1917	1,246.0 <sup>a</sup>	133.0	26,396.2	26,529.2
1918	2,430.8 <sup>a</sup>	1,037.8	27,956.4	28,994.2
1919	3,307.5 <sup>a</sup>	566.8	33,211.6	33,778.4
1920	4,017.0 <sup>a</sup>	175.8	37,830.0	38,005.8
1921	3,558.8 <sup>a</sup>	390.2	35,459.2	35,849.4
1922 <sup>a</sup>	2,938.3 <sup>a</sup>	128.9	37,194.3	37,323.2
1923 <sup>a</sup>	2,966.4 <sup>a</sup>	238.4	40,034.2	40,272.6
1924	2,587.0 <sup>a</sup>	.....	.....	.....

<sup>a</sup>Data for the years 1855-1864 are found in the *Report of the Comptroller of the Currency* (1907), pp. 150, 409. These data do not harmonize with data given on pp. 412-413 of the same report, and can serve only as a rough indication of general conditions. Data for the years 1864-1907 were compiled from the same report, p. 413, and from the *Report of the Comptroller of the Currency* (1911), pp. 804-805. The years 1864-1911 include State bank circulation. The term "circulation" is consistently smaller than the amount of "national bank notes outstanding" as given in other tables. Furthermore, there are glaring

discrepancies between this table and the table given on p. 150 of the 1907 report. Items of circulation, in the table given here (Table VIII), appear to be *net* rather than gross; this seems to be the only grounds on which to explain the discrepancies. This table is virtually the same as that given by Mr. A. P. Andrew, *Statistics of the United States, 1867-1909*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 570, p. 42. Further discrepancies are to be seen in the *Report of the Comptroller of the Currency* (1911), pp. 111-114, and Vol. II (1920), pp. 55, 151. Months are not indicated for the years 1855-1911.

It must be borne in mind, also, that all individual deposits are not subject to check. Some of them represent deposits in savings banks and others deposits not subject to check. On the other hand, government deposits would be represented by checks in many cases. This table should be compared with a table constructed by Professor Irving Fisher for the period 1896-1909, in which he estimated the individual deposits subject to check. See his *Purchasing Power of Money* (New York, 1911), p. 281. Prior to 1915, the reports for national banks did not segregate deposits subject to check from time deposits. On this point see Holbrook Working, "Circulating Medium, 1890-1921," *Quarterly Journal of Economics*, Vol. XXXVII (Feb., 1923), p. 255. Individual deposits are considerably larger than demand deposits. The research staff at the Federal Reserve Bank of New York estimated that total individual deposits in all national banks in the United States amounted to about 140 per cent. of demand deposits in 1910 and about 170 per cent. in 1923. For demand deposits subject to check, 1890-1911, see Wesley C. Mitchell, *Business Cycles* (University of California, 1913), p. 302. These data do not agree with those given by W. I. King in Table XIII, p. 95 below.

<sup>1</sup>*Report of the Comptroller of the Currency*, Vol. II (1914), p. 36. Circulation is national bank circulation outstanding as of June 30. All dates for 1912-1922 are for June 30 unless otherwise indicated.

<sup>2</sup>*Report of the Comptroller of the Currency* (1912), p. 46. As of June 14; in United States only, does not include Alaska and island possessions.

<sup>3</sup>*Report of the Comptroller of the Currency* (1913), p. 50. As of June 4; in United States only.

<sup>4</sup>*Report of the Comptroller of the Currency*, Vol. II (1914), p. 751. In United States only.

<sup>5</sup>*Treasury Department Circulation Statements* (July 1). Includes national bank notes, Federal reserve bank notes, and Federal reserve notes.

<sup>6</sup>*Report of the Comptroller of the Currency* (1922), p. 18.

<sup>7</sup>June 23.

<sup>8</sup>For June 30. *Report of the Comptroller of the Currency* (1923), pp. 122-123.

Brief mention has been made elsewhere of the various investigations that have been made in the United States in an effort to determine with some exactness the relative importance of checks as a part of the currency. The question of the proper method of computing the relative importance of checks and notes has been and is a difficult one. The usual methods have included the analysis of the clearing house returns, of aggregate receipts by banks and of particular receipts of banks, such as wholesale, retail, and all others. No one method has been satisfactory and all have been criticised freely. Most of the comparisons have been between checks and money rather than between checks and notes. Space precludes any careful and detailed criticism of the methods and data used in the various surveys. The reader will find those else-

where.<sup>2</sup> It will be sufficient for our purposes to bear in mind that the data presented are rough and only approximate, although they will serve, safely enough, to show general tendencies, the end desired here.

### Inquiries to determine the importance of checks

The first inquiry into the importance of checks in this period was the Garfield inquiry of 1877 which was based upon 52 banks, classified in three groups: (1) City banks, (2) those in cities the size of Toledo and Dayton in Ohio, and (3) the "countryest" banks—the smallest that could be found, at points removed from railroads and telegraph. In this inquiry it was thought that 88 per cent. of business was transacted in checks, drafts and commercial bills. This left undetermined, however, the exact importance of checks.<sup>3</sup>

Comptroller Knox made a more extensive inquiry in 1881; it rested upon the returns received from 1,966 banks for June 30 and from 2,132 banks for September 17, the latter number being all the national banks in operation at that date. For June 30 he found that the proportion of checks and drafts in the receipts of the 1,966 banks was 91.77 per cent., or 95.1 per cent. including clearing house certificates; on September 17 for the 2,132 banks it was 91.85 per cent., or 94.1 per cent. including clearing house certificates.<sup>4</sup>

In 1890 Comptroller Lacey made an investigation of the receipts of 3,438 national banks; 3,364 reported, showing their receipts for July 1 and September 17. For July 1, 92.50 per cent. of the receipts of 3,364 banks consisted of checks, drafts, bills of exchange, etc., in which were included exchanges for the clearing

<sup>2</sup>See H. P. Willis, "Credit Devices and the Quantity Theory," *Journal of Political Economy*, Vol. IV (1895-1896), pp. 281-308; David Kinley, "Credit Instruments in Business Transactions," *Journal of Political Economy*, Vol. V (1896-1897), pp. 157-174; E. W. Kemmerer, *Money and Credit Instruments in Their Relation to General Prices* (New York, 1907), Chaps. II-IV; Irving Fisher, *Purchasing Power of Money* (New York, 1911), *passim*; B. M. Anderson, Jr., *Value of Money* (New York, 1917), Chap. XIX; W. Randolph Burgess, "Velocity of Bank Deposits," *Journal of the American Statistical Association*, Vol. XVIII (June, 1923), pp. 727-740; W. I. King, "Is Our Currency Elastic?" *Bankers' Statistics Corporation*, Special Service, Vol. II, No. 23 (Sept. 21, 1920); Holbrook Working, "Prices and the Quantity of Circulating Medium, 1890-1921," *The Quarterly Journal of Economics*, Vol. XXXVII (Feb., 1923), pp. 228-256. Some careful studies in this field have been made by the Reports Department of the Federal Reserve Bank of New York under the direction of Mr. Carl Snyder.

<sup>3</sup>Report of Comptroller of the Currency (1881), pp. 14-15.

<sup>4</sup>*Loc. cit.*, pp. 15-19; *Bankers' Magazine*, Vol. XXXVIII (1884), pp. 485-486.



houses, clear house certificates, and miscellaneous items. Of the receipts of the 3,474 national banks reporting for September 17, 91.04 per cent. were in checks, drafts and other substitutes for money.<sup>5</sup> Comptroller Hepburn made a similar survey in 1892 and reported that 90.61 per cent. of the receipts of 3,473 banks as reported for September 15, 1892, were composed of checks, drafts, exchanges and other substitutes for money. "Checks etc.," apparently meaning checks and drafts, constituted 46.79 per cent., as compared with national bank notes which constituted apparently 1.04 per cent.<sup>6</sup>

Comptroller Eckels, at the suggestion and with the aid of Dr. David Kinley, made a survey of the national banks in 1895 in an effort to learn the proportion of credit instruments used in retail transactions. On the basis of replies received from 2,465 banks, with the amount of retail transactions aggregating approximately \$6,000,000, it was found that 58.9 per cent. were in checks and store orders and 41.1 per cent. in various kinds of money. In this report, it appears that the use of checks in retail transactions did not necessarily increase as population increased, but on the contrary decreased relatively after a certain density of population was reached. This conclusion cannot be accepted as a definite fact, however, as it rests upon but one investigation which was very defective. The following tables will show something of the results of the survey:

TABLE IX

The Use of Checks in Retail Transactions in 1895, in States Grouped According to the Grouping of the Census

Division	Per Cent.	Population
North Atlantic .....	56.1	17,400,000
South Atlantic .....	62.3	8,900,000
North Central .....	54.3	22,400,000
South Central .....	65.6	11,000,000
Western .....	59.7	3,000,000

TABLE X

The Percentage of Checks in 1895 to Total Receipts in Groups of Cities According to Population

In cities of	Number of cities	Per cent.
500,000 and over .....	4	55.9
200,000 and over .....	11	65.3
100,000 and over .....	10	70.9
50,000 and over .....	25	53.8
25,000 and over .....	41	53.0
10,000 and over .....	59	66.1
Below 10,000 .....	309	55.6

<sup>5</sup>Report of the Comptroller of the Currency (1890), pp. 22-32; *Bankers' Magazine*, Vol. XXV, 3rd series (1891), p. 519.

<sup>6</sup>Report of the Comptroller of the Currency (1892), p. 32.

The discrepancy between the results of this report and the previous reports is to be explained partially on the ground that the earlier reports had to do with the use of checks in general, while this report covered the use of checks in retail transactions only. In large cities many banks had no depositors in retail business. In New York, for example, 24 banks reported that they had no such deposits or only an exceedingly small amount of them. With these facts in mind, it was concluded that this report was, on the whole, in line with previous reports as to the importance of credit instruments in payments and exchanges generally and that credit instruments comprised between 90 and 92 per cent. of the exchange media when wholesale as well as retail transactions were included.<sup>7</sup>

In 1896, Comptroller Eckels, again with the aid of Dr. Kinley, made a more extensive investigation in which 5,530 banks reported, among other things, the amount and character of deposits made in the bank (1) by retail dealers, (2) by wholesale dealers, and (3) by all other depositors. This report called for deposits rather than receipts. Deposits, obviously, would be less than receipts; but it was thought that deposits would represent more accurately the real business transactions of the country.<sup>8</sup> For July 1, 1896, 3,474 banks reported that checks constituted 67.9 per cent. of their retail deposits, 95.6 per cent. of their wholesale deposits, 95.8 per cent. of all other deposits, and for all deposits combined in the 3,474 national banks, checks constituted 93.4 per cent. Combining the national bank reports with the State bank reports, 5,530 banks reported that their deposits were as follows:

	Retail deposits	Wholesale	All other	Grand total of deposits
Per cent. of gold.....	2.4	0.3	0.4	0.6
Per cent. of silver....	3.2	0.4	0.2	0.5
Percent. of currency...	26.7	4.0	4.1	6.3
Per cent. of checks.....	67.4	95.3	95.1	92.5

After a careful analysis of the data gathered, Dr. Kinley concluded relative to the per cent. of retail trade transacted by the use of credit instruments, that 40 per cent. was as low as in reason could be claimed to be correct and that 55 per cent. rather than 67.4 per cent. was probably about correct, all things considered.

<sup>7</sup>*Report of the Comptroller of the Currency* (1894), pp. 17-24. For an additional answer to this apparent discrepancy, see H. P. Willis, *op. cit.*, pp. 299-301.

<sup>8</sup>Receipts include checks presented for collection and not credited until the collection is made.

He thought 95 per cent. for the wholesale deposits about correct and that combining retail and wholesale with proper weights, 75 per cent. represented the best conclusion as to the relative importance of credit instruments in both kinds of deposits, and combined with all other deposits, properly weighted and discounted, thought 80 per cent. was a reasonable estimate for all data presented, although in a later review of the work he settled finally upon 75 per cent. as a safe minimum. This made check transactions at least three times as important as money transactions.<sup>9</sup>

The National Monetary Commission, in 1909, made another investigation along lines similar to those followed in 1896.<sup>10</sup> Banks reported for March 16, 1909, the per cent. of checks, drafts, etc., in the deposits made by retail dealers, wholesale dealers, and all other depositors, the estimated amount of checks used in pay rolls, and other relevant facts. Of the retail deposits, 73.2 per cent. were in checks as against 67.4 per cent. in 1896. The largest volume of deposits was in the returns of the national banks, and the percentage of checks in those deposits was 74.6 per cent., the highest shown in any class of banks. In representative reserve cities 80.0 per cent. of the retail deposits were in checks; for the rest of the country 68.7 per cent. were in checks. Of the aggregate wholesale deposits of all banks, 96.4 were checks. In 44 States the percentage of checks in wholesale deposits for national banks was over 90; in 24 States it was over 95. For representative reserve cities checks constituted 97.4 per cent. of the wholesale deposits of all banks; for the rest of the country approximately 94 per cent. Of all other deposits, Dr. Kinley found that 95.9 per cent. were in checks; of all the deposits combined, checks constituted 94.1 per cent.

In his final conclusions, Dr. Kinley estimated that the percentage of checks in the retail payments was about 60 and the percentage for wholesale about 95 which, with his weighting, gave 86 per cent. as an average, and combining the results with "all others" he reached the final conclusion that the average percentage for all payments was from 80 to 85 per cent.<sup>11</sup>

---

<sup>9</sup>Report of the Comptroller of the Currency (1896), pp. 57-90; *Bankers' Magazine*, Vol. LIII (1896), p. 704.

<sup>10</sup>The results of this investigation were compiled by Dr. David Kinley and constitute the most careful and extensive study of the subject made up to date. See Kinley, *The Use of Credit Instruments in Payments in the United States*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d sess., Sen. Doc. No. 399, *passim*.

<sup>11</sup>About 70 per cent. of weekly pay rolls were in checks. See Kinley, *op. cit.*, *passim*. See also the Report of the Comptroller of the Currency (1912),

As we have already seen, Dr. Kinley estimated in 1896 that check transactions were at least three times as important as money transactions. Using these data, Professor Kemmerer went a step further in 1906 and computed the velocity or rapidity of turnover of money, but was satisfied to consider the total amount of check deposits equal to the total amount of transactions effected by means of checks.<sup>12</sup> He accepted the same conclusion that check transactions were approximately three times money transactions.<sup>13</sup>

It was left for Professor Fisher in 1911 to make the greatest step forward in this direction working upon the material provided by Dr. Kinley in 1896 and 1909. Professor Fisher computed the importance not only of money (M) and its velocity (V) for the years 1896-1909, but also deposit currency (M') and its velocity (V'). The following table will show the results:

TABLE XI

Year	M in bil- lions	V	M' in bil- lions	V'	MV In billions	M'V'	M'V' MV	M' M	Note circu- lation in bil- lions	M' Note circu- lation
1	2	3	4	5	6	7	8	9	10	11
1896	.88	18.8	2.71	36.6	16	99	6.2	3.1	.20	13.0
1897	.90	19.9	2.86	39.4	18	112	6.2	3.2	.20	14.0
1898	.97	20.2	3.22	40.6	20—	131—	6.5	3.3	.19	16.9
1899	1.03	21.5	2.88	42.0	22	163	7.4	3.8	.20	19.4
1900	1.18	20.4	4.24	40.1	24	170	7.1	3.6	.26	16.3
1901	1.22	21.8	5.13	40.6	27	208	7.4	4.2	.32	16.0
1902	1.25	21.6	5.40	40.5	27	219	8.1	4.3	.31	17.4
1903	1.39	20.9	4.73	39.7	29	227	7.8	3.4	.36	13.1
1904	1.36	20.4	7.77	39.6	28	228	8.2	5.7	.40	19.4
1905	1.45	21.6	6.54	42.7	31+	279+	9.0	4.5	.44	14.9
1906	1.58	21.5	6.81	46.3	34	315	9.3	4.3	.51	13.3
1907	1.63	21.3	7.13	45.3	25	323	9.2	4.4	.55	13.0
1908	1.62	19.7	6.54	45.0	32	294	9.2	4.0	.61	10.7
1909	1.61	21.1	6.68	52.8	34	353	10.4	4.1	.64	10.4

Columns 1-7 from Fisher, *op. cit.*, p. 304; columns 8, 9 computed from columns 1-7; column 10 from Table XIII, p. 95; column 11 computed Cf. W. C. Mitchell, *op. cit.*, pp. 321-322.

It will be noticed in the above table that the ratio between money (M) and deposit currency (M') is much smaller than the ratio between money transactions (MV) and total transactions

p. 124 for a table combining all these reports. The table is given in subsequent reports also. B. M. Anderson, Jr., *op. cit.*, Chap. XIX, should be consulted for a careful analysis of the data on this point. Other authorities which should be consulted in this connection are E. W. Kemmerer, *op. cit.*, Bk. II, Chap. III, and Irving Fisher, *op. cit.*, Chap. XII.

<sup>12</sup>Professor Kemmerer estimated the velocity of money to be 47, an estimate criticized later by Professor Fisher who thought 18 or 20 nearer the truth. See Fisher, p. 277.

<sup>13</sup>E. W. Kemmerer, *op. cit.*, Chaps. III-V.

effected by means of checks ( $M'V'$ ). There seems to be little doubt but that  $\frac{M'V'}{MV}$  gives a more accurate picture of the relative importance of checks as compared with money, assuming the accuracy of the velocities. Total transactions in deposit currency as against total transactions in notes present a more accurate picture of the importance of each. However, with the present uncertainty attaching to the velocities,  $V$  and  $V'$ , the other comparisons may present a picture almost as accurate.

Thus we see that in 1909 the business carried on by deposit credit was approximately ten times that carried on by means of money, that is, coin, bank notes, certificates, etc. At the same date the demand deposits—not the transactions effected with deposit currency ( $M'V'$ )—seemed to be about ten times the note circulation, although in 1899 and 1904 they were almost twenty times as great. For more recent years according to Holbrook Working,<sup>14</sup> Professor Fisher's estimates assign progressively increasing importance to deposit credit. This conclusion is supported by Dr. W. I. King, who insists that the ratio of deposit currency to money in actual circulation has been steadily increasing for the last 40 years.<sup>15</sup> The Reports Department of the Federal Reserve Bank of New York has been engaged for some time in a careful study of the velocity of deposits, and has estimated that the velocity of deposit currency for the country as a whole in 1920 and 1921 ranged from 25 to 35 times a year, which is considerably below Professor Fisher's estimate. This would reduce the relative importance of deposit currency somewhat if Professor Fisher's velocity is demonstrated to be too high.<sup>16</sup>

The Federal Reserve Bank of New York also found the widest variations in the velocities of deposits in different sections of the country. The velocity for 39 banks in New York City was found to be considerably above that for banks in other cities, the velocity for the New York City banks ranging from 91.3 in November, 1919, to 58.7 in August, 1921. The velocity for groups of banks

<sup>14</sup>Holbrook Working, *op. cit.*, p. 234.

<sup>15</sup>W. I. King, *op. cit.*, p. 4.

<sup>16</sup>The work done by the Reports Department of the Federal Reserve Bank of New York relative to the velocity of deposit currency is reported by W. Randolph Burgess, "Velocity of Bank Deposits," *Journal of the American Statistical Association*, Vol. XVIII (June, 1923), pp. 727-740; *Federal Reserve Bulletin*, Vol. IX (1923), pp. 562-566. Summary results of this study have been reported currently in the *Monthly Review* of the Federal Reserve Bank of New York. The Reports Department of the Federal Reserve Bank of New York was aided by the statistical offices of the Federal reserve banks of Boston, Chicago, and San Francisco, as well as by Professor Irving Fisher, Professor E. W. Kemmerer, Mr. J. H. Riddle, and Mr. Clark A. Warburton.

in 8 cities, for each month since January, 1919, ranged from a minimum of seven times a year for Syracuse, N. Y., to about ninety times a year in New York City. The following table gives a summarized view of the velocity of deposits as computed by the Federal Reserve Bank of New York:

TABLE XII<sup>1</sup>  
Annual Rate of Turnover of Bank Deposits

Year	New York City	Albany	Buffalo	Rochester	Syracuse	Total 4 up-State cities	Boston	Chicago	San Francisco
	28 banks	2 banks	10 banks	2 banks	2 banks	22 banks	11 banks	14 banks	6 banks
<b>1919</b>									
January	64.7	33.0	16.5	16.7	15.3	18.8	31.7	..	35.5
February	63.6	29.1	17.0	17.0	11.4	17.1	30.5	..	39.6
March	62.1	27.4	17.8	16.7	9.0	16.0	31.4	..	39.0
April	63.7	34.2	18.8	18.4	9.8	18.2	31.2	..	34.0
May	72.4	40.6	18.4	17.5	8.6	18.0	34.2	..	38.0
June	81.2	49.0	19.4	18.9	9.7	19.8	37.3	47.8	38.5
July	81.3	43.1	17.9	18.5	10.2	18.6	38.2	50.2	41.9
August	72.6	28.9	17.5	17.7	9.9	16.6	33.8	44.3	43.1
September	74.5	30.3	16.5	19.2	10.4	16.8	35.4	46.4	44.2
October	85.4	35.0	18.4	20.6	11.5	18.7	42.9	47.0	42.8
November	91.3	33.8	19.0	19.6	12.2	18.8	45.1	46.5	42.5
December	89.5	39.2	19.7	20.4	12.1	19.7	47.6	51.3	44.9
<b>1920</b>									
January	83.1	24.6	21.0	20.0	11.6	18.9	42.5	50.0	40.9
February	77.0	28.7	19.4	19.6	10.8	18.5	37.4	44.1	42.6
March	76.6	25.7	18.6	19.2	10.0	17.4	38.0	45.3	43.1
April	77.3	32.2	18.8	20.2	11.7	18.9	39.4	46.3	40.3
May	70.6	34.6	19.9	20.5	11.4	19.5	38.0	47.0	40.7
June	68.7	32.2	19.4	20.6	11.7	19.2	36.1	49.7	39.4
July	67.1	35.0	22.3	20.4	12.8	21.0	36.2	48.2	38.5
August	62.7	32.1	19.2	19.8	11.4	19.0	30.8	46.3	35.4
September	66.0	31.8	21.1	21.4	11.6	19.9	34.4	51.5	41.6
October	77.5	32.6	22.8	21.9	13.2	21.2	37.0	50.8	41.6
November	79.1	31.8	22.2	21.9	11.6	20.5	38.0	46.9	40.2
December	83.8	35.9	23.1	22.5	11.5	21.3	39.0	49.4	41.8
<b>1921</b>									
January	76.3	26.4	20.9	21.7	10.1	19.1	33.5	46.4	39.4
February	68.0	24.8	19.2	20.3	9.2	17.8	30.9	42.4	37.7
March	64.1	27.0	16.9	19.3	8.6	16.7	30.0	41.3	42.8
April	62.9	27.4	18.2	21.5	9.1	17.9	30.0	42.7	42.4
May	68.7	36.8	18.0	19.8	8.9	18.6	31.1	43.3	40.2
June	66.2	30.5	18.3	21.4	8.6	18.0	30.4	42.0	42.3
July	66.2	28.1	19.2	19.6	8.8	17.8	29.3	43.6	38.9
August	58.7	22.5	16.1	18.3	7.0	14.9	25.9	41.5	36.7
September	65.7	24.4	17.8	21.4	8.1	16.7	28.2	44.1	38.6
October	70.4	26.0	19.9	21.8	9.0	18.1	32.2	46.6	42.2
November	75.7	27.7	19.9	22.0	9.8	18.5	33.6	47.4	37.4
December	77.1	30.5	20.2	21.8	9.1	18.8	32.8	48.4	42.8
<b>1922</b>									
January	74.2	28.5	20.1	21.7	8.3	18.6	32.4	47.3	43.9
February	75.2	25.4	18.9	18.9	8.2	17.3	29.6	49.7	37.7
March	75.4	22.4	18.0	19.2	8.1	16.4	32.7	49.3	41.2
April	79.9	29.4	19.5	19.9	9.2	18.6	33.6	47.1	39.4

<sup>1</sup>From the *Federal Reserve Bulletin*, Vol IX (1923), p. 566.

TABLE XII—(Continued)

Year	New York City banks 39	Albany banks 3	Buffalo banks 10	Roch- ester banks 3	Syra- cuse banks 6	Total 4 up- State cities banks 22	Boston banks 11	Chicago banks 14	San Fran- cisco banks 6
1922									
May	77.8	26.6	19.7	19.1	8.4	18.1	31.4	44.5	37.3
June	75.7	26.2	20.2	22.0	8.5	18.3	33.4	45.6	37.6
July	74.2	24.3	21.9	19.7	8.8	18.7	32.3	41.7	37.1
August	65.2	22.1	18.3	17.8	7.3	15.9	24.7	38.4	34.4
September	68.6	21.6	20.4	21.1	8.4	17.5	28.6	41.9	40.7
October	86.3	24.0	22.6	23.6	8.8	19.3	34.3	43.7	37.4
November	77.4	25.8	23.0	22.3	9.7	19.6	32.5	41.4	39.7
December	79.9	31.4	24.5	22.7	9.6	21.0	35.4	45.9	39.9
1923									
January	79.9	23.5	24.6	21.4	8.7	19.2	34.7	47.0	39.0
February	82.3	26.0	25.1	21.4	8.6	20.0	35.7	50.3	39.7
March	84.0	23.9	24.2	21.4	9.7	19.8	38.0	46.4	42.6

There proved to be a close relationship or correlation between the size of the city and the velocity of deposits, but a still closer relationship between the amount of bank deposits in the city and the velocity.<sup>17</sup> For 282 clearing house centers the average velocity for December, 1921, was estimated at 36 times a year. The final tentative estimate, as pointed out above, places the velocity of bank deposits in the United States as a whole between 25 and 35 times a year. Among other interesting conclusions of Dr. Burgess we find that seasonal changes in bank clearings are largely accounted for by large seasonal variations in the velocity of deposits.

Dr. King compiled a table covering the period 1880-1920, with results for the years 1896-1909 quite similar to those already given above in Table XI. Table XIII was compiled from the one developed by Dr. King.<sup>18</sup>

This table will show in a rough way the steady growth of deposits subject to check as compared with note and money circulation for the years 1881-1923, although these tables are obviously subject to correction in many respects due to the present uncertainty attaching to some of the principal magnitudes.

<sup>17</sup>For seven cities of New York, the highest coefficient of correlation was that between the logarithm of velocity and the logarithm of bank deposits, amounting, by the Pearson method, to 0.94. See Burgess, "Velocity of Bank Deposits," *Journal of the American Statistical Association*, Vol. XVIII (June, 1923), p. 733.

<sup>18</sup>W. I. King, *op. cit.*, p. 9.

TABLE XIII

Year (June) .....	Medium Available for Private Use (in millions)		All Money and Deposits Available for Spending (in millions)		Ratio of Individual and Corporation Demand Deposits to Money Circulation for Private Use $\frac{M}{M}$	All Demand Deposits to All Money Available for Spending <sup>1</sup>	Note Circulation (in billions)	$\frac{M}{C}$ Circulation .....
	Money Circulation .....	Demand Deposits (M) <sup>2</sup> .....	Money .....	Demand Deposits .....				
1881 .....	656.3	1,809.5	891.7	1,821.7	2.76	2.04	.31	5.8
1882 .....	730.0	2,010.5	965.1	2,023.2	2.75	2.10	.31	6.5
1883 .....	738.4	2,302.9	980.6	2,316.8	3.12	2.36	.31	7.4
1884 .....	742.0	2,002.8	985.3	2,017.0	2.70	2.06	.29	7.0
1885 .....	653.8	1,945.1	898.7	1,959.1	2.98	2.18	.27	7.2
1886 .....	650.0	2,214.0	858.7	2,230.5	3.41	2.33	.24	9.2
1887 .....	773.4	1,947.2	1,089.3	1,970.5	2.52	1.81	.17	11.5
1888 .....	809.3	2,019.6	1,128.6	2,078.0	2.50	1.84	.16	12.6
1889 .....	785.8	2,168.0	1,064.1	2,214.7	2.76	2.08	.13	16.8
1890 .....	849.9	2,338.3	1,105.8	2,368.9	2.75	2.14	.13	18.0
1891 .....	957.3	2,357.6	1,137.7	2,383.5	2.46	2.09	.12	19.7
1892 .....	898.4	2,587.7	1,049.3	2,601.9	2.88	2.48	.14	18.6
1893 .....	1,018.9	2,505.3	1,161.0	2,519.0	2.46	2.17	.15	16.7
1894 .....	845.6	2,599.8	989.9	2,613.9	3.08	2.64	.17	16.3
1895 .....	801.7	2,715.5	1,019.1	2,729.7	3.39	2.68	.18	15.1
1896 .....	873.5	2,522.6	1,167.0	2,738.0	3.12	2.35	.20	13.6
1897 .....	877.6	2,820.6	1,143.4	2,837.0	3.21	2.48	.20	14.1
1898 .....	969.6	3,433.4	1,205.3	3,486.3	3.54	2.89	.19	18.0
1899 .....	1,032.1	4,089.4	1,318.1	4,165.7	3.96	3.16	.20	20.4
1900 .....	1,165.8	4,490.4	1,450.3	4,589.3	3.86	3.16	.26	17.3
1901 .....	1,231.4	5,321.6	1,539.2	5,420.7	4.32	3.52	.32	16.3
1902 .....	1,260.0	5,749.9	1,573.9	5,873.9	4.56	3.73	.31	18.3
1903 .....	1,382.5	5,872.5	1,699.5	6,019.6	4.26	3.54	.36	16.3
1904 .....	1,368.8	6,087.5	1,653.2	6,197.8	2.45	3.75	.40	15.2
1905 .....	1,456.7	6,560.9	1,751.9	6,636.2	4.50	3.79	.44	14.9
1906 .....	1,589.0	5,717.8	1,922.3	6,807.7	4.23	3.54	.51	13.2
1907 .....	1,619.6	7,092.6	1,962.2	7,273.3	4.38	3.70	.55	12.9
1908 .....	1,623.4	6,506.2	1,964.1	6,636.5	4.01	3.38	.61	10.7
1909 .....	1,622.0	6,704.1	1,922.1	6,778.6	4.13	3.53	.64	10.5
1910 .....	1,639.6	6,873.2	1,956.8	6,927.7	4.19	3.54	.68	10.1
1911 .....	1,614.1	7,782.1	1,966.1	7,730.6	4.82	4.00	.68	11.3
1912 .....	1,677.6	7,794.4	2,042.0	7,853.3	4.65	3.84	.74	10.3
1913 .....	1,770.6	7,720.5	2,126.9	7,770.2	4.36	3.65	.76	10.2
1914 .....	1,732.5	8,880.0	2,069.1	8,946.7	5.12	4.32	.75	11.8
1915 .....	1,771.6	8,963.7	2,117.0	9,012.7	5.06	4.26	.87	10.3
1916 .....	2,090.2	11,198.1	2,388.4	11,388.7	5.36	4.75	.90	12.4
1917 .....	2,360.9	14,186.2	2,629.3	14,815.0	6.01	5.64	1.26	11.3
1918 .....	3,450.0	15,784.5	3,810.3	16,906.8	4.58	4.44	2.43	6.5
1919 .....	3,686.0	18,933.9	4,270.3	19,574.3	5.15 <sup>3</sup>	4.58	3.31	5.7
1920 .....	4,331.3 <sup>3</sup>	21,081.3 <sup>3</sup>	4,770.2	21,071.1	4.87 <sup>3</sup>	4.42	4.02	5.2
1921 <sup>4</sup> .....	3,911.1	19,620.4	.....	.....	5.02	.....	3.56	5.3
1922 .....	3,567.9	20,626.9	.....	.....	5.80	.....	2.94	7.0
1923 (Jan.) .....	3,749.0	21,491.0	.....	.....	5.73	.....	3.12	6.9

<sup>1</sup>Government supply of ready cash and demand deposits included, as well as amounts available for use of individuals.

<sup>2</sup>Corrected by Miss Bagwell of the Federal Reserve Bank of New York. Dr. King's figures were 4,337.4.

<sup>3</sup>Corrected by Miss Bagwell; Dr. King's figures were 20,941.2.

<sup>4</sup>Miss Bagwell's figures; Dr. King's were 5.14.

<sup>5</sup>Miss Bagwell's; Dr. King's were 4.83.

<sup>6</sup>Miss Bagwell developed the table for the years 1921 to January, 1923.



**The relation of the clearing and collection system to the system of reserves**

Any system of clearing and collection of checks tends to reflect the system of reserves which obtains among the banks involved. If the reserves are decentralized as was the case under the National Banking System prior to 1913, or partially centralized as during the first three years of our Federal Reserve System, the system of clearing and collection will be decentralized or partially centralized accordingly. With the centralization of reserves which was effected by the amendment of June 21, 1917, to the Federal Reserve Act, the clearing and collection system has tended to become highly centralized.

The concentration of reserves and the centralization of the clearing system are necessary prerequisites to the most effective use of deposit currency; and deposit currency is the most economical, speedy and desirable currency that the world has been able to devise thus far. It behooves any nation, therefore, to see to it that it is providing the proper mechanism for the most complete and economical use of its best medium of exchange.

A concentration of reserves is one of the first and most necessary steps in the proper direction. Concentration of reserves minimizes the necessity for such large reserves because it renders them more mobile and more effective. At the same time it enables the same amount of reserves to support, with no greater strain on the specie base, a much larger superstructure of credit which, in turn, permits the price level to rise higher than would be possible were the reserves scattered. But, above all, a greater degree of elasticity is injected into the currency system.

If a centralized clearing system accompanies the concentration of reserves—and this is the tendency—even greater effectiveness is given to the use of deposit currency. To the extent that all banks participate in a centralized clearing, all debits and credits will tend to equalize and offset each other. This fact further minimizes the necessity for reserves. Were reserves not necessary to meet other obligations such as the demands for cash and to meet adverse trade balances, a perfect clearing or offset system would require no reserves. And to the extent that deposit currency is not covered by reserves or does not call out cash finally to liquidate it, it acts as a potent factor in maintaining or raising prices. On the other hand, to the extent that there is not a perfect offset in clearing, there is a necessity for reserves to liquidate the adverse balances. Thus a concentration of reserves accom-

panied by a perfectly centralized clearing system will permit a maximum expansion of purchasing power on the basis of the available reserves. Such a system brings not only a greater degree but also a greater ease in the expansion of the purchasing power, and this fact implies at the same time both a greater danger and a greater advantage to the nation. The danger is increased because the price level can rise to greater heights without any greater strain on the reserve base; the greater advantage lies in the increased elasticity of the system. Whether such a system becomes a blessing or a cause of injury to a nation depends upon the soundness of the banking administration. Under sound banking methods the elasticity in the system can be used as an important factor in stabilizing the price level. Under unsound methods inflation can creep in, and the price level can rise to dizzy heights with all the attendant evils which accompany that well-known financial disease. The extent to which our present credit system permits prices to rise and fall has been seen in the phenomenal rise from 1913 to 1920 and in the unprecedented fall which followed. Inflation may be followed in turn by deflation, thereby doubling all the injustice that is experienced during the period of inflation. Deposit currency by its very nature makes inflation easy. To the extent that credit is advanced by banks without being covered by reserves or commodities and services equal in value to the credit advanced, inflation exists. This depends, of course, upon the wisdom of the individual bankers. The mere placing in their hands of a good mechanism with which to work does not insure its proper use. But no nation can expect to accomplish much towards a stabilization of prices until the proper mechanism is provided. Success in its use can be attained as time brings home new lessons.

A proper mechanism is provided through concentrating the reserves and centralizing the clearing system. But a more perfect functioning of the clearing system involves, not only absolute centralization with all banks participating, but remittance at par by all the banks. Par remittance is a technique in clearance and collection which permits deposit currency to circulate at its face value, on an equal plane with notes, facilitates its circulation, and equalizes and minimizes the burdens resting upon business activities as a result of using deposit currency. Thus the ideal mechanism will be provided, the best use of deposit currency secured, and the maximum benefits secured to a nation through the use of deposit currency only when these three conditions are met, namely,

concentration of reserves, centralization of clearing with all banks participating, and par remittance.

But the transition to concentration of reserves, to the centralization of clearing, and to par remittance, has not been taking place without serious opposition on the part of banks which think they found the old system profitable. In order to understand better the system under which the United States is now working, the problems that have arisen in connection with its development, and the causes for the opposition to the new system, a survey will be made of the clearing and collection practices that existed just prior to the introduction of the Federal Reserve System.

#### **Practice under the National Banking System. Local exchanges without clearing houses**

For convenience and simplicity of treatment the practice of clearing and collection may be treated according to whether it is (1) local, or (2) inter-community. Local exchanges, in turn, may be divided into two classes according to whether the community is small and without a clearing house, or larger and with a clearing house.

In a small community with but a few banks, checks and drafts, drawn upon one local institution and deposited with another in the same locality were and are collected by the direct presentation of the paper to the bank on which it is drawn, which bank pays in current funds the amount due. Where the banks were located in different towns or villages, but within traveling distance of an hour or so, checks might be presented over the counter by messenger, daily, two or three times per week, or at given times agreed upon, and the messenger may have traveled the distance in any one of several ways—train, trolley, carriage, boat, or auto. This practice was used where it was found to be more profitable than to use the mails which required more time, or for other reasons that might be peculiar to the communities concerned. It has also been a common practice to use the express companies for collection purposes. But, in general, unless unique conditions existed, the mails were the common means of collection. Indeed, it is difficult to generalize. Peculiar practices have been indulged in by banks, and the reasons lying behind such practices have been equally peculiar. Arrangements, understandings, discriminations, all inspired by the desire for profit, were the order of the day. This profit was to a large extent determined by the ability of the bank to collect exchange and at the same time avoid paying such charges to other banks remitting to it. As a result there

were no uniform practices that could be dignified by the name "system."

#### **Local exchanges with clearing houses**

In large cities, the method of procedure just described, although practiced in the early days of banking, is dangerous and expensive, and the clearing house has been devised to take its place. These early clearing houses accepted only local checks and other items on the members. Checks and drafts on out-of-town banks had to be collected in other ways. The process of clearing treated fully in another chapter requires no explanation here further than to say that in principle it brings the reciprocal claimants together. Each bank presents its claims to the other clearing member banks and, in turn, receives claims from them. Each bank then totals its debits and credits on a balance sheet and determines the amount due by or to itself, as the case may be. These balance sheets are then sent up to the central desk, where the manager of the clearing house presides, and accounts between the various banks are settled there in a manner which simplifies settlements. It has been and is yet a common practice for those from whom payments are due to pay the amount in one form or another to the manager of the clearing house, and for those to whom sums are due to receive the amounts from him.

Balances are paid in various ways. In some clearing houses banks are required to pay in specie; in others by means of clearing house certificates which represent either gold or some other accepted medium; in others they are permitted to carry accounts with the clearing house; in others debtor members are permitted to borrow from other members to effect settlements; in others the balances are paid in drafts on some large institution which has extensive connections with all the other banks in question; and in still others, balances are settled through the Federal reserve banks, in which the member banks of the clearing house association carry reserve deposits. There is an increasing tendency to settle through the Federal reserve banks. Arrangements are often made by banks which are members of the clearing house association to clear for other non-member banks in the community provided they keep accounts with the clearing banks.

#### **Inter-community clearing and collection**

The great variety of economic transactions arising between individuals in different communities gives rise to inter-community

claims. Banks are the chief agencies for the conduct of these inter-community exchanges, usually called out-of-town exchanges, and must offer facilities to their customers either in remitting to or in collecting on other centers. This means that banks have been obliged to keep funds on deposit in other cities, not necessarily in every city in which customers may desire to do business, but in certain commercial centers through the banks of which arrangements may be made for the conduct of exchanges with any place desired. The burden of collection has been almost entirely on the reserve and central reserve city banker. In selecting the reserve city in which he purposed to carry the reserve funds of his bank, the country banker naturally selected the one to which his section was tributary. Thus the banks of New England, with few exceptions, selected Boston and New York as their reserve cities. Those in the middle States selected New York and Philadelphia; the south Atlantic States selected Baltimore and New Orleans; the middle West was divided among Cincinnati, Cleveland and Chicago, although Chicago exchange occupied the important place. All Michigan drew on Detroit. St. Louis was the center for the southern Mississippi valley and the Southwest; San Francisco for the Pacific Coast. But few were the banks that did not have at least one New York correspondent, New York exchange being in the greatest demand, as New York was and is the commercial and financial center of the country. Besides corresponding with the central reserve and reserve city banks, each bank corresponded with from three to a dozen banks in neighboring counties, among which the checks of each circulated freely and with which settlements were made weekly or semi-weekly, as the case supposedly required.

The existence of such balances with correspondent banks rendered necessary the movement of money from one place to another, since creditor banks might demand from the debtor banks payment in cash. Whether they did exact such payments depended upon the relative demand for money at home as compared with that in the community of their correspondents. If the home demand for loans and for hand-to-hand money did not justify the banks in calling for shipments of currency from their correspondents, they probably loaned surplus funds in the cities in which their correspondents were located, or in other cities, or perhaps left them on deposit with their correspondents at a rate of interest agreed upon, in which case the funds were loaned ordinarily by the correspondent at rates sufficiently high, supposedly, to assure a fair profit.

Almost every type of reciprocal arrangement was made. A large volume of checks was handled by many banks and trust companies in reserve cities and smaller places through special reciprocal arrangements, consisting of the mutual exchange of checks within certain territory or of checks drawn on certain specified points and handled at par. Some banks would agree to collect for others at par not to get the same favors but primarily to induce country banks to carry deposits with them for the sake of the profit which was supposed to result from the lending of such reserve deposits on call. Competition for such deposits became so keen that banks, such as those in New York City, made a practice of paying interest of about 2 per cent. on the deposits. Some of these city banks even went so far as to agree to pay collection charges to these same country banks. The practice of entering into such arrangements was widespread. Chicago at one time offered to collect at par in 29 entire States.<sup>19</sup> In some instances two banks would make arrangements to carry balances with each other free of interest, the so-called "double-headed" accounts, in order to have their items collected at par in the respective districts, the remittance of accumulated balances being made at par in exchange on central points at stated intervals. Other schemes were employed, involving an evasion of direct charges and outlays in the form of exchange paid, but entailing, nevertheless, cost in some form.

As has been indicated in another connection, the clearing and collection system is determined largely by the system of reserves underlying. The decentralized system of reserves which existed under the National Banking System gave rise to certain practices which made obvious the great defects of the old system of clearing and collection.

### **The defects of the old clearing and collection system**

The defects of the former clearing and collection system, which were associated almost entirely with inter-community settlements, and which gave rise to the Federal reserve system of clearing and collection, may be classified as follows: (1) Excessive charges, (2) indirect routing of checks to avoid remittance charges, (3) giving immediate credit for uncollected funds, (4) paying interest on uncollected funds, (5) the carrying of compensating balances with collecting banks solely for the purpose of obtaining par territory, (6) the maintenance of reserve bal-

<sup>19</sup>Hallock, *op. cit.*, p. 25.

ances with banks for the sole purpose of getting items on which to charge exchange, (7) excessive gold movements, and (8) the absorption of collection charges by collecting banks. Each of these defects or, perhaps one should say, malpractices, will now be reviewed briefly.

### ✓ Excessive charges

The question of excessive charges has reference not only to charges exacted for drafts, designated as exchange, but to deductions or charges made by banks in remitting funds in payment of checks presented by other banks, commonly called exchange charges, although when considered from the point of view of the remitting bank they were, in nature, remittance charges. Such charges rested upon the theory that banks might find it necessary to ship funds to meet adverse claims as well as upon the fact that other expenses were incurred in meeting the customer's distant obligations.

It has been noticed already that in the thirties, charges on checks and drafts ranged from zero to  $1\frac{1}{2}$  per cent.<sup>20</sup> Comptroller Knox later estimated that the average cost of southern and western exchange upon New York in 1859 "was not less than from 1 to  $1\frac{1}{2}$  per cent." Although the higher rates were charged by western and southern banks the average rate in 1890 was about  $\frac{1}{2}$  of 1 per cent.<sup>21</sup> Since 1890 the charges have not varied widely from  $\frac{1}{10}$  to  $\frac{1}{4}$  of 1 per cent.

Such charges are claimed to be in part a survival of the stage coach days when drafts on New York City were the safest and most convenient means of carrying funds and for the conversion of which the early banker charged roundly.<sup>22</sup> One of the principal causes of excessive charges has been the wastefulness of the independent system of collections. For example, a small bank at Clayton, Mo., just outside of St. Louis, received one day twelve letters, inclosing checks, from St. Louis banks. Remittance was made to each of twelve banks by draft on its St. Louis correspondent. Twenty-four letters were written and postage paid on them, whereas a central agency could have handled all the business with one letter each way.<sup>23</sup> What was true of the Clayton bank was true in almost every section of the United States.

<sup>20</sup>See Chap. III, p. 72.

<sup>21</sup>*Report of the Comptroller of the Currency* (1890), pp. 14-22; H. H. Preston, "The Federal Reserve Banks' System of Par Collection," *Journal of Political Economy*, Vol. XXVIII, No. 7 (July 1, 1920), p. 566.

<sup>22</sup>Preston, *op. cit.*, pp. 565-566.

<sup>23</sup>Hallock, *op. cit.*, p. 14.

The rate of exchange on drafts and the remittance charges made by the remitting banks for checks received were arbitrary, as a rule, depending more upon the value of the purchaser as a patron of the bank along some other line than on the actual elements of cost. As the banks grew in numbers and the use of checks in payment of foreign (out-of-town) bills became more general, the banker found he could charge the collecting bank a maximum rate with less compunction than he could charge his depositor a minimum rate on drafts, and so he encouraged the use of the check. This, in turn, caused more trouble for other banks who had to collect the checks. From the increased use of checks for meeting out-of-town obligations many of the evils associated with the old clearing and collection system developed.

### —Circuitous routing of checks

Doubtless, the greatest evil in connection with the collection of out-of-town checks was the practice of sending them on long, devious and circuitous routes in order to avoid remittance charges. This practice in itself increased the delay and waste in the system. It was possible to find routes open in which there were no remittance charges because of the reciprocal arrangements which were made between correspondent banks to pay checks at par for each other.

### Remittance charges as a cause of circuitous routing. Legality of such charges

At this point it becomes necessary to understand what banks could charge for remittances. Under the common law, as ordinarily interpreted, no bank legally could make charges for payment when checks were presented at its counter. Its obligation was to pay the holder at once and in full.<sup>24</sup> If checks are mailed to

<sup>24</sup>*In re Brown*, 2 Story, 502, 517 (1843); Story on *Promissory Notes*, Section 489; *Boehm v. Sterling*, 7 Term Rep. 429, The English Reports, Vol. CI (1797); 3 Kent's *Commentaries*, 104, note c; *Senter v. Continental Bank*, 7 Mo. App. 532 (1879); *Fogarties and Stillman v. The State Bank—David A. Ambler v. the Same*, 12 Richardson (S. Car. L. Rep.), 518 (1859).

The Negotiable Instruments Law has now superseded the common law in all the States with respect to checks and according to this law a bank's liability to pay cash without deduction applies to the depositor (drawer) only. Therefore any other holder who presents a check at the bank's counter for payment may be compelled to accept a draft and suffer a deduction in the form of an exchange charge. Eight States since 1920 have passed laws limiting the freedom of certain holders of checks in this manner. The United States Supreme Court, in the case of *Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 262 U. S. 649 (1923), upheld such a law passed in North Carolina. See pp. 1-3, 76-77 above, and pp. 269-276 below.



the bank on which drawn the bank then becomes its own agent for collection and may deduct charges for remittance. However, it is considered negligence on the part of a bank to send a check directly to the bank on which drawn. In the case of *Merchants' National Bank of Philadelphia v. Goodman et al.*,<sup>25</sup> the Supreme Court of Pennsylvania said: "We think that the principle may be stated as a true one . . . that no firm, bank, corporation, or individual can be deemed a suitable agent, in contemplation of law, to enforce in behalf of another a claim against itself. . . . We interpret the cases to which we have referred as establishing the rule of transmission to a suitable correspondent or agent to mean that such suitable agent must, from the nature of the case, be some other than the person who is to make the payment. By no other rule can the rights of endorsers be protected if it is the interest of the party who is to make the payment to hinder, postpone, or defeat payment."<sup>26</sup> In the case of *Drovers' National Bank v. Anglo-American Packing and Provision Company*,<sup>27</sup> the Supreme Court of Illinois said that if the collecting bank has no proper agent at the place through which to make the collection it should so inform the customer and act on his instructions. But if it takes the check without special stipulation, the customer is authorized to assume that it has a suitable agent to whom the paper may be transmitted, and that it will make the collection through such agent.<sup>28</sup> Every State except New York has upheld this ruling.<sup>29</sup> Thus, since banks could not legally send checks direct to the banks on which drawn without assuming the liabilities attached they would send them to agents for collection. Often they had no correspondent agents in the towns on which they had checks and consequently would be subjected to remittance charges by the collecting agents. Thus it will be observed that it was the final collecting banks (or the drawee banks, if collecting on themselves) which made the charges for remittance and which pocketed the profits resulting from such transactions, as the banks on which the checks were drawn could not make such charges if the checks were presented over the counter or through

<sup>25</sup>109 Pa. St. 428 (1885).

<sup>26</sup>Also in the *Bankers' Magazine*, Vol. LVI (1898), p. 727.

<sup>27</sup>117, Ill. 107, 108 (1886).

<sup>28</sup>*Bankers' Magazine*, Vol. LVI (1898), p. 728.

<sup>29</sup>See also *German National Bank of Denver v. Burns*, 12 Colo. 539 (1889); *Lowenstein and Brothers v. Bresler*, 109 Ala. 326 (1895); *Anderson v. Rodgers*, 53 Kans. 542 (1894); *First National Bank of Chicago v. Citizens Savings Bank of Detroit*, 123 Mich. 336 (1900). For a further list of cases see W. H. Kniffin, *The Practical Work of a Bank* (New York, 1919), p. 173.

the local clearing house which, of course, was the same as direct presentation over the counter. The last collecting banks, then, which charged for remitting, were the ones responsible for the circuitous routing of checks.

This legal aspect of collection had its weaknesses, however. In cases where there were but two banks in a town, one strong and one weak, the collecting banks would be obliged to send all the checks on the strong bank to the weak one for collection in order to protect themselves from liability. At the same time it was for the interests of the depositors to have their checks sent to the strong bank rather than to the weak bank which might collapse and deprive them of their funds. In New England some of the weaknesses of the small out-of-town banks were exposed by having the check collection business taken from them after the creation of the country collection system in 1899. This was done when they proved slow in making remittances or offered insufficient excuses for the delays. With the introduction of the country collection system some of them went into bankruptcy.<sup>30</sup>

Some collecting banks, however, rather than risk the weak banks as agencies, often sent items direct and themselves assumed the liabilities. This was a practice which steadily developed. It was indulged in by most banks in large cities as well as by those clearing houses which had country clearing departments, such as Boston, Atlanta, and Kansas City, Mo. Obviously, however, it was a practice that could not be supported in law.<sup>31</sup>

#### Typical illustrations of circuitous routing of checks

It is possible to give several peculiar and interesting examples of the indirect routing of checks. Hallock gives an example, probably the best known and most widely quoted, of a check drawn on a bank in Sag Harbor, N. Y., and deposited in a bank at Hoboken, N. J., which passed through eleven banks, traveled about 1,500 miles, and was in transit about eleven days, due to the effort of the Hoboken bank to avoid paying remittance charges in collecting on the bank about 100 miles distant.<sup>32</sup>

<sup>30</sup>*Proceedings of the New York State Bankers' Association* (1912), pp. 70-71.

<sup>31</sup>*Proceedings of the American Bankers' Association* (1909), Third Annual Report of the Clearing House Section, pp. 25, 40, 42.

<sup>32</sup>Hallock, *op. cit.*, pp. 19-22; J. G. Cannon, *Clearing Houses*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 491, Chap. IX; J. D. Magee, *Materials for the Study of Banking* (New York, 1923), pp. 233-239.

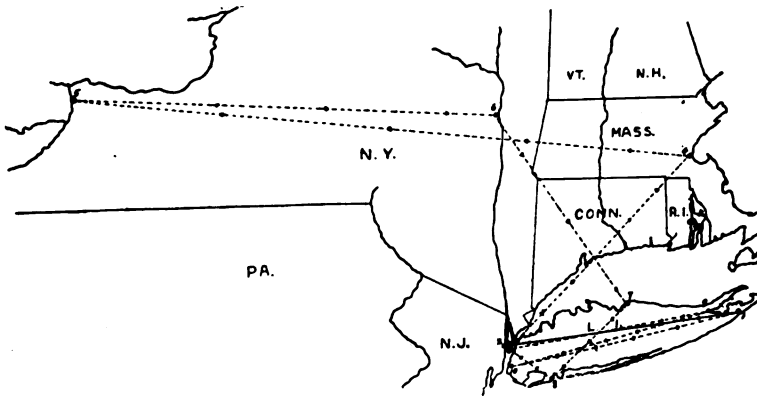


FIGURE 1.

The accompanying diagram shows how a check was pushed along from place to place in its erratic course. The check was drawn on a bank in Sag Harbor, L. I. (1) and deposited in a bank in Hoboken, N. J. (2). The Hoboken bank sent it to a bank in New York City (3), which had no correspondent in the neighborhood of the drawee, consequently, the New York bank sent it along with some other checks to its correspondent in Boston (4). This bank, in turn, sent it to its correspondent at Tonawanda, N. Y. (5), which sent it in a homeward direction by sending it to a bank in Albany (6). The Albany bank sent it to its correspondent at Port Jefferson, L. I. (7), which diverted it from its course by sending it to its correspondent at Far Rockaway (8), from which point it was sent back to a New York City bank, then to Riverhead, L. I. (9), then back to Brooklyn (10), and finally home to Sag Harbor.

This practice was not peculiar to any section of the country, nor is the above case a particularly unique one, as the following examples will show.

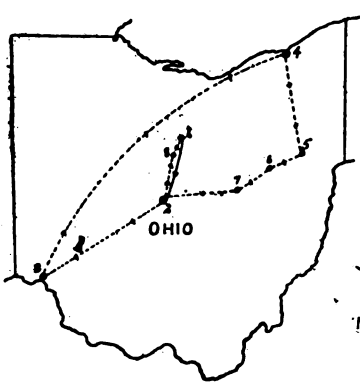


Fig. 2.

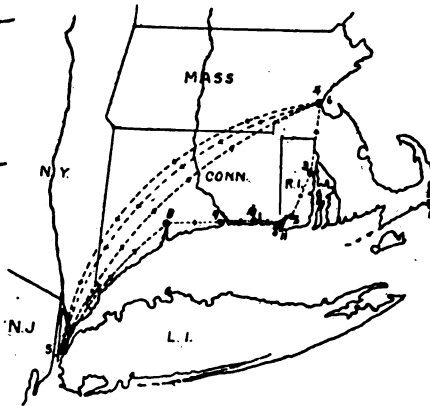


Fig. 3

FIGURE 2.

Figure 2 shows a check drawn on Mt. Gilead, Ohio (1), and deposited in a Columbus bank (2), from which it was sent in the opposite direction to Cincinnati (3), then to Cleveland (4), to Uhrichsville (5), to Coshocton (6), to Newark (7), and back to Columbus again, from which it was sent to Cardington (8), and finally to Mt. Gilead. The check traveled about 650 miles

instead of the necessary 60, and was gone about eight days. As the check was not paid, "it had to be sent back through the same hands again, and during 23 days this worthless check stood on the books of the bank to the credit of the depositor, and the bank was actually taxed two cents on it which looks like adding insult to injury." *Bankers' Magazine*, Vol. XVII, 3rd series, (1882), pp. 466-467.

FIGURE 3.

Figure 3 shows a check for less than \$50 drawn on a Stonington, Conn. bank (1) and deposited at Westerly, R. I. (2), six miles from Stonington, which it reached after many days and a thousand miles of travel over the following route: Westerly (2) to Providence (3), Providence to Boston (4), Boston to New York City (5), New York City to Boston again (6), Boston to New York City again (7), New York City to New Haven (8), New Haven to Saybrook (9), Saybrook to New London (10), and New London to Stonington (11). Hallock, "The Practicability of a Clearing House for Country Items," *Bankers' Magazine*, Vol. LVII, (1898), p. 69; also in his *Clearing Out-of-Town Checks*, p. 72.

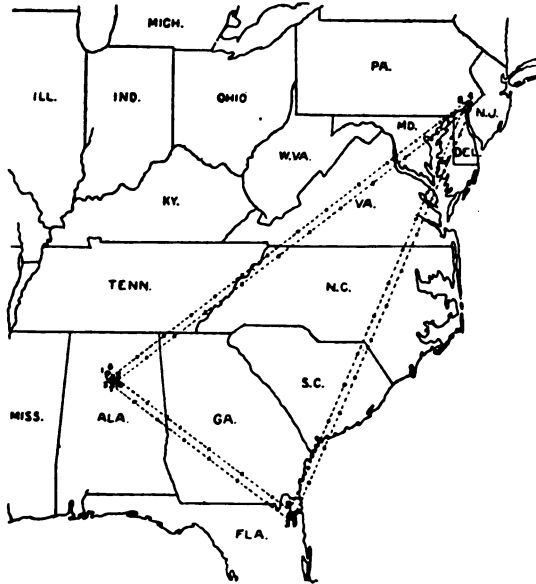


FIGURE 4.

Figure 4 shows a check on a North Birmingham bank (1) and deposited in a Birmingham bank (2), 4 miles distant. In order to avoid remittance charges the check was sent to Jacksonville, Florida (3), 488 miles; then to Philadelphia (4) 817 miles; then back to Birmingham (5), 941 miles; and finally to North Birmingham (6), 4 miles. As the check was not paid it was returned to the Birmingham bank (7), 4 miles; then to Philadelphia (8), 941 miles; then Jacksonville (9), 817 miles; and then back to the Birmingham bank (10), 488 miles, which returned the check to the depositor. The check had traveled 4,500 miles and had been 14 days in transit. From a pamphlet called—*of service to banks and business*, Federal Reserve System, exhibit at annual convention of American Bankers' Association (Atlantic City, Sept. 24-27, 1923), p. 12. See *Bankers' Magazine*, Vol. XXXVII (1882), pp. 466-468, and Vol. LIV (1896), pp. 237-239, for other illustrations.

The practice of sending such items through the same city more than once became so pronounced that Cincinnati sent a circular letter to the banks in Ohio, Indiana, Kentucky and other States announcing that it would refuse to receive any items that had been in Cincinnati before.

**Evil effects of circuitous routing of checks**

The evils resulting from the circuitous routing of checks may be summarized as follows: (1) It caused an immense amount of trouble to banks in the form of much unnecessary correspondence, the requirement of additional clerks, excessive postal charges, complicated bookkeeping, and redundant book entries, many of them in banks not really concerned. (2) Many country merchants, depending on checks being out a week or more, paid bills with them, trusting to luck to be able to deposit the money before their presentation. (3) Banks had to pay a tax of 1/24 per cent. a month on deposits which were not real deposits, but simply items in process of collection. (4) In the case of *Gifford v. Hardell*<sup>33</sup> the Supreme Court of Wisconsin decided that the indorser of a check is absolutely discharged if presentment be not made in a reasonable time, and in the same year the Supreme Court of Nebraska decided in the case of *First National Bank of Nymore v. Miller*<sup>34</sup> that the forwarding of checks by circuitous route would operate to discharge the indorser.<sup>35</sup> (5) Reserve balances were often diverted from their natural channel and the amount due from reserve agents, which should have been immediately available as cash, was made up largely of items in transit. This fact was brought forcibly to our attention in the panic of 1907.<sup>36</sup> (6) Circuitous routing of checks, combined with the practice of giving immediate credit for checks deposited, made possible an evil known as check kiting. As an example, suppose Mr. A deposits \$5,000 in a bank in New York City. He draws a check on his New York account and deposits it in a bank at Elizabeth, Pa.; he now has two deposits, each of \$5,000 to his credit and even though the check deposited at Elizabeth should be sent direct to New York it would be about two days before it would arrive and be charged to his account. If the check were sent indirectly Mr. A would have the use of the deposits that much longer. But Mr. A goes still further and opens an account at Columbia, S. C., by depositing a check drawn on the Elizabeth bank for \$5,000. He now has \$15,000 at his command if he is given immediate credit, although he has rightful claim to but \$5,000. He could now draw checks for, say, \$4,000 on each of the banks and meet obligations amounting to \$12,000 and still have at

<sup>33</sup>88 Wis. 538 (1895).

<sup>34</sup>43 Neb. 794 (1895).

<sup>35</sup>*Banker's Magazine*, Vol. LIV (1896), pp. 237-238; *Rhodes' Journal of Banking* (Jan., 1895), p. 35, and (April, 1895), p. 435.

<sup>36</sup>*Proceedings of the American Bankers' Association* (1911), p. 713.

his command in the banks \$3,000. His balance in each bank could be maintained as long as he would continue to draw a check on one bank in favor of another and as long as each bank continued to give him immediate credit upon receipt of the checks. The more deposits he created and the more indirectly the checks were routed the easier it would be for Mr. A to continue the practice. It is obvious that Mr. A is getting loans from the banks without being required to pay interest. Indeed, banks were fortunate if they were not finally defrauded of the funds entirely.

✓ The "float"; giving immediate credit for out-of-town checks

Another practice, excused on the ground of convenience, in which many commercial banks indulged, was to credit the reserve account of the correspondent bank and itself carry the so-called "float"; that is, the reserve bank would not debit the reserve of the country bank to which checks were being sent for collection until the country bank remitted, and checks sent to the reserve bank by the country bank for collection were counted as available reserve by the country bank as soon as put into the mail. A country bank in this way knew how its reserve account stood, and herein lay the convenience, but a fictitious reserve was created and the correspondent reserve bank carried the "float". Checks in the mail for several days might be returned later for want of funds while the various banks that had handled them during this time would count as reserve these unavailable funds. Moreover, the deposited reserve of the country bank was built up in the city to a large extent by the deposit of checks and drafts with a very small percentage of cash. The items so forwarded were immediately counted by the country bank as reserve, when mailed to the city reserve agent, although they were not received and collected by the city bank until several days later. This condition created a paper reserve, or a reserve, a large part of which consisted of uncollected checks in transit. Such a reserve, obviously represented an unhealthy, if not a dangerous situation, as was apparent in the panic of 1907 when banks endeavored to realize on their paper reserves.

A further result of giving immediate credit was that banks became accustomed to allow customers the right to draw checks against uncollected funds. This practice was thoroughly developed by 1885 and was frequently condemned. Twenty-five years earlier such practice was uncommon, the banks accepting checks for collection only. Banks brought the evil on themselves. Com-

petition among themselves for business brought about bargains on their part with dealers to receive checks drawn upon distant banks, at first for a smaller charge than the usual one, later on, a nominal charge, ending with the general practice of making no charge for collection and for giving immediate credit. This competition for customers on the part of the banks and for trade on the part of the banks' customers, encouraged the use of checks for out-of-town remittances which, in turn, confronted the banks with one of their chief problems.<sup>37</sup>

✓ **Paying interest on uncollected funds**

Some banks practiced the payment of interest on current balances, a practice opposed by many conservative bankers. But in addition to paying interest on current balances banks would receive at par items on outside points, and make collections without charge to an extent which, when computed, would show that they were suffering a loss which amounted to a much greater rate of interest than any bank in the country could be induced to pay on daily balances. Competition for business and lack of co-operation among the banks were again responsible for this loss to banks. An actual calculation in some instances showed that by doing this work gratuitously the banks were paying for the account at the rate of 6 or 8 per cent., as shown by the daily balance-sheet. This computation was on the basis of absolute cost of handling, without taking into consideration the labor and risk involved.<sup>38</sup>

✓ **The carrying of compensating balances with collecting banks solely for the purpose of obtaining par territory**

After New York began to charge in 1899 for collecting out-of-town checks, Philadelphia and Baltimore became the dumping ground of western banks for the eastern exchange. As these cities, as well as Chicago, offered tempting par lists many balances went to these cities. Some of the depositing banks and other concerns would thus get their checks collected at par, then carry the proceeds or at least part of the proceeds in New York banks. Very often the Philadelphia and Baltimore banks would be charged by the remitting banks.<sup>39</sup>

But if these country banks frequently profited at the expense

<sup>37</sup>For a typical protest against the practice, see A. W. Blye, "Collection of Country Checks," *Bankers' Magazine*, Vol. XX, 3rd series (1885), pp. 278-284.

<sup>38</sup>*Bankers' Magazine*, Vol. LV (1897), p. 579.

<sup>39</sup>*Bankers' Magazine*, Vol. LXVII (1903), pp. 996-998.

of the city banks, they also frequently lost. By maintaining large fixed compensating balances in return for par territory a large proportion of a bank's working capital was tied up and could not be converted into New York exchange or currency when most needed to supply demands from the bank's customers. If such funds were not needed for working capital they should have been used for loaning purposes instead of earning only 2 or 3 per cent. interest. Par facilities for compensating balances did not mean that the items were really cleared without cost; the expense merely came out of the interest account where it was not noticed.<sup>40</sup> Furthermore, the balances held by banks in reserve cities for the purpose of compensating the reserve banks for the collection of the depositing banks' checks were frequently meant to serve as reserve balances, thus confusing the subject of reserves with that of compensation for other services.

**The maintenance of reserve balances with banks for the sole purpose of getting items on which to charge exchange**

It has been pointed out above that after New York City began to make charges for collection of country checks many bank balances were moved elsewhere. Other cities competed for these reserve balances and as a result of this competition some flagrant abuses developed. One was the practice of country banks dividing a reserve account of (say) \$25,000 among six or eight correspondents, ostensibly for the purpose of greater safety, but really for the purpose of corraling most of the exchange drawn on itself. The collecting banks expected a balance, the income of which would be sufficient to cover the expenses of collecting the checks sent in by the country bank, for on these banks fell the burden of collection for the country bank. Often these banks suffered losses because of the divided accounts. Then these banks were obliged to pay perhaps the same collection charges to this country bank when collecting on it as to a bank which carried a large reserve balance. This practice of divided reserve accounts was prevalent only in a town where there were two or more banks, because the one-bank-town banker was certain to get all checks drawn on his bank and at his own terms. Where there were two or more banks in the town the checks would come to the other bank or banks and be presented over the counter, for which payment at par would have to be made. Some country banks, favoring their correspondent-collecting bank or banks with an agreement to re-

---

<sup>40</sup>*Proceedings of the American Bankers' Association* (1911), p. 714.



mit at par, would connect with reserve banks having a small country business so there would be few checks to collect, but at the same time would let the reserve correspondents collect their items as well as they could. On the other hand, not having reciprocal relations with a reserve bank with a large country business, the country bank could make a profit by charging a certain rate of exchange. As a result of this extensive division of reserves among so many banks it was frequently true that no balance was large enough to warrant the reserve agent in extending credit when the time came to borrow.<sup>41</sup>

### ✓ Excessive gold movements

With reserves scattered over the entire country rather than held in some central agency, there was no convenient method by which banks with surplus funds could lend to banks in need without actual shipments of currency. Had there been a centralized reserve system much could have been accomplished by means of simple transfers on the books of the central reserve agency and the actual shipments of currency would have been reduced to a minimum. Instead, the various sectional and seasonal demands caused the constant shipping back and forth of specie at a heavy expense in insurance, loss of interest and express charges, and with a constant abrasion of the specie.<sup>42</sup>

### ✓ The absorption of collection charges by collecting banks

At this point it is important to learn who really bore the cost of collecting these out-of-town checks. Equally important is it to know what items entered into the expense, and finally, who should have borne the cost. These latter questions will be discussed after the first has been disposed of.

#### 1. Who bore the cost?

It has been contended that where charges were levied on depositors of out-of-town checks the expense seemed to fall on the merchants and business men whose accounts with their customers were settled with such checks. It is admitted that they could reimburse themselves by charging more for their goods or services, or refuse to receive such checks. But it seems clear that compe-

<sup>41</sup>*Ibid.*

<sup>42</sup>For an account of cash movements during the years, 1905-1908, see Ivan Wright, *Bank Credit and Agriculture* (New York, 1922), Chap. VII. On the economy in transfers through the agency of the Gold Settlement Fund, see Wright, *op. cit.*, Chap. XVI.

tion prevented them from trying to shift the burden to their customers. There is rather general agreement that the cost is not often shifted backwards to the drawer of the check.

Others have insisted that the competition among the banks for business has forced them to absorb the costs. This point of view has been well supported. Except where clearing house rules require the member banks to charge for collecting such checks, it probably has been true in the great majority of cases that the collecting banks have absorbed the collection charges. Even clearing house banks have been known to violate secretly the clearing house rules in order to favor customers and thus absorb the charges.

It has been pointed out frequently that the city banker who absorbs the costs of out-of-town collections has brought the so-called evil of which he complains upon himself. He solicited country accounts by offering frequently to pay exchange to the country banker, and, in addition, agreed to take all items within a large territory, sometimes the entire United States, at par. The country bank was thus encouraged to charge exchange, but did not have to pay it, while the city banker absorbed all the exchange charges, both coming and going, as a premium on getting the business, besides paying the country banker a liberal rate of interest on his average balance.<sup>43</sup>

## 2. The items of cost in collecting checks

(1) Every bank which collected out-of-town checks for its depositors was and is confronted with additional expenses in the form of bookkeeping, postage, stationery, etc. This general expense has been estimated at  $\frac{3}{4}$  of 1 per cent.<sup>44</sup> In this connection might be mentioned the cost involved in making the proper presentation.<sup>45</sup>

(2) It was the general practice of banks to give immediate credit for out-of-town checks when deposited. As national banks were taxed on their deposits at the rate of  $\frac{1}{2}$  of 1 per cent. per year, they were paying taxes to this extent on items in the process of collection and which were in no sense deposits.<sup>46</sup>

---

<sup>43</sup>*Proceedings of the American Bankers' Association* (1911), p. 713.

<sup>44</sup>B. J. Shreve, "Country Checks and Country Bank Accounts," *Bankers' Magazine*, Vol. LVI (1898), pp. 221-223.

<sup>45</sup>See R. D. Kent, "The Elements of Cost in Collecting Out-of-Town Checks," *Bankers' Magazine*, Vol. LXI (1900), pp. 738-739.

<sup>46</sup>*United States Revised Statutes*, Section 5214. This section was repealed in 1883 but was reenacted in 1908.

(3) The time element was an important item of cost in the form of loss of interest. In addition to the fact that great distances often had to be covered, few country banks remitted at once. The nearest thing to immediate remittance was semi-weekly. But there was no uniformity of practice. There were weekly remittances, three times per month, semi-monthly, and monthly. Mr. Shreve computed the cash cost for semi-weekly remittances, at a distance of one day's time, at 75 cents per \$1,000, and for weekly remittances \$1 per \$1,000.<sup>47</sup>

(4) Collection charges, when absorbed by the collecting bank, whether for the correspondent bank or the individual depositor constituted an additional expense ranging from  $\frac{1}{40}$  of 1 per cent. to  $\frac{1}{2}$  of 1 per cent. Rates were often fixed by agreements among banks and often varied widely. From 10 to 25 cents was a common charge for small items ranging from \$5 to \$100;  $\frac{1}{10}$  of 1 per cent. to  $\frac{1}{4}$  of 1 per cent. for items ranging from \$100 to \$1,000; and ordinarily  $\frac{1}{20}$  to  $\frac{1}{10}$  of 1 per cent. on items over \$1,000. It is obvious that the smaller banks were forced to pay more in proportion than the larger ones for their collections.<sup>48</sup> It was estimated that  $\frac{1}{8}$  of 1 per cent. was a fair average cost to the New York banks for the general run of country checks.

(5) Where banks, like the New York banks, indulged in the practice of paying 2 per cent. interest per annum on the deposits carried by other banks in addition to giving credit at par on receipt for a daily amount of country checks equal to, say, 5 per cent. of the balance, another expense item of some consequence was added. This expense item has reference, however, only to the expenses involved in collections for correspondent banks, and not to the expenses resulting from collections for the ordinary individual depositor.

In 1898 it was estimated that some banks which were paying 2 per cent. interest on deposits of correspondent banks as well as extending the usual favors of par collections were actually paying 4.65 per cent. on the available deposits. Another account was costing the bank 4.37 per cent. per annum. One illustration may be apropos: An out-of-town bank kept an average balance of \$200,000 with its New York correspondent on which it received 2 per cent. interest per annum and in addition received credit at par on receipt for a daily amount of country checks equal to 5 per cent. of the balance. Putting the cost of the country checks

<sup>47</sup>B. J. Shreve, *op. cit.*, pp. 221-222.

<sup>48</sup>*Loc. cit.*, pp. 222-223.

at the low estimate of four days average time and 50 cents per \$1,000 exchange, the loanable funds of that account cost as follows:

Average balance .....	\$200,000
Four days' time on \$10,000 in country checks absorbed....	40,000
	<hr/>
Balance less country checks .....	\$160,000

This balance, less the 25 per cent. required for reserves, would serve as a basis of loans to the extent of \$141,177 as explained below. The cost for the amount loaned would be as follows:

2 per cent. interest paid on \$200,000 .....	\$4,000.00
\$10,000 in country checks at 50 cents per \$1,000 (300 days) .....	1,500.00
General expense of handling the business, estimated to be three-fourths of 1 per cent. ....	1,058.82
	<hr/>
Total expense .....	\$6,558.82

This expense amounts to 4.65 per cent. on the amount loaned.<sup>49</sup>

Suppose the bank loaned the available reserve deposit at 6 per cent. interest, what would be its profit? After deducting country checks outstanding, there remains a balance of \$160,000 against which a reserve of 25 per cent. was required. If it is assumed that 20 per cent. of the deposits resulting from the loans remain in the bank as derivative deposits (represented by K), the bank will lend as follows, if the Phillips formula for loan expansion is used as a basis for computation:<sup>50</sup>

$$X = \frac{C(1-r)}{Kr+1-K} = \frac{\$160,000 (.75)}{.20 \times .25 + .80} = \frac{\$120,000}{.85} = \$141,177 \text{ loaned}$$

Interest at 6 per cent. ....	\$8,470.62
Cost .....	6,558.82
	<hr/>
Net profit .....	\$1,911.80

The net profit amounts to 1.4 per cent. on the basis of the loan. If the bank could lend the funds at but 4 or even 4½ per cent. it would suffer a net loss.

Thus, whether the banks made any profit depended upon the rate of interest at which they could lend their available cash de-

<sup>49</sup>This expense has been computed from data given by Mr. Shreve, *op. cit.*, p. 225, but the method of computation varies from his. He thinks that but \$120,000 is available for lending by the reserve bank and computes the cost as 4.58 per cent. His method seems inaccurate.

<sup>50</sup>For an explanation of this theory of credit expansion, see C. A. Phillips, *Bank Credit* (New York, 1920), Chap. III.

posits. By taking the average of all the loans of a bank as the basis, Mr. Shreve thought it possible to compute a profit, but insisted that this method was unfair, as city deposits carried with them less expense than the deposits of correspondents. He insisted that it would require an average loan of at least 4 per cent. to secure any profit, and some 5 and 6 per cent. loans would be necessary. It was estimated that the demand for 6 per cent. loans which came from the city customers hardly absorbed their own cash deposits and that the country bank deposits had to be loaned on call at rates ranging from 1 to 5 per cent., ordinarily 2 to 3 per cent., with a resultant loss. Thus, while the banks may have made profits if computed on the basis of their loans as a whole, the carrying of country bank deposits when taken alone was unprofitable. Mr. Shreve concludes: "A careful investigation of the statements of the New York banks shows that some of the banks without country bank accounts make a net profit of over 1 per cent. per annum on their deposits; while the large banks with a liberal supply of country bank accounts show a profit of less than  $\frac{1}{2}$  of 1 per cent. on their total deposits, and in some cases it is less than  $\frac{1}{4}$  of 1 per cent. on their deposits."<sup>51</sup>

The costs to the banks for collecting the checks of correspondents were summarized by Mr. Shreve as follows: (1) Interest paid on balances available for loans,  $2\frac{2}{3}$  per cent. per annum. That is, 2 per cent. was commonly paid on deposits of which  $\frac{1}{4}$  had to be kept as reserve, leaving but  $\frac{3}{4}$  available. The 2 per cent. on the whole would amount to  $2\frac{2}{3}$  per cent. on the amount available; (2) the cost of collection of checks which was estimated to be  $\frac{1}{2}$  of 1 per cent. of the available funds on deposit; (3) the expense of handling the business of the bank, estimated at  $\frac{3}{4}$  of 1 per cent. of the available funds. Thus, according to this estimate the average cost of country bank balances was at the rate of 3.91 per cent. per annum, and it was estimated further that the loanable funds of fully 60 per cent. of all the country balances kept in New York cost the New York banks at the rate of 4 per cent. per annum.<sup>52</sup>

In attempting to compute the costs of collecting out-of-town checks for customers, not correspondent banks, so many variables are present that any safe generalization is rendered virtually impossible. The question of distance, times of remittance, whether remittance is at par or at any one of many rates of discount,

---

<sup>51</sup>Shreve, *op. cit.*, p. 231.

<sup>52</sup>*Ibid.*

whether immediate credit is given, apportionment of general overhead expenses, all combined in various ways, preclude computation.

### 3. Who should bear the cost?

Any one of four parties might bear the cost of collecting out-of-town checks: The drawer of the check, the payee, the bank in which the payee deposits the check, or the drawer's bank. Arguments have been presented in favor of each of the parties.

(1) Should the drawer pay? It is contended that the drawer of the check is the one who receives the chief benefit from its use. Whereas in earlier times he would have been compelled to go to his bank and purchase a draft for remittance, he could now save himself the time and expense by remitting his check. It has the added advantage of serving as a better receipt for him than does the bank draft which is not readily accessible and frequently becomes lost in the bank files. The check is the substitute for the actual money which the purchaser wishes to have transmitted—he is the one seeking the favor and should bear the expense. The banks provide the facilities for such transfer accommodations and should receive remuneration for their services.<sup>53</sup>

(2) Should the payee bear the expense? It has been urged that merchants who deposit out-of-town checks should pay the cost of collection. If they received remittances in the form of checks it was because they were driven to it by competition or because they were satisfied with such payments. If they wished to have the checks converted into money they should pay the bank for the expense involved or refuse to accept such instruments in payment. The collecting bank should not be compelled to bear the expense, as it provides the necessary facilities for collection and every branch of the banking business should be made self-sustaining. To have the collecting bank absorb the cost rather than the depositor means that those who borrow money from the bank are forced indirectly to pay for free collection for others in the form of higher interest charges.<sup>54</sup>

(3) Should the collecting bank bear the expense? In favor of the collecting bank bearing the expense it is urged that the increase in the deposits as a result of accommodating customers more than recompenses the banks for their expense in collecting checks. Further, it is argued that there is no more reason for

---

<sup>53</sup>See A. W. Blye, *op. cit.*, pp. 278-279.

<sup>54</sup>*Bankers' Magazine*, Vol. XXXVII (1882), p. 468.

complaining of the expense of collection as a result of the greater use of checks than there is of complaining of the expense of printing bank notes and that it is as logical to suppress the use of bank notes as checks. Nor is it any more reasonable, it is insisted, to charge for collections than it is for the check books, deposit books and other miscellaneous books and papers, or for counsel, advice and other services freely given.<sup>55</sup> The fact that competition among banks has forced them to collect at par seems to show, it is claimed, that the practice is in harmony with good business principles. Also despite the expenses of collection the banks pay large dividends which are proof of the fact that they could absorb the charges, thus relieving business of the charge.

(4) Should the drawer's bank bear the expense? Since these banks are the ones that receive the benefit of the delay in the presentation of the checks for payment it is claimed that they can well afford to bear the expense of remittance and the depositors in such banks should require their banks to keep sufficient funds at money centers to cause checks drawn upon them to be at par in those centers, by refusing to deposit money in any bank that will not agree to make its checks equal to par at any of the money centers. If collection charges are made and are high enough to yield a profit they belong to the bank of the payee. The country banker should recognize the advantages of having his customers' checks circulate at par at the collecting centers and over a wide field and to keep them at par implies that he will remit for them without charging the collecting centers.<sup>56</sup>

Although there is a degree of validity in each of these contentions, it seems fairly clear that the burden should not rest upon the banks if, indeed, they do not get their compensation indirectly. They offer facilities for effecting exchanges for which they have a legitimate right to receive compensation. No agency should be expected to offer its services without a return sufficient to justify the expense involved. If the services cannot exact a return sufficient to cover costs the services are not needed by the business community. As between the drawer and payee it would seem that the burden should fall upon the drawer. He is the one to whom falls the greatest advantages. The drawer could be compelled to pay the costs by having prices raised by the amount of the collection charges. But this is seldom done. Competition among sellers has forced them to absorb the charges in most cases

<sup>55</sup>*Bankers' Magazine*, Vol. LXVII (1903), p. 167.

<sup>56</sup>*Proceedings of the American Bankers' Association* (1911), p. 715; *Bankers' Magazine*, Vol. LVIII (1898), p. 165; Vol. LXXXV (1912), p. 136.

if they could not shift the burden to their collecting bank. Consequently, the question has resolved itself into whether there might not be some way to relieve the payee and his bank from the burden. In many instances the burden rests upon the payee and it is rather generally agreed that the collecting bank should not be compelled to bear the burden.

It seems true, however, that all parties secure some advantages from the wide circulation of the check. It is clear that the drawer gains; the payee apparently feels recompensed to a degree, at least, else he would not let competition force him to accept them in payment; the banks gain something indirectly in the form of increased deposits and increased business. As a result, it has been urged that since all gain all should bear the burden. How can all be made to share the burden? In answer it may be pointed out that just as the Federal government was finally responsible for making bank notes circulate everywhere at par so the government again could make checks circulate at par and place the expense so that it will fall lightly, but nevertheless indirectly, on all. All banks, business, and customers, would then be placed on a more even plane of competition.

Before reaching the ultimate solution, a brief survey will be made of the proposals for reform which have been offered and the actual attempts which have been made to correct the recognized evils of the old system.

### **Proposals for reform**

Since numberless proposals for reform were made, only a few of the typical and more outstanding ones will be mentioned. They are valuable only because they show the halting steps that were made toward the ultimate solution which can be better understood and seen in clearer perspective.

1. **State clearing houses.** In 1885 Mr. A. W. Blye submitted a plan to the American Bankers' Association which provided for a central concern in each State to act as a State clearing house. This central agency was to be either a large bank with a separate department devoted to the work, or some central office under the control of all the banks to be located in the commercial center of each State. Each central concern was to undertake all the clearing and collection of the items within a given distance of twelve or twenty hours from the clearing center; interstate exchanges were to be effected by the correspondence of one center with another. In addition to the reduction of expenses, additional advantages



were to be secured by having monthly records of the full exchanges of the entire country reported as well as the dissemination of other information vital to business interests.<sup>57</sup>

2. Out-of-town collection agencies. At the annual meeting of the American Bankers' Association in 1890 another plan for handling out-of-town checks was submitted by a Mr. C. W. Hammond. The purposes of this plan were similar to the one presented by Mr. Blye, although the plan itself was quite different. It provided for stock companies in centers with ten or more banks which would handle all out-of-town items. Each collecting agency was to divide the country into collection districts on the basis of time involved in receiving returns, furnish each of its contributing banks a schedule showing the charges for the collection of items in each district, the charges to be graded on the basis of the time required to receive items by the most direct route. Upon receipt of items, the agency was to issue certificates payable in cash or New York exchange at the end of the time allowed for returns from the district involved less the schedule charge for collection, or the agency would cash the certificates for an additional charge. The plan in general had a decidedly modern flavor. It was claimed that expenses of banks would be reduced, due to the saving of clerk hire and stationery, that the danger of competition to the detriment of profit would be removed, and that much time and risk would be saved by routing the checks directly.<sup>58</sup>

3. A national clearing agency. A national or Federal clearing house was also proposed at various times. It was suggested that it be a chartered corporation with capital subscribed by the local member clearing houses which were also to be corporations.<sup>59</sup>

4. Country checks to be sent through the clearing house to correspondent banks. In 1899 it was proposed that all country checks be sent through the clearing houses to the city correspondents of the drawee banks and by them charged immediately to the account of the drawee. This plan, apparently so simple, had

---

<sup>57</sup>A. W. Blye, *op. cit.*, pp. 282-284.

<sup>58</sup>C. W. Hammond, "Clearings and Country Collections," *Bankers' Magazine*, Vol. XXV, 3rd series (1890), pp. 292-296.

<sup>59</sup>J. M. Elliott, "A National Clearing House as a Safeguard Against Panics," *Annals of the American Academy of Political and Social Science*, Vol. XXXI (1908), pp. 460-462; see also *Bankers' Magazine*, Vol. LXVII (1903), pp. 980-982. A plan for Federal clearing houses was also developed by Theodore Gilman, but his plan had reference more particularly to the securing of elasticity in note currency rather than to solving the question of the collection of country checks. See Theodore Gilman, *Federal Clearing Houses* (New York, 1899).

obvious objections. For example, John Smith, a Chicago merchant, owes John Jones, in New York, \$1,000. Mr. Smith draws his check on the First National Bank, Chicago, to the order of Mr. Jones and sends it to him in New York. Mr. Jones deposits this check in his bank, which presents it through the clearing house to the National City Bank, the correspondent of the First National Bank of Chicago. Of course the National City Bank does not know whether the check represents a deposit in the Chicago bank, but nevertheless charges the amount to the account of that bank. The Chicago bank is placed in the unfortunate position of never knowing how its account stands at any particular time and of having checks charged against it before it can see and verify them.<sup>60</sup>

5. Place the burden upon the drawer. Another plan which had for its purpose the placing of the burden on the drawer of the check provided that checks be used by customers in making remittances with such wording as: "The Nineteenth National Bank, New York, will cash this check at par as the agent solely of the endorsers. Exchange hereon will be paid to said bank by the maker."<sup>61</sup>

6. Uniform exchange charges. In 1905 and 1911 proposals were made for universal exchange charges. In 1905 the Committee on Conference of Clearing Houses of the United States announced itself in favor of charging exchange for the handling of out-of-town items and recommended that the clearing house associations of the country establish rules for their members regulating the collection charges.<sup>62</sup> When a universal exchange charge was proposed in 1911 opposition speedily developed. The opponents contended that such a plan would only add to the cost of collecting by increasing the rates charged by the banks upon which the checks were drawn; that banks at par points would begin to charge and the banks at charge points would increase their rates. Furthermore, the plan was not considered practical, as it seemed impossible to obtain concerted action by the banks in all the collecting centers.<sup>63</sup>

7. Universal par system.<sup>64</sup> At various times a universal par

---

<sup>60</sup>However this plan was tried with some degree of success in Sedalia, Missouri, and other places. See below, pp. 124-125.

<sup>61</sup>*Bankers' Magazine*, Vol. LVIII (1899), p. 870.

<sup>62</sup>*Proceedings of the American Bankers' Association* (1906), pp. 103-104.

<sup>63</sup>*Ibid.* (1911), p. 714.

<sup>64</sup>The par system recommended here refers not only to remittances at par but to collections without charge. The same point of view is represented by the arguments presented for and against the plan.

system was proposed and just as frequently opposed. The advocates of the system offered the following arguments in its support: (1) It would eliminate the circuitous routing of checks. (2) The increased use of checks would increase the deposits, thus increasing the banks' returns to an extent that would more than offset the expense involved. (3) Each bank collecting and remitting at par would receive equal favors which would tend to compensate it for any expenses incurred. (4) It would encourage the use of checks, thus giving more elasticity to the currency and thereby benefit not only the entire country but every banker as well. (5) Checks, or rather deposits, are the most common medium of exchange and for that reason everything possible should be done to cause them to circulate at par. Bank notes play a relatively small part in business transactions and yet their parity is inviolable. (6) Collection charges make the creditor receive less than the amount for which he sold his goods or the debtor pay more than the amount upon which he agreed. (7) The acceptance of checks at par is in direct accordance with the rigid policy of maintaining the parity of the medium of exchange.

The opponents of the par system presented the following arguments in support of their position: (1) Checks when deposited with a bank are not cash, and the bank must wait for some time before it can get its cash. Checks are often returned for want of funds also. Banks are not always able to tell the genuineness of checks presented. (2) Giving credit for uncollected checks means lending money without interest. Sometimes such checks will exceed in amount the customer's balance. (3) In addition to the time element involved the bank has certain expenses to meet, like postage, clerical help, bookkeeping, telegrams, protest fees, etc. (4) Often the exchange received is not suited to the needs of the bank and makes necessary a great deal of transferring to other parts of the country, sometimes at a large expense, for which the bank cannot be reimbursed. (5) To remit for checks at par forces the bank to carry deposits in leading banking centers, which is expensive. (6) The cost of par collections and remittances must be made up in the form of higher interest rates which places the burden on the borrowers in favor of the large depositor who does not borrow. It also means less borrowing and less total profits for a bank.

8. Par points and charge points with country clearing houses. Considering both uniform charges and a universal par system impracticable, it was proposed that the country checks be

divided into two classes, those that could be collected at their face value and those that could be collected only at a discount. Each bank would classify itself, and banks could then recognize the two classes and act accordingly. Co-operation with the country bankers on the part of the collecting centers was to be secured by providing country clearing houses through which the checks could be collected, and by furnishing correspondents with lists of the clearing house par points.<sup>65</sup> Country clearing houses, usually in the form of a separate department within the city clearing house, were frequently proposed, and as it will be seen below, were successfully established in several important centers.<sup>66</sup>

The general tone of the discussion was one of despair of any effectual remedy. Plan after plan fell by the wayside. But the bankers in their discussions of the evils of local checks lost sight of the fact that their use gave a general impetus to banking and that if their use by any means were repressed there would be a great falling off of deposits and loanable funds. The convenience in business of the use of local checks was doubtless one reason for the establishment of banks in all parts of the country; every little business community found a bank necessary to its prosperity. If it had been possible for the bankers of the country to restrict or abolish the use of local checks it is a question whether, from the broadest standpoint of banking welfare, they would not have injured themselves.

Repressive measures were beside the point, for with the improved means of communication which tended to eliminate distance, the use of local checks steadily increased. Their use should have been looked upon as a token of advancing business methods. The main defect was not from their increased use but from the inequality of the benefits which accrued to certain members of the community from their use. The large dealer whose account was sought by the banks had no difficulty in using his bank as an agent to collect at par the out-of-town checks which he accepted in payment. On the other hand, the holder of the less desirable account was more likely to be charged something. In the agitation for country clearing houses or some similar plan, the large city banks, however, were found frequently to oppose such reform because of the effect that it might produce upon the country bank balances they had secured as a result of offering certain collection facilities.

---

<sup>65</sup>*Proceedings of the American Bankers' Association* (1911), pp. 714, 715.

<sup>66</sup>*Bankers' Magazine*, Vol. LXII (1901), p. 108.

**Attempts at reform**

Some obscurity is attached to the first attempts to regulate the collection of country checks. Mr. F. E. Farnsworth, in his report to the American Bankers' Association in 1906, pointed out that the regulation of the country check was undertaken first by western clearing houses and also that St. Joseph, Mo., claimed to have been the first association to take such action.<sup>67</sup> Hallock says that as early as 1875 Pittsburgh had made arrangements to clear out-of-town checks by exchanging the checks on their correspondents and then forwarding them in their own letters. This practice seems to have lasted about ten years, when competition between the banks broke up the scheme of mutual accommodation.<sup>68</sup>

**The Sedalia, Missouri, plan, 1895**

A similar plan was instituted by Sedalia, Mo., in 1895. Hallock lays great stress upon this plan of country clearing and insists that great credit is due Sedalia as the pioneer in establishing sound methods of country clearing. He also insists that it was a modification of the London plan of country clearing established in 1858, but entirely independent in the sense that the originators of the Sedalia plan knew nothing of the English practice.<sup>69</sup>

Soon after establishing a clearing house in 1893, the Sedalia banks turned their attention to the possible handling of the out-of-town checks. It was observed that a country bank some distance out would have reciprocal accounts with all of the five banks in Sedalia and received checks from all, which it required five letters to forward. The Sedalia banks altogether would have more checks on this bank than it would have on them and consequently it would be constantly in their debt. The Sedalia bankers finally proposed that the bank should keep a balance with some one of them on which interest would be paid and against which any checks drawn on the bank could be charged. At the same time any checks forwarded to Sedalia by the bank for collection would be credited to its account at par and with interest allowed on the resulting balance. Gradually such arrangements were made with the surrounding banks and completed about 1895. The plan comprehended some 22 banks at fifteen points, 13 of the points lying in a

<sup>67</sup>*Proceedings of the American Bankers' Association* (1906), p. 104.

<sup>68</sup>Hallock, *op. cit.*, p. 47.

<sup>69</sup>See Hallock, *op. cit.*, Chap. III for a description of the London plan.

circle with a radius of some thirty miles; two of the points lay farther away, one as far as 102 miles.

When a check on one of the out-of-town banks was received by its Sedalia correspondent the account of the out-of-town bank was charged and the check mailed to the bank in the afternoon of the same day. If the check were received by another Sedalia bank in the morning mail it was presented to the country bank's correspondent at the clearing house and paid there as if it were the correspondent's own check. The correspondent charged it against the country bank's account and forwarded it in the afternoon. If the other Sedalia bank did not receive it in the morning, but later in the day, it was held over and presented at the clearing house on the following day. If for any reason the out-of-town bank declined to pay a check it returned it to its correspondent who duly credited it, and if the check were cleared, at once collected the amount upon delivery at the counter of the Sedalia bank that put the check through the clearing.

The advantages of the plan were soon apparent. Sedalia was able to forward the checks to each out-of-town bank in a single letter. Payment was obtained, as a rule, at once in Sedalia before mailing the checks. The out-of-town banks, instead of being in debt to Sedalia as formerly now kept from \$150,000 to \$200,000 on deposit there. Each out-of-town bank was, in effect, a branch, not only of its correspondent, but also of every bank in Sedalia. The advantage was mutual. Checks on the out-of-town banks were the same as Sedalia funds and were received at par from depositors; the benefits being enjoyed by the members of the clearing house, customers and correspondents.<sup>70</sup>

### The New York City plan, 1899

New York City adopted a repressive policy during the nineties and attempted unsuccessfully to exclude out-of-town checks, or at least penalize them, a policy contrary to business growth and quite the reverse of that adopted in other sections of the United States and some of the continental countries, particularly Belgium, who in 1901 made arrangements for free checks, apparently regarding it as the true banking policy to foster the use of banking instruments for transmitting funds, and thus bring into the banks a large amount of money that would otherwise go into other channels.<sup>71</sup>

<sup>70</sup>Hallock, *op. cit.*, Chap. IV.

<sup>71</sup>*Bankers' Magazine*, Vol. LV (1897), p. 579; Vol. LXVI (1903), pp. 10-11.

In 1899 the member banks of the New York City Clearing House entered into an agreement to levy uniform charges for collection of out-of-town checks, a practice they have followed since that time. This charge with few exceptions was to be 1/10 or 1/4 of 1 per cent. of the amount of the items collected, according to the distance. No charge was to be less than 10 cents. There were certain points on which the charge was discretionary. A penalty of \$5,000 for violation of the rules was attached, with the possibility of expulsion from the clearing house association for a second violation.<sup>72</sup> Other cities had tried the same plan but failed, but the New York banks were more firmly united than were banks elsewhere, and succeeded in eliminating this burdensome form of competition from among themselves.<sup>73</sup> This plan, although relaxed somewhat at a later date, threw the burden upon the holder and much friction resulted.<sup>74</sup> Some critics of the plan claimed it was done to force country banks to carry balances with them so that their checks would pass at par.<sup>75</sup>

A similar plan had been in operation in St. Louis since 1894; Chicago followed in 1905, and soon many other cities had adopted it. But once it became general the advantages to any group of banks tended to be neutralized. Philadelphia did not follow the New York idea and as a result secured a large number of New York's reserve deposits. The New York plan did not put the country check out of circulation nor decrease its volume appreciably, but simply shifted, to some extent, the burden of collecting from New York to other eastern collecting centers which did the work, even though not as favorably situated as New York to collect in the East, particularly in New York State and New Jersey.<sup>76</sup>

### **The Boston country clearing house, 1899**

In 1899, Boston banks undertook to solve the problem of country check collection. At that time they estimated that their cost of collecting New England checks was not less than \$700,000 per

---

<sup>72</sup>J. G. Cannon, *Clearing Houses and the Currency*, Columbia University Press (1908), p. 100.

<sup>73</sup>*Bankers' Magazine*, Vol. LVIII (1899), pp. 518-519, 811.

<sup>74</sup>In 1913 the New York Clearing House relaxed the rules to the extent that the banks were permitted to accept for free collection checks on such banks and trust companies in the States of New York, New Jersey, Massachusetts, Connecticut, and Rhode Island, as remitted at par and on the day of receipt of the checks drawn on them. *Bankers' Magazine*, Vol. LXXXVI (1913), pp. 134-135.

<sup>75</sup>*Ibid.*, Vol. LXVII (1903), p. 712.

<sup>76</sup>*Proceedings of the American Bankers' Association* (1911), p. 713.

year.<sup>77</sup> Rather than adopt the repressive policies applied by New York City, Boston sought a more scientific solution, one in harmony with business growth and one that would encourage rather than hamper the growth of deposit currency. The solution was found in the establishment of a country clearing department in the Boston Clearing House, commonly called the country clearing house. The Boston plan was the most successful attempt to solve the problem of country check collection prior to the establishment of the Federal Reserve System. The system adopted was modeled after the old Suffolk System for the redemption of bank notes and brought distinction to the New England banks with respect to deposit currency just as the earlier system had distinguished them with respect to bank note currency. It caused checks to circulate at par just as the earlier system forced bank notes to circulate at par.

The plan provided for the clearing of country checks with practically the same machinery that was used to clear Boston checks. Boston checks were cleared in the morning, country or New England checks in the afternoon in the same room and at the same desks. Both clearings were under the same management. The plan centered around the manager of the clearing house who acted as agent for the banks in clearing country checks.

Country checks deposited in Boston banks were taken to the clearing house in packages, sorted by States and alphabetically by towns. Slips were attached showing totals, name and location of bank, the accompanying slips varying in color according to the State to which the checks were directed. Each slip had attached to it a coupon or stub which was detached and retained at the clearing house as a record of the packages forwarded to their destination. There were two deliveries daily; those checks going some distance had to be in the clearing house before one o'clock, others not later than three o'clock. It was the duty of the manager to mail them direct to the country banks drawn on, collect or return them, and account for the proceeds to the Boston banks to whom they belonged. As it took but two nights to obtain most of the remittances, the manager settled with the city banks on the second morning, when he distributed the proceeds through the regular city clearing. Remittances were made in either New York exchange, Boston exchange, or currency, at the expense of the

---

<sup>77</sup>*Proceedings of the New York State Bankers' Association* (1912), pp. 66-74.



clearing house. Almost 90 per cent. of the remittances were in drafts on Boston.<sup>78</sup>

It was the aim of the plan to place all banks in New England on the par plan and this was all but successful. As a result, New England checks were more widely received throughout the country than checks on any other section. In 1900, Boston banks put into effect a plan to charge exchange on all checks deposited which were drawn on banks not remitting at par. It was expected that by thus putting the customers of such banks at a disadvantage the banks would be brought into line. For a few months in 1901 efforts were made to force all banks to remit at par by sending checks to them by express. These banks retaliated by having silver coin transported to them at the expense of the government<sup>79</sup> which was then sent to the clearing house at the latter's expense.<sup>79</sup> Although the Boston banks were never able to force all banks into the system, approximately 97 per cent. of the checks in New England were collected at par.<sup>80</sup> In 1912, 560 out of 642 banks outside of Boston which paid their checks through the clearing house, remitted at par. The Boston banks charged the depositors of these non-par checks the same rates that they themselves were charged.<sup>81</sup>

The Boston plan was highly successful. Costs were reduced from an amount ranging from \$1.00 to \$1.50 per thousand dollars to a charge varying from six to seven cents per thousand dollars. The time factor was reduced also by an amount varying from two to four days in the middle and southern Atlantic States. In 1912 the Boston Clearing House was collecting New England checks to the amount of \$600,000,000 or \$700,000,000 a year at this small expense of time and money.<sup>82</sup>

In 1905, the Kansas City, Mo., Clearing House organized a country clearing house or collection department. This plan was similar in principle to the Boston plan. At first it covered about 300 of the most expensive points, then was extended to the States of Oklahoma, Kansas, Colorado, New Mexico, Texas, Nebraska, and Missouri, the idea being to increase gradually the territory of

<sup>78</sup>*Bankers' Magazine*, Vol. LXVII (1903), p. 992.

<sup>79</sup>From August 27, to November 8, 1901, checks amounting to \$3,544,813 were thus presented to non-par banks. In retaliation 58 of them had \$2,316,250 in silver coin transported from the sub-treasuries at a cost to the government of \$2,700 and to the Boston clearing house of \$8,500. Hallock, *op. cit.*, p. 64.

<sup>80</sup>*Ibid.*, p. 61.

<sup>81</sup>*Proceedings of the New York State Bankers' Association* (1912), pp. 69-72.

<sup>82</sup>*Bankers' Magazine*, Vol. LXVII (1903), p. 992; Vol. LXXII (1905), p. 94; *Proceedings of the New York State Bankers' Association* (1912), pp. 69-72.

the country clearing house until it covered all the territory tributary or accessible to Kansas City. The country clearing department was a member of the clearing house to all intents and purposes except in the matter of government. All members of the clearing house were obliged to send to this department all country items on points in the country clearing house territory where a cost of 10 cents or more per hundred would be charged if sent direct. A great saving in postage, stationery, and labor was effected and the plan was considered of great value.<sup>83</sup> It was claimed in 1912 that a saving of over 50 per cent. in the gross expense in the handling of the items was effected and the time required in securing returns was reduced about 25 per cent.<sup>84</sup>

The banks of Atlanta, in 1908, copying the Boston plan, organized the Georgia collection department—a department of the clearing house—grouping all items received by the six Atlanta banks and sending out under one cover all items on a town or bank where more than one bank existed. After six months Florida and Alabama were added to the list. The plan resulted in a saving in exchange, in postage and clerical force.<sup>85</sup> The country clearing house plan gradually spread until 14 cities, by 1916, had country clearing houses or departments.<sup>86</sup>

In 1911, the Reserve City Bankers' Association started a movement to establish country clearing houses in the various reserve cities to facilitate the collection of country items, both in relation to cost and to the direct handling. The movement was started in twenty-five reserve cities, but stopped short with the passage of the Federal Reserve Act which seemed to obviate the necessity of country clearing houses.

### County clearing houses

In 1906, the ten banks and trust companies of Lancaster, Pa., undertook to simplify the problem of collecting checks on the 40 banks within the county by establishing a county clearing house. There are at present about six such clearing house associations.<sup>87</sup>

<sup>83</sup>*Proceedings of the American Bankers' Association* (1909), Third Annual Report of the Clearing House Section, pp. 41-44.

<sup>84</sup>*Ibid.* (1912), p. 513.

<sup>85</sup>*Ibid.* (1909), pp. 24-25; (1910), pp. 715-725.

<sup>86</sup>*Ibid.* (1916), pp. 468-469. At the present time there are but two, located at St. Louis, Mo., and Nashville, Tenn. Detroit has such a department in a limited degree, the department of the clearing house collecting all checks on Highland Park, a city within the corporate limits of Detroit. Information secured from the Clearing House Section of the American Bankers' Association.

<sup>87</sup>There are county clearing houses in the Pennsylvania Counties of Lancaster, Lebanon, and Beaver; four towns in Connecticut—Shelton, Ansonia, Derby, and Seymour, in Fairfield and New Haven Counties—have a similar association;

The ten city banks in Lancaster were either chosen or assigned as correspondents of the outside county banks. Instead of one out-of-town bank now having ten correspondents in Lancaster City and several more in the county, it now had but one correspondent and received all checks coming to it in the course of business and drawn on any one of the fifty banks of Lancaster County. This meant that with but a single letter to a correspondent in Lancaster, the out-of-town bank was able to send through the clearing house on the following day, all checks received on any or all of the fifty banks constituting the association and have them at their destination on the second day, thus obviating the necessity of starting checks on an unchartered sea without the possibility of knowing their whereabouts or when they would reach their destination. At the same time, the representative in Lancaster honors and forwards all the checks drawn on the out-of-town bank that may be presented at the clearing house by the other nine members, including all checks received from their correspondents in Lancaster County. At the end of the day, any amount in excess of \$1,000 owing to the county bank's city correspondent or owing to the county bank, is paid by draft. That is, should the county bank's books show that it owed \$2,600, the county bank encloses with its remittance a draft for \$2,000. Should the city correspondent's books show them in debt, the plan is the same. They send their check for \$2,000 with their remittance letter. Settlements are made in full once a week to verify all accounts.<sup>88</sup>

There were other plans tried but they were of no particular significance. It was felt rather generally among bankers that nothing of great importance could be accomplished without concerted action, which seemed quite improbable. It was seen that a concerted action which would result perhaps in par collection throughout the country would also result in a shifting of reserves to natural centers of exchange. Philadelphia would lose her country balances to New York City as would Baltimore. Boston would gain also. Naturally such cities as Philadelphia and Baltimore would oppose such concerted action and it seemed that it could be accomplished only by bringing all banks of deposit finally under Federal control. How this was brought about, and the extent to which it had been accomplished, is told in Chapter VI.

---

another is to be found in the Northern New Jersey Clearing House Association which includes the banks in Hudson County; and a tri-city association in Illinois may be counted as a sixth. Information secured from the Clearing House Section of the American Bankers' Association.

<sup>88</sup>Information furnished by the Clearing House Section of the American Bankers' Association.

## CHAPTER V

### SPECIAL FUNCTIONS OF CLEARING HOUSES PRIOR TO 1914

#### **Special functions of the clearing house**

In its primary and simplest form a clearing house is merely a conveniently located place where checks, drafts, bills, notes, or other kinds of credit instruments coming into the possession of the banks are brought to be exchanged for their equivalent in other credit instruments or for cash. Probably no clearing house exists in this simple form today. As necessity has arisen new functions have been assumed until the special functions of clearing house associations have become a subject of importance. Some of the special functions as exercised in the past have been of prime importance; this has been particularly true of clearing houses in times of stress when they supplied an element of elasticity to the currency in the form of clearing house loan certificates. Because of the importance of the special functions exercised by clearing houses in the past, as well as in the present, it will be appropriate to make a general study of them at this time, reserving to a later chapter the study of clearing houses as clearing centers, their main function as found today.

The most common of the special functions may be summarized as follows: (1) Extending loans to the government, (2) rendering assistance to members, (3) fixing uniform rates of interest on deposits, (4) fixing uniform rates of exchange and of charges on collections, (5) fixing reserve requirements, (6) examining member banks, (7) gathering credit data for members, (8) publishing statements relative to clearings and condition of member banks, (9) participating in annual conferences, and (10) issuing clearing house loan certificates in times of stress.

#### **Extending loans to the government**

During the Civil War the clearing house associations of New York, Philadelphia, and Boston responded with practical unanimity on the part of the member banks to the call of the government:

for loans. In 1861 the New York banks by combination and equalization of their resources were enabled, through the facilities afforded by the clearing house, to unite in advancing to the United States government \$150,000,000, which at once restored its declining credit and enabled it to equip and arm its newly-formed military forces and provide for its immediate requirements.<sup>1</sup> As the Spanish-American War gave rise to no serious monetary problems, no such action was taken by the clearing houses during that war.

At the outbreak of the recent European War, the Federal Reserve Board called representatives of the clearing houses of the reserve cities in conference, September 4, 1914, to consider ways and means of meeting the adverse balance due to Europe. It was estimated that the United States had approximately \$500,000,000 in obligations to meet. To experience such a large drain of gold at that particular time with foreign exchange markets disrupted was considered dangerous for our banking structure. Out of the conference came a plan for the creation of a gold exchange fund of \$100,000,000 to meet the first instalments due. On September 21, 1914, letters were sent to the presidents of the clearing house associations throughout the country asking that their associations subscribe for the allotted amount. The associations responded quickly and oversubscribed the fund. Although but a small percentage of the amount subscribed was actually called for, their action saved the situation and by the time of the opening of the Federal reserve banks, the premium had disappeared on gold and the danger of immediate gold exports had been removed.<sup>2</sup> During the various loan drives on the part of the government to finance the War many associations volunteered their services, organized the work in their own districts, and secured the desired results in the most effective manner and in the shortest possible time. This is the last important move made by the clearing house associations to aid the government directly. The organization and development of the Federal Reserve System has obviated the necessity.

#### Rendering assistance to members

In times of stress it has been common practice for weak banks to go to other members of the association for aid. The appeals

<sup>1</sup>W. A. Camp, "The New York Clearing House," *North American Review*, Vol. CLIV (1892), pp. 685-686.

<sup>2</sup>*First Annual Report of the Federal Reserve Board* (1914), pp. 12-13.

and the aid extended have taken various forms. For instance, during the period just preceding the panic of 1907, the Mercantile National Bank in New York reached a situation where it did not see its way clear to meet its obligations and pay cash balances debited to it after the daily clearings at the clearing house. It appealed to the associated banks for assistance. The clearing house committee had it examined, decided it was solvent and should be assisted. The committee thereupon assessed a certain number of banks in the clearing house membership amounts sufficient to meet the daily balances against the Mercantile so long as such aid should be imperative. Before granting this assistance, however, the committee stipulated that the entire board of directors, not only of the Mercantile, but of several affiliated institutions, should resign, that its president should retire, and that certain officers prominently identified with its management should virtually withdraw from the banking field in New York City. The Mercantile consented, as it was the price of solvency.<sup>3</sup>

Any question of common interest is likely to be discussed at the regular meetings of a clearing house association. In some associations it is customary to discuss the question of loans to individuals who go from bank to bank seeking accommodations. "Good customers" of one bank are frequently discovered to be "good customers" of other banks and knowledge of this fact serves as a protection to the banks. An undesirable customer is also less liable to force a concession from one bank under threat of going to the bank across the street. Instead of playing one bank against another without profit to either, the customer and the bank usually get together, but upon terms more favorable to the bank and less favorable to the customer. Other questions that arise are those connected with the deposit of public funds frequently not prorated among the banks, the charges for handling accounts where the average balance falls below a certain amount, opening and closing hours, the policy to be adopted in answering inquiries in order to protect banks from the abuse of this courtesy which they generally extend, the question of the policy to be adopted in connection with the safekeeping of securities and the rental to be charged for safety deposit boxes, fixing a minimum per transaction and per thousand dollars for handling matters in escrow, arranging for all requests for donations of certain amounts to be referred to a special committee, submitting to a committee periodically a list of all past due paper and overdrafts, not to mention

<sup>3</sup>A. D. Noyes, "The Clearing House Committee," *Independent*, Vol. LXIII (1907), pp. 1029-1030.

many other problems that arise from time to time.<sup>4</sup> Extending aid to members often has assumed its most important form in the issuance of clearing house loan certificates described below, as well as in other ways discussed in the following pages.

#### ✓ **Fixing uniform rates of interest on deposits**

Some clearing house associations have not hesitated to fix uniform rates of interest on deposits. Others have regarded the legality of such action as a moot question and have been reluctant to enforce such a rule. The purpose of such regulation, of course, has been to regulate competition among the member banks.

As early as 1881, the association in Buffalo agreed upon rates of interest which were observed practically without violation for some nine years thereafter and they were broken at last only because of their non-observance by new banks which at the outset refused to become members of the clearing house association.<sup>5</sup> The practice of regulating interest rates to be paid on deposits is quite common today in clearing house associations.

#### ✓ **Fixing uniform rates of exchange and of charges on collections**

In 1881, also in Buffalo, a prominent banker in that city succeeded in uniting the banks on rates to be charged on drafts and for collecting out-of-town checks. The promoter of the enterprise was well known for rate cutting and had been able to meet competition successfully. Consequently when he proposed the reform the other banks were only too glad to consider the proposition. The rates were not high, but were arranged to do justice to both the banks and the depositors. The plan was so satisfactory that it remained in continuous operation for nearly nine years. The non-observance of the collection exchange rules by the new banks made its continuance an injustice to the member banks.

In 1899, the banks in the New York Clearing House Association entered into an agreement to levy uniform charges for the

---

<sup>4</sup>Raymond F. McNally, *Clearing House Organizations from the Standpoint of a Country Banker*, a pamphlet published by the Clearing House Section of the American Bankers' Association (Sept. 7, 1915); Wayne Hummer, *Clearing Houses in Smaller Communities*, a pamphlet also published by the Clearing House Section of the American Bankers' Association, published sometime after 1918; *The Clearing House, etc.*, a pamphlet published in the same manner in 1923. Clearing house associations assume prominent parts in civic movements. Many respond to the call of charity whether local, national, or foreign.

<sup>5</sup>J. G. Cannon, *Clearing Houses and the Currency* (Columbia University Press, 1908), p. 99.

collection of out-of-town checks, based upon a zoning system, and have continued to regulate the charges since that time. A similar plan had been in operation in St. Louis for some time. Chicago adopted a similar plan in 1905. In 1899, Boston adopted a par system for country checks in New England, but the next year provided for uniform charges on all checks drawn on banks which would not remit at par. At present it is the uniform practice of clearing house associations to regulate such charges.

### ✓ Fixing reserve requirements

Clearing house associations in the interest of increased safety may require a higher per cent. of reserves than that required by law. For example, the Clearing House Association in New York City adopted an amendment to its constitution in January, 1908, requiring all member banks thereafter to maintain in their vaults a cash reserve of 25 per cent. against deposits, although it had been the general practice of the member banks to keep a 25 per cent. reserve.<sup>6</sup> This regulation was made a condition of admission and was applied to trust companies which were admitted to membership.<sup>7</sup>

### ✓ Examination of member banks by clearing houses

The New York Clearing House adopted an amendment to its constitution in June, 1884, which authorized the clearing house committee to examine any bank in the association. The experiences of May, 1884, had justified this step. The committee was authorized to examine any bank in the association whenever it considered such examination to be for the interest of the associated banks in general, and to require from such bank the surrender of its securities for purposes of protection.<sup>8</sup> In June, 1906, an examinations department was added to the Chicago Clearing House. The object of this movement was to detect instances of unsound banking in any direction among the members of the clearing house association. It was expected that such examinations would enable the clearing house to take preventive rather than remedial measures by applying an earlier remedy than was possible for national or State officials, and by such early action to remove unwholesome conditions from any bank in the as-

<sup>6</sup>For the law regulating reserve requirements in New York State see pp. 334-339 below.

<sup>7</sup>J. G. Cannon, *Clearing Houses and the Currency*, p. 106.

<sup>8</sup>A. D. Noyes, *op. cit.*, p. 1033.



sociation. As the system has developed it has become possible for the clearing house as a body to exercise such supervision over any weak bank as to amount to a virtual taking over of its management until it regains a sound condition. This has proved valuable during times of stress when the announcement of clearing house support to a weak bank has been sufficient to avert a run on the bank.<sup>9</sup>

The Clearing House Section of the American Bankers' Association has used its best efforts to secure such examiners and claims the following advantages for the system: (1) Such examiners have the assistance of the clearing house committee who are better judges of local credits than any bureau at Washington possibly could be. This so fortifies the judgment of the examiner that it is as nearly correct as human imperfections permit. Certainly his judgment is more likely to be superior to the very best examiner sent from the office of the Comptroller of the Currency. (2) The slightest expression of a wish from the clearing house committee to a bank under its jurisdiction must have prompt attention. A delinquent bank may argue for months and even years with the department of the Comptroller of the Currency, but it dare not dally with the clearing house committee.<sup>10</sup>

#### ✓Gathering credit data for members

For some years it has been common practice for a few clearing house associations to gather valuable credit data for members. Large borrowers are indexed and observed, and facts as to their

<sup>9</sup>Stanley Young, "Enlargement of Clearing House Functions," *Annals of the American Academy of Political and Social Science*, Vol. XXXVI (1910), p. 608.

<sup>10</sup>*Proceedings of the American Bankers' Association* (1909), pp. 7-8, 15. Following is a list of cities where the Clearing House System of Examination was in successful operation in 1921: Boston, Mass., Chicago, Ill., Cleveland, Ohio, Columbus, Ohio, Denver, Colo., Detroit, Mich., Hutchinson, Kan., Indianapolis, Ind., Kansas City, Kan., Kansas City, Mo., La Crosse, Wis., Los Angeles, Calif., Louisville, Ky., Milwaukee, Wisc., Minneapolis, Minn., Montgomery, Ala., Nashville, Tenn., Newark, N. J., New Haven, Conn., New Orleans, La., New York City, Northern Anthracite Bankers' Association (Scranton, Pittston and Forest City, Pa.), Ogden, Utah, Oklahoma City, Okla., Omaha, Neb., Pasadena, Calif., Philadelphia, Pa., Portland, Ore., St. Louis, Mo., St. Paul, Minn., Salt Lake City, Utah, Seattle, Wash., Sioux City, Ia., Tulsa, Okla., Wichita, Kan. *The Clearing House Idea and the Examiner System*, a pamphlet published by the Clearing House Section of the American Bankers' Association (1921).

For an account of the efforts of the Clearing House Section of the American Bankers' Association in behalf of the clearing house examiner system, see *American Bankers' Association Journal*, Vol. XVII (Oct., 1924), p. 261. This Section is also encouraging Bank Auditors Conferences looking forward to a national organization, and is trying to educate the banks on the value of the analysis of accounts.

total local obligations are made available quickly upon request for any interested member of the association. It may be easily learned whether there are duplications of borrowings by the same client from different banks.<sup>11</sup> It is a common practice to exchange credit information on all customers who patronize two or more banks or who seek to change their connections. Another practice is to require annual statements from all customers having a line of (say) \$1,000 or more, and to encourage the procuring of statements from all borrowers.<sup>12</sup>

### ✓ The issuing of public statements

It has been and is the practice of a few clearing house associations to require periodic statements from members showing their condition, although very few associations publish such statements. Nearly all clearing house associations, however, give the totals of monthly clearings to the financial press and some also give daily and weekly clearings. Not only does such information give the public some idea of the condition of member banks, but it serves, in a general way, as a basis for judging the general tendencies in business. Such information, combined with the knowledge secured through clearing house bank examinations, also places the clearing house in possession of valuable information so that it is able to detect weaknesses and unwise tendencies before it is too late.<sup>13</sup>

### ✓ Annual conferences

The annual conferences held by representatives of clearing houses date from 1899, being the outcome of resolutions passed by the Michigan Bankers' Association, which, in that year, recommended such conferences to consider the unsatisfactory and confused conditions pertaining to collection and exchange charges. The first conference was held in Cleveland in 1899 with the convention of the American Bankers' Association, and effected a formal organization. In 1905 the organization, which had met annually since 1899, was formally recognized by the American Bankers'

<sup>11</sup>Stanley Young, *op. cit.*, pp. 130-132.

<sup>12</sup>*The Clearing House, etc.*, a pamphlet published by the Clearing House Section of the American Bankers' Association (1923).

Bureaus of Credit have been installed in five clearing house associations: Indianapolis, Chattanooga, Mobile, Allentown, Pa., and Camden, N. J. One county association, the Jasper County Bankers' Association of Missouri, also has such a bureau. See *American Bankers' Association Journal*, Vol. XVII (Oct., 1924), p. 261.

<sup>13</sup>The results of clearing house examinations are not put in possession of other members of the association.

Association in the appointment of a special committee, to which was intrusted the future work of the Clearing House Conferences. In 1906 the Clearing House Section of the American Bankers' Association was organized and this gave the section representation on the executive council of the association. Annual reports as part of the *Proceedings of the American Bankers' Association* have been made since that time. These cover the general activities of the section. For example, in 1907, plans were formulated to reduce to a minimum certain lines of clerical work in clearing house banks by the use of certain forms of remittance sheets, and the adoption of a system of letters and numbers for cities and clearing house banks. Among other things, the section also has been instrumental in creating sentiment in favor of the appointment of clearing house examiners, the suppression of note kiting, the publication of clearing house totals, the country clearing house, the no-protest symbol plan, and uniform counter checks.

**The issue of clearing house loan certificates. Their nature**

Clearing house loan certificates must be distinguished from clearing house certificates. The latter are merely substitutes for specie or currency, and are used by member banks of a clearing house association for the settlement of balances. These certificates constitute claims to currency and obviate the necessity of counting and recounting it. They are issued upon the deposit of currency and are used in ordinary times, solely as a method of economizing time and labor and reducing risk in handling large sums of currency. Clearing house loan certificates, on the other hand, are issued in times of stress upon the deposit of collateral securities. Although both are intended for use in the settlement of balances at the clearing house, the circumstances that call them forth, the results effected by their use, and the parts they have played in banking economy are quite different. Under Section 5192 of the *Revised Statutes*, clearing house certificates for purposes of reserve are deemed to be lawful money in the possession of any association belonging to the clearing house issuing the certificates.<sup>14</sup> Clearing house loan certificates are negotiable, as a rule, only among the members of the association, and originally were not regarded as currency. Ordinarily, they did not pass from bank to bank except in payment of clearing house balances and

<sup>14</sup>*Report of the Comptroller of the Currency* (1907), p. 64; C. F. Dunbar, *Chapters on Theory and History of Banking*, 2nd ed. (New York, 1904), pp. 43-44, 175.

were not seen by the business community. While this has been true in general, it will be seen that there have been important exceptions to the rule.

Clearing house loan certificates have been resorted to as a means of injecting some elasticity into the currency which was not only not elastic, but perversely inelastic. Taking the place of money in settlements at the clearing house, they saved the use of so much cash, which enabled the banks to meet their balances, to make additional loans and discounts, and to meet other obligations, and thus to that extent expand the volume of currency. Although originally designed for use in settlements at the clearing houses only, they were put into actual circulation in some cases after 1893, thus assuming an additional function which at times became quite important.

When the stringency in the money market seemed sufficient, the clearing house association would meet and appoint a so-called loan committee, which, in New York City, usually consisted of five bank officers, to act in concurrence with the president of the clearing house association, who served as *ex-officio* member. The clearing house loan certificates would be taken out by the clearing house members through this committee. It was the duty of the committee to meet each morning at the clearing house and examine the collateral offered as security by the banks and issue the loan certificates thereon in such denominations and proportions as were agreed upon. Cannon says the denominations have varied from 25 cents to \$20,000 in the different associations, and in proportions of 50 to 100 per cent. of collateral deposited.<sup>15</sup> Interest rates varied from 6 to 9 per cent. per annum, payable by the banks to which they were issued, to the banks receiving the certificates in settlement of daily balances. As a result the interest charged against certain banks should exactly equal that credited to certain other banks. The aim was to fix the rate sufficiently high to insure the retirement of the certificates as soon as the emergency which called them forth had passed.

It was not the general practice for all the members to take out loan certificates when such issues were arranged. Some were in such condition that they could weather the storm without them while others were weak and in need of relief. Some banks regarded their use as a reflection upon their standing and refused to apply for them unless driven to it by sheer necessity, while others regarded it as in no way prejudicial to their interests, but, on the

<sup>15</sup>J. G. Cannon, *Clearing Houses* (New York, 1900), p. 82.

contrary, as a proper movement in which all the banks should engage for the general welfare of the community as a whole. It has been the general policy of the members of the New York Clearing House to take out loan certificates regardless of their strength. They have distinguished themselves in this respect and in one instance, when a member bank refused to share the burdens of the associated banks, it was suspended from the privi-

TABLE XIV

Issue of Loan Certificate by New York Banks, 1860-1893<sup>1</sup>

Loan committee of	Date of first issue	Date of last issue	Date of final cancellation	Aggregate issue	Maximum amount outstanding	Rate of interest
1860	Nov. 23, 1860	Feb. 27, 1861	Mar. 9, 1861	\$7,375,000	\$6,860,000	7
1861	Sept. 19, 1861	Feb. 17, 1862	April 23, 1862	22,585,000	21,960,000	6
1862	Nov. 6, 1862	Jan. 9, 1864	Jan. 30, 1864	11,471,000	9,608,000	6
1864	Mar. 7, 1864	April 25, 1864	June 13, 1864	17,728,000	16,418,000	6
1873	Sept. 22, 1873	Nov. 20, 1873	Jan. 14, 1874	26,565,000	22,410,000	7
1884	May 16, 1884	June 6, 1884	Sept. 23, 1886	24,915,000	21,885,000	6
1890	Nov. 12, 1890	Dec. 22, 1890	Feb. 7, 1891	16,645,000	15,205,000	6
1893	June 21, 1893	Sept. 6, 1893	Nov. 1, 1893	41,490,000	38,280,000	6

<sup>1</sup>Report of the Comptroller of the Currency (1907), p. 66; W. W. Swanson, "The Crisis of 1860 and the First Issue of Clearing-House Certificates," *Journal of Political Economy*, Vol. XVI (1908), p. 221.

## Nature of collaterals:

1860—U. S. stocks, Treasury notes, stocks of State of New York.

1861—Temporary receipts of the U. S. for purchase of government bonds.

1863—U. S. or New York State bonds, etc., or temporary receipts as in 1861.

1864—Same as in 1863.

1873—Bills receivable, stocks, bonds, and other securities.

1884—Same as in 1873.

1890—Do.

1893—Do.

leges of the clearing house for more than three months. The total amount of balances is not always paid in clearing house loan certificates by a bank to which such certificates have been issued; a bank may pay all or only part in such certificates with the balance in gold or gold certificates. Clearing house loan certificates have been issued repeatedly in this country as Tables XIV and XV will show.

## The use of clearing house loan certificates in 1860

The crisis of 1860 was brought on by the rupture of business relations between the North and South and aggravated by the suspension of normal trade relations between the East and West. To

appreciate this condition it must be borne in mind that business had been expanding by leaps and bounds during 1859 and never

TABLE XV

Aggregate Issues of Clearing House Loan Certificates, 1873-1896, Inclusive<sup>1</sup>

Year	Association	Aggregate Amount	Year	Association	Aggregate Amount
	New York .....	26,565,000		New York .....	41,490,000
	Philadelphia .....	6,785,000		New Orleans .....	998,000 <sup>2</sup>
	Boston .....	4,800,000 <sup>3</sup>		Boston .....	11,445,000 <sup>4</sup>
1873	Baltimore .....	1,326,000 <sup>5</sup>		Philadelphia .....	10,965,000 <sup>6</sup>
	St. Louis .....	1,472,500 <sup>5</sup>		Baltimore .....	1,475,000 <sup>7</sup>
	New Orleans .....	1,067,000 <sup>3</sup>	1893	Buffalo .....	985,000 <sup>10</sup>
	Cincinnati .....	515,000 <sup>8</sup>		Pittsburgh .....	987,000
1879	New Orleans .....	54,000 <sup>4</sup>		Detroit .....	360,000 <sup>11</sup>
1884	New York .....	24,915,000		Atlanta .....	127,000 <sup>12</sup>
				Birmingham .....	..... <sup>13</sup>
	New York .....	16,645,000		Cincinnati .....	..... <sup>14</sup>
1890	Boston .....	5,065,000	1895	Chatanooga .....	..... <sup>14</sup>
	Philadelphia .....	9,655,000		Boston .....	235,000 <sup>15</sup>
1891	Louisville, Ky... Amt. unknown <sup>9</sup>			Philadelphia .....	8,220,000 <sup>16</sup>
			1896	New Orleans .....	399,000 <sup>16</sup>

<sup>1</sup>Report of the Comptroller of the Currency (1907), p. 66, for the years 1873-1893.

<sup>2</sup>Approximate maximum outstanding at any one time. Cannon, *Clearing Houses*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 491, p. 86.

<sup>3</sup>Cannon, *op cit.*, p. 89.

<sup>4</sup>*Ibid.*, p. 90.

<sup>5</sup>*Ibid.*, p. 95.

<sup>6</sup>Maximum, Cannon, p. 105. A. P. Andrew, "Substitutes for Cash in the Panic of 1907," *Quarterly Journal of Economics*, Vol. XXII (1906), pp. 506-507, gives \$1,029,000.

<sup>7</sup>Cannon says this represents the maximum amount, and that the aggregate was \$11,645,000. *Loc. cit.*, p. 98.

<sup>8</sup>Cannon again says this is the maximum amount and that the aggregate was \$11,470,000. *Ibid.*

<sup>9</sup>Maximum according to Cannon, p. 98.

<sup>10</sup>Aggregate. Cannon, p. 105. The maximum was \$925,000.

<sup>11</sup>Maximum. Cannon, p. 107. A. P. Andrew, *op. cit.*, gives \$500,000.

<sup>12</sup>Maximum. Cannon, p. 109. Had general circulation.

<sup>13</sup>Amount not known. Had general circulation.

<sup>14</sup>Amount not known.

<sup>15</sup>Cannon, pp. 112-113.

<sup>16</sup>Maximum amount. Cannon, p. 113.

in the history of the country had the outlook been more encouraging than in the first few months of the disastrous year 1860. During the fiscal year which ended June 30, 1860, foreign trade

reached the highest mark yet attained.<sup>16</sup> New York City banks had expanded their loans liberally at the beginning of the year, but by October and especially in November after the election of Lincoln, hostility in the South accompanied by fear and distrust in almost every section of the country, disrupted the banking system and threatened a panic. The banks, in general, hesitated to advance loans and obtained from their customers as rapidly as possible the payment of obligations. Call loans commanded 7 per cent., and the paper of some of the best houses went begging at 24 per cent. The banks in the New York Clearing House, on the other hand, wished to extend their loans liberally to check the incipient panic. In order to effect this end and to facilitate the settlement of exchanges among the banks themselves, it was decided by an agreement of November 21, 1860, that any bank in the clearing house association might deposit at its option with a select committee of five members chosen by the association, any amount it desired of its bills receivable, United States stocks, Treasury notes, or approved stocks of the State of New York, and receive in return certificates of deposit, on which it would be required to pay interest at 7 per cent. per annum. These certificates were to be in denominations of five and ten thousand dollars, were to be issued up to 75 per cent. of the value of the securities pledged, and could be used to settle balances at the clearing house only for a period of thirty days from the date of issue.

A creditor bank was obliged to accept each day from the clearing house by this agreement, such a proportion of the certificates offered as its own balance bore to the total amount settled. Under such an arrangement some banks would be unable to maintain their reserves, if certificates of deposit were used to any considerable extent by debtor banks in settling balances. The banks receiving these certificates were themselves obliged to pay out gold on demand to depositors, thus depleting their own reserves and introducing a new kind of paper into their assets. To obviate this difficulty, the specie of the associated banks was pooled and treated as a common fund for their common benefit and protection. The clearing house committee was given power to equalize this common reserve by assessment or otherwise. For this purpose banks were required to make statements each morning before commencement of business to the committee on the following items: (1) Loans and discounts, (2) deposits, (3) loan

---

<sup>16</sup>W. W. Swanson, "The Crisis of 1860 and the First Issue of Clearing-House Certificates," *Journal of Political Economy*, Vol. XVI (1908), *passim*.

certificates, and (4) specie. These data enabled the committee to determine daily which banks were carrying a disproportionate amount of specie in comparison with other banks in the clearing house association. The common specie reserve was then, according to agreement, equalized among the banks by assessment. It was also provided that interest which might accrue upon these certificates, at the expiration of the thirty days, should be apportioned among the banks which had held them during that time. The committee was authorized to exchange any portion of the securities for an equal amount of others, to be approved by them at the request of the depositing bank, and had power to demand additional security either by exchange or by an increased amount. The amount of certificates which the committee might issue was not to exceed five million dollars. On December 3, 1860, it was voted to increase the limit to ten millions, and something over seven millions were issued. After February 1, 1861, every bank in the clearing house association was to have on hand at all times, in specie, an amount equal to one-quarter of its net liabilities, and any bank whose specie fell below that proportion, was not to make loans or discounts until its position was re-established. The banks also agreed not to exchange with any bank which showed by two successive weekly statements that it had violated the agreement.<sup>17</sup>

This meant the virtual fusion of the banks of New York<sup>18</sup> into one central bank and the issue of the certificates marked the turning-point in the panic and postponed the suspension of specie payments which came thirteen months later. The banks extended their loans freely, but the customers usually placed them as deposits on the books of the bank and very little specie was withdrawn. Deposits increased and commercial paper, which formerly could not be sold at 20 per cent. discount, was now marketed freely at 7 to 8 per cent. Although it may be said that there was a suspension of specie payments among the banks since they settled among themselves by the pledge of securities, there was no suspension so far as the public was concerned. The aggregate issue was \$7,375,000; the last certificate was cancelled March 9,

<sup>17</sup>Hunt's *Merchants' Magazine*, Vol. XLIV (1861), pp. 91-92; W. W. Swanson, *op. cit.*, pp. 219-220.

<sup>18</sup>All the New York banks entered into this combination, except the Chemical Bank, an institution with remarkably large and steady deposits and small circulation, which preferred to leave the clearing house rather than throw its large specie into the common stock. C. F. Dunbar, *op. cit.*, p. 82; Hunt's *Merchants' Magazine*, Vol. XLIV (1861), p. 77.



1861, and the total period from the date of first issue was 106 days.<sup>19</sup>

Although there were four other clearing houses established prior to 1860—at Boston, Philadelphia, Baltimore, and Cleveland—they did not resort to clearing house loan certificates. On November 24, the Boston banks followed the example of those of New York in so far as to agree among themselves to discount freely. Banks owing balances at the clearing house were permitted to settle in their own notes up to 50 per cent. of the balances due, in amounts ranging from \$10,000 to \$100,000, according to the capital of the bank tendering them.<sup>20</sup> But they did not make a common fund of their specie, however, as did the banks of New York City. As the banks refrained from mutual demands for specie, they were able to weather the storm.<sup>21</sup> The Baltimore and Philadelphia banks suspended specie payments on November 22; other banks followed in rapid succession especially throughout the South.<sup>22</sup>

#### The New York issues of 1861, 1863, and 1864

The relief afforded by the certificates in 1860 was but temporary for the country soon was plunged into the Civil War, which paralyzed trade and industry and caused great distrust and uncertainty in business in general. As a result, the New York Clearing House Association authorized another issue of loan certificates September 19, 1861. The aggregate issue was \$22,585,000. The last certificates were called April 28, 1862, more than seven months after the date of their first issue. The nature of the collateral, the rate of interest, the maximum amount outstanding at any one time, are set forth in the table above, p. 140. The third and fourth issues of 1863 and 1864, respectively, are also set forth in the same table. These issues were the result of the prolongation of the war, with the consequent unrest in business circles. No more loan certificates were issued until the panic of 1873.

---

<sup>19</sup>Dunbar says \$10,000,000 of such certificates were issued under this agreement, all to be redeemed by February 1, 1861. He is incorrect in this statement according to the *Report of the Comptroller of the Currency* (1907), p. 66.

<sup>20</sup>Hunt's *Merchants' Magazine*, Vol. XLIV (1861), p. 77.

<sup>21</sup>W. W. Swanson, *op. cit.*, p. 222.

<sup>22</sup>According to D. P. Bailey, *The Clearing House System* (New York, 1890), p. 22, there are no records of the Cleveland Clearing House prior to 1877.

### Clearing house loan certificates and the panic of 1873

It was not until the panic of 1873 that other clearing house associations followed the practice of New York and issued loan certificates. New York followed the precedent established in 1860 and was joined by the clearing house associations of Boston, Philadelphia, Baltimore, Cincinnati, St. Louis, and New Orleans.

The severe panic of 1873 affected every operation of finance and commerce. The result of inflation, an enormous railway expansion in anticipation of demand, and the burden of heavy foreign indebtedness largely in the form of interest charges on borrowed money, the panic of 1873 plunged the United States into disaster with little preparation or anticipation by financial interests. When Congress met in December, 1873, demands for government action took every form known to finance. The panic reached its climax in September and was so severe that the New York Stock Exchange closed its doors on September 20 for an indefinite time, although it reopened them ten days later.

The usual resolutions were passed by the New York Clearing House, authorizing the issue of loan certificates, and the first issue was made September 22, 1873.<sup>23</sup> Although the amount was fixed at the outset at \$10,000,000, more than \$26,500,000 were issued in less than four months. But the announcement that the ten millions would be issued, coupled with the announcement that the government would purchase the same amount of bonds, caused a rapid subsidence of the panic and in about three days its most acute stages were over.<sup>24</sup>

Cannon points out that attempts on the part of the business community were made in vain to discover what banks had taken out certificates, but the information was withheld. For more than two months, covering the worst period of the panic, no weekly statements of their condition were made to the clearing house by the banks, the object being to prevent a general knowledge of the weak condition of some of the members, which, if disclosed might have invited runs upon them.

The Boston Clearing House Association on September 27, 1873, voted to suspend currency payments and to appoint a loan committee, with power to issue loan certificates to the amount of \$10,000,000 upon substantially the same basis as at New York. On October 20, the amount outstanding reached its maximum of

---

<sup>23</sup>See table above, p. 140.

<sup>24</sup>Cannon, *Clearing Houses*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 491 (1910), p. 85. Hereafter cited as Cannon, I.

approximately \$4,800,000. Similarly, the Philadelphia Association adopted for the first time the plan of issuing loan certificates by a resolution of September 24, 1873, amended October 18, 1873, with provisions quite similar to those adopted by the New York Clearing House Association in 1860 as set forth above. The maximum amount outstanding at any one time was \$6,285,000, reached on December 1, 1873; the aggregate amount was \$6,785,000. Baltimore began to issue similar certificates on September 24, which amounted in the aggregate to \$1,326,000. The last of these was retired January 2, 1874, one hundred days after the date of the first issue. The St. Louis Association issued its certificates on September 25, and retired them forty-six days later, the aggregate amount having been \$1,472,500. At New Orleans the maximum amount outstanding was \$1,067,000, reached October 10, 1873. The Cincinnati Clearing House Association issued loan certificates during a period of only fourteen days and to the amount of \$515,400, the last of which were cancelled six weeks after the date of the first issue. Among the resolutions issued by the association on September 25 was one that they would follow the plan adopted by New York City, namely, they would not pay out currency on checks, except for small sums, to be optional with the banks and bankers on whom they were drawn; but they would certify checks drawn on balances in their hands, payable through the clearing house only. When such checks were drawn in payment of notes or drafts, the bank holding them was not required to deliver the paper until after the check in payment had been paid to the clearing house.<sup>25</sup>

#### Clearing house loan certificates in 1879, 1884, 1890, and 1891

The next issue of clearing house loan certificates was in 1879, when the New Orleans Association alone issued a small amount—only \$54,000—to satisfy conditions of a purely local character.<sup>26</sup> The year 1884 marked the next issue of such certificates. Although a commercial and financial crisis occurred in that year, resulting largely from an excessive construction of railways, the New York Clearing House Association was the only one which issued loan certificates. The amount taken out was almost as large as that of 1873; the issue beginning early in the year to prevent a widespread panic. The first issue was on May 15, and

<sup>25</sup>Cannon, I, p. 89.

<sup>26</sup>*Ibid.*, p. 90.

reached the maximum of \$21,885,000<sup>27</sup> on May 24. The last certificates were issued June 6, and the last were retired September 23. The aggregate amount was \$24,915,000.

The next six years were free from unusual financial disturbances and as a result no more loan certificates appeared until 1890. Up to midsummer of that year the country had experienced unusual prosperity. But there was an unwholesome tendency to overtrading and expansion which required the extension of large sums of money upon security. Early in the year the deposits in the banks of New York City began to fall off, and by May 17, the shrinkage had amounted to more than \$44,831,000, of which over \$13,500,000 consisted of balances drawn out by banks in the interior and in other reserve cities. Boston, New York, and Philadelphia were the cities subjected to the heavy drains, and to protect themselves they issued loan certificates. New York City took the first action on November 11, 1890. Next day she issued the first certificates and the last issue was December 22. The maximum amount outstanding at any one time was \$15,205,000; the aggregate amount was \$16,645,000.<sup>28</sup> Boston followed on November 19 with loan certificates. The last were issued December 6, and the last issue was cancelled January 6, 1891. The amount issued totaled \$5,065,000. On November 19, Philadelphia also made her first issue, on practically the same plan as followed in 1873. The issue ceased May 22, 1891, the total issue being \$9,655,000, with the maximum of \$8,870,000, which was reached on January 9, 1891. The certificates were all retired, excepting \$170,000 issued to the Keystone and Spring Garden National Banks, institutions which were carried down in the panic.<sup>29</sup>

Louisville, Ky., has the distinction of being the only city in which a clearing house association issued loan certificates in 1891 and peculiarly enough this was the only time the association ever issued loan certificates. The issue was small, the exact amount not being known.

### Clearing house loan certificates and the panic of 1893

Late in 1891 the United States entered again into a period of expansion which resulted in the panic of 1893. Bad harvests in Europe and abundant harvests in the United States stimulated

<sup>27</sup>Cannon says \$21,881,000. *Op. cit.*, p. 90.

<sup>28</sup>See table above, p. 140.

<sup>29</sup>Cannon, I, p. 94.

the farmers and the railways to buying with freedom which was the beginning of a general stimulation in almost all lines of business. In 1892 the situation was different. Crops were poor, prices low and gold exports heavy. These facts, combined with the lowering of the tariff which reduced the revenues of the Treasury, the increased appropriations of Congress, the drainage of the gold reserve to meet not only foreign obligations but to redeem the United States and Sherman notes—the “endless chain”—the collapse of banks in Australia, the failure of the Philadelphia & Reading Railway and the National Cordage Company, destroyed confidence and plunged the country headlong into a panic.<sup>30</sup> By May, bank deposits began to shrink rapidly, by June and July, the mortality among banks was alarming, and by August, a panic of great severity held the country in its grip.

There was no way in which banks could expand their currency. The situation in the reserve and central reserve cities was aggravated by the call of interior banks for their reserves which had been deposited in those cities. The interior banks got into trouble first and sporadic failures, multiplying here and there, gradually forced other banks, and finally the New York banks, to a temporary restriction of payments.<sup>31</sup> Thus was manifested one of the outstanding defects of the old National Banking System, the pyramiding of reserves. Clearing house loan certificates were again resorted to as the best means of staying the force of the panic. Eight cities were reported to have employed loan certificates of large denominations for use in settling clearing house balances.<sup>32</sup>

New York began to issue the certificates June 21, 1893; the last issue was September 6; the date of final cancellation, November 1; and the aggregate issue, \$41,490,000, an issue of unprecedented size. New Orleans followed New York on June 22, under joint agreement and responsibility as contrasted with the usual individual responsibility. The largest amount outstanding at any one time was \$998,000. Boston began to issue loan certificates June 27, bearing 7.3 per cent. interest. The aggregate issue was \$11,645,000 and the maximum at any time \$11,445,000. They were cancelled by October 21. Philadelphia issued an aggregate amount of \$11,470,000, the largest amount outstanding at any

<sup>30</sup>See W. C. Mitchell, *Business Cycles* (University of California, 1903), pp. 51-58.

<sup>31</sup>A. P. Andrew, “Substitutes for Cash in the Panic of 1907,” *Quarterly Journal of Economics*, Vol. XXII (1908), p. 513.

<sup>32</sup>See Table XV above, p. 141.

time being \$10,965,000. The maximum amount outstanding at any time in Baltimore was \$1,475,000. Buffalo banks issued an aggregate of \$985,000. Pittsburgh issued \$987,000 in the aggregate. The first was issued on August 11, and the last retired on September 15. Detroit had a maximum outstanding of \$360,000; Atlanta a maximum of \$127,000. Atlanta's certificates were distinguished from those mentioned above in the fact that they circulated outside of the banks and were received on deposit or in payment of debts due any bank in the clearing house. This was the first time that clearing house loan certificates in currency denominations, to be used by banks in paying their customers, were ever issued.<sup>33</sup> Birmingham also issued loan certificates for general circulation in denominations as small as \$2, \$1, 50 cents, and 25 cents. No other association in the United States had previously made issues which compared with the one at Birmingham in the comprehensiveness of its currency system and the extent to which it was developed on this occasion. Cincinnati and Chattanooga also resorted to loan certificates, but the amount issued is not known.

In cities in which there were no clearing houses an emergency currency, under the name of "clearing-house certificates," was issued by banks associated together. These certificates were temporary loans made by the banks associated together and pledged for their redemption. They were in small denominations and peculiar to the Southeast. The denominations and cities were: Albany, Ga., \$10, \$5, and \$1; Chester, S. C., \$10, \$5, and \$1; Columbia, S. C., \$50, \$20, \$10, \$5, \$2, and \$1; Newman, Ga., \$10, \$5, and \$1; and Rock Hill, S. C., \$5, \$2, and \$1. They afforded relief to the public and accomplished results similar to those accomplished by actual clearing house loan certificates in larger cities.<sup>34</sup>

#### Loan certificates in 1895 and 1896

Certain localities experienced a depression in 1895. Boston felt such pressure that the clearing house association issued loan certificates to the amount of \$235,000, the last of which were retired March 12, 1896. In a similar manner Philadelphia made an issuing aggregating \$8,220,000.<sup>35</sup> In 1896, New Orleans issued clearing house loan certificates. The largest amount outstand-

<sup>33</sup>A. P. Andrew, *op. cit.*, p. 507; John DeWitt Warner, "The Currency Famine of 1893," *Sound Currency*, Vol. II, No. 6 (New York, 1895), p. 6.

<sup>34</sup>Cannon, I, p. 112.

<sup>35</sup>*Ibid.*, p. 113.

ing at any time being \$399,000. Cannon says the excitement due to the presidential contest in that year was the disturbing factor which occasioned the issue. This seems to have been the last issue until the panic of 1907.

#### **Loan certificates and other currency substitutes issued during the panic of 1907**

The panic of 1907 was a violent manifestation of an international crisis which terminated the period of business expansion in Europe and America in 1905-1906. The defective currency system was undoubtedly the chief contributing factor. Business was being done by the modern system of bank credits with inadequate machinery for readily converting bank credits into cash. The crisis antedated the panic by several months. While the panic came in March with a second crash in August, 1907, a recession in the prices of raw materials began in the spring and early summer of the preceding year. Unsold stocks accumulated and forced large industrial enterprises into the hands of receivers in June, August, and October. The investment market for loans became more and more stringent. Prices fell rapidly on the Stock Exchange and acute trouble began when suspicion was directed against certain New York banks, controlled by a group of financiers who were believed to have suffered heavy losses through the decline in the prices of copper stocks. The run on the Knickerbocker Trust Company, October 22, precipitated the panic which carried down with it other financial houses with the usual attending phenomena. From New York as a center the panic spread rapidly over the country. The banks of the country, it seems, had never suspended payments with quite the same simultaneity as in 1907.

Clearing house loan certificates were again resorted to, but, in addition, several other expedients were adopted.<sup>36</sup> It had been hoped and expected in New York that the fact that the New York Clearing House had announced its intention to support the associated banks, would be sufficient to tide the banks over the crisis. Several of the banks applied for and received assistance through the joint action of many of the banks, which advanced cash, receiving therefor participating certificates, for which the clearing house held the collateral security. The drain upon all the banks was exceedingly severe, and it became apparent that aid would be solicited soon by other members of the association. For this rea-

<sup>36</sup>For other remedies adopted, see Mitchell, *Business Cycles*, p. 78.

son the loan certificates were issued. The first issue was on October 26, 1907. Most of the clearing house associations of the country met about the same time and made provision for the issue of some form of instrument that would aid in relieving the existing conditions, and in the majority of cases certificates were issued varying in rates of interest from 5 to 10 per cent., and were issued for from 50 to 80 per cent. of the collateral deposited to secure them. Although Cannon thought it impossible to estimate the amount of these instruments outstanding at any one time, he thought it safe to assert that more than \$250,000,000 were issued during the panic in addition to which some of the railroads and larger industrial concerns issued checks of various denominations to pay wages of employees, all of which, he concluded, served well the purpose for which they were issued.<sup>87</sup>

The variations in the types of issues almost defy classification. Table XVI below classifies the issues of 1907 under five main heads. However, there were other variations that should be mentioned and a more complete classification would be as follows: (1) Clearing house loan certificates in large denominations for the settlement of bank balances, (2) clearing house loan certificates in small denominations for general circulation, (3) clearing house checks in convenient denominations for general circulation, (4) cashiers' checks in convenient denominations payable only through the clearing house, (5) certificates of deposit in convenient denominations, (6) drafts on reserve banks, and (7) pay checks payable to bearer. In addition, other expedients were resorted to as (1) official encouragement of suspension, (2) limiting the size of checks to be paid, (3) the practice of requiring the larger customers of the banks to mark their checks "payable only through the clearing house," and (4) the plan of group No. 2 of the Ohio Bankers' Association.

### Clearing house loan certificates in large denominations

It would be unprofitable to make a detailed study of the particular issues of clearing house loan certificates in large denominations further than to mention briefly some of the most typical and outstanding cases. Mr. A. P. Andrew says that in 1900 there were 147 cities with populations of 25,000 or over and that out of 145 of these which reported to him in 1908, 42 issued clearing house loan certificates in large denominations to settle bank bal-

<sup>87</sup>J. G. Cannon, *Clearing Houses and the Currency* (Columbia University Press, 1908), pp. 112-113. Hereafter cited as Cannon, II.



ances at the clearing houses; 22 of the 145 issued loan certificates of small denominations for general circulation; and 51 issued either or both.<sup>38</sup>

On October 26, the New York Clearing House Committee first issued \$11,235,000 of loan certificates to take care of the participating receipts given for loans advanced the preceding week. The final issue was on January 30, 1908; while final cancellation was on March 28, 1908. The aggregate issue was \$101,060,000 and the maximum amount outstanding at any one time was \$88,420,000. During this period \$453,000,000 of collateral passed through the hands of the committee, of which \$330,000,000, or 72.92 per cent., consisted of commercial paper, and \$123,000,000, or 27.08 per cent., of stocks, bonds, and short-time railroad and other similar notes. The smallest amount issued to any bank was \$250,000; the largest amount, \$17,000,000, an amount of certificates greater than the aggregate issue of any individual clearing house in the United States with the exception of Chicago.<sup>39</sup> The issues of clearing house loan certificates in New York also provided credit with which the banks were enabled to buy and pay for large amounts of the Panama bonds and United States certificates of indebtedness which were issued by the government as a measure of relief. The bonds and certificates so purchased were then placed on deposit in Washington, as security for new national bank note circulation. In this manner the issue of clearing house loan certificates made it possible to secure more circulation.

Aid was extended also to the trust companies of the city by permitting them to borrow from clearing house banks with which they did business, on their own notes secured by collateral which they permitted the clearing house banks to hypothecate with the New York Clearing House Association and for which they received clearing house loan certificates in return. This relieved the trust companies of great embarrassment.<sup>40</sup>

Chicago followed New York on October 28 or 29 with its first issue of clearing house loan certificates. They differed from those issued by New York as the agreement under which Chicago's certificates were issued was amended on November 6, and again on November 9, authorizing the substitution of checks in denominations of \$1, \$2, \$5, and \$10, as desired. These were designed to circulate to the extent of \$7,500,000 and were secured by clearing

---

<sup>38</sup>A. P. Andrew, *op cit.*, p. 501.

<sup>39</sup>See Table XVI below, pp. 156-157.

<sup>40</sup>Cannon, II, pp. 112-113.

house loan certificates which, in turn, were secured by 133 per cent. of good collateral.<sup>41</sup> Boston issued only long-time certificates. For the period beginning October 28 and ending January 24, she issued \$12,595,000. According to Cannon, Philadelphia began to issue such certificates as early as September 24, and issued an aggregate amount of \$13,695,000. Other types also appeared there. The table should be consulted for a further list of the cities which made such issues.

#### **Clearing house loan certificates in small denominations for general circulation**

Mr. A. P. Andrew estimated that out of 145 cities with a population of 25,000 or over, at least 22 issued loan certificates in small denominations for general circulation. Table XVI, however, lists 26 cities with a population of 25,000 or over, and Table XVII lists 34 more with a population of less than 25,000 that made such issues. It is obvious that this information must be very uncertain and incomplete.

The Los Angeles Association issued not only clearing house loan certificates in large denominations, but also a peculiar issue designed for general circulation and called "clearing house circulating certificates or scrip." Their purpose was identical with that of the clearing house checks issued by other associations and closely resembled them except that they were more elaborate in form. Both types of issues were directly secured by collateral, the former to the extent of 133 per cent., and the latter by securities valued at 200 per cent. of the amount issued. This was unlike the practice followed by most clearing house associations which issued both types. The usual practice was to secure the checks by the deposit of loan certificates, which were secured by collateral. The Kansas City, Missouri, Association, like that of Los Angeles, issued both types, each directly secured by collateral.

The Fargo, North Dakota, Clearing House Association issued loan certificates in denominations of \$5, \$10, \$20, \$100, and \$500, payable on or before three months after date and only up to 50 per cent. of the deposited collateral. The Harrisburg, Pennsylvania, Association issued what it called "Certificates of Indebtedness" stating that the association was indebted to the bearer to the sum of \$1, the payment being guaranteed by members of the Harrisburg and Steelton Associations, but payable only through the Harrisburg Clearing House. On the reverse

---

<sup>41</sup>Cannon, I, pp. 121-123. Cannon's data do not harmonize with Table XVI.

side were found the following words printed in English, Polish, Hungarian, and Italian: "This check may be deposited but will not be paid in cash."<sup>42</sup> Examples will not be multiplied. Regarding both types of loan certificates, Mr. Andrew pointed out that upon no previous occasion had banks of so many cities resorted to clearing house loan certificates for the settlement of their mutual obligations; never before had they issued them in such large amounts, nor for such long periods of time; and never had these certificates been so extensively issued in small denominations to meet ordinary bank obligations in lieu of cash.<sup>43</sup>

#### **Clearing house checks in convenient denominations for general circulation**

Like the loan certificates of general circulation, clearing house checks were issued by the associations to member banks upon the deposit of approved securities and were accepted for deposit in any of the banks, but were payable only through the clearing house. They were in currency denominations and were often very elaborately engraved in order to resemble currency. However, they were unlike the loan certificates in the fact that instead of merely certifying indebtedness on the part of the clearing house association, they took the form of checks drawn upon particular banks, and were signed by the manager of the clearing house. In Chicago a bank desiring such checks, deposited with the clearing house a corresponding amount of the ordinary loan certificates of large denominations, and received the checks in currency denominations in exchange. They were also issued in Cleveland, Milwaukee, and some smaller cities.<sup>44</sup>

#### **Cashiers' checks issued in convenient denominations and payable only through the clearing house**

National banks and State banks, despite the 10 per cent. tax law, issued these checks in convenient denominations, which circulated virtually as bank notes. Such checks usually purported to be "payable to bearer," but they were "payable only through the clearing house," or in "clearing house funds". Sometimes they were secured by the deposit of approved collateral with a committee of the clearing house, but in the small towns of the middle

<sup>42</sup>Cannon, *Clearing House Loan Certificates and Substitutes for Money Used During the Panic of 1907*. Address delivered before the Finance Forum, New York City (March 30, 1910), p. 13.

<sup>43</sup>A. P. Andrew, *op. cit.*, p. 501.

<sup>44</sup>*Ibid.*, p. 510.

West they were commonly issued directly by the individual banks. Occasionally an apparent effort was made to circumvent their illegality by making them payable to a supposed person. In St. Louis, Mo., and Muskogee, Okla., they were payable to "John Smith, or bearer"; in Memphis, Tenn., to "Richard Roe, or bearer."<sup>45</sup>

The Cincinnati Clearing House issued similar checks beginning October 28, 1907, to the extent of about \$2,000,000. They were in denominations of \$2, \$5, \$10, and \$20 and were issued to each of the fourteen clearing house banks on the security of high-class collateral which exceeded the amount of the checks issued by more than 20 per cent. Over three hundred merchants whose names were published in the papers indicated their willingness to cash such checks and in some instances a premium as high as 5 per cent. was allowed for cash purchases made and settled by these checks. As soon as the currency situation became normal again they practically retired themselves.<sup>46</sup>

At Canton, Ohio, a manufacturing center, which required large amounts of cash for payrolls, an agreement was made between the bankers and their manufacturing clients by which pay checks were to be used. The banks supplied their customers with these in a general form in denominations of \$5, \$10, and \$20, made payable to the bearer through the clearing house. In using them for purchases with the trades people, they were found to be an easy means of exhausting the supply of cash which the stores were obliged to give in change when small purchases were made. As a result, clearing house checks, or cashier's checks payable to bearer through the clearing house only, were issued to the extent of about \$200,000 in denominations of \$1, \$2, \$5, and \$10. These checks had no collateral security back of them and were accepted purely on the responsibility of the issuing bank. Similar checks were issued by Council Bluffs, Ia., Denver, Colo., and other cities, as indicated in Table XVI.

### Certificates of deposit

In a few instances the banks issued currency in the form of negotiable certificates of deposit in convenient denominations. Sometimes the certificates asserted that a particular person or company had a deposit and sometimes the assertion was in general terms, as "This is to certify that there has been deposited with the

---

<sup>45</sup>A. P. Andrew, p. 510.

<sup>46</sup>Cannon, I, p. 127.

First National Bank of Berkeley, Cal., 5 dollars".<sup>47</sup> In some cases they were interest bearing and payable after the expiration of a certain period; in others they were immediately acceptable by the issuing bank through the clearing house and bore no interest. They seem to have been found only in a few cities and those with population of 25,000 or less.<sup>48</sup>

#### **Drafts on reserve banks**

The banks of Birmingham, Ala., issued drafts on New York City in denominations of \$1 and upward, which were used for pay-rolls and general circulation in that locality. They were drawn against actual balances held by particular New York correspondents and were payable through the New York Clearing House. Such a practice seems to have been peculiar to Birmingham. They were not unlike cashiers' checks "payable in exchange".<sup>49</sup>

#### **Pay checks payable to bearer**

These checks were drawn by such bank customers as railways, mining companies, manufacturers, storekeepers, etc., upon their banks in currency denominations and used in all parts of the countries in payment of wages and in settlement of other commercial obligations. They were generally "Payable only through the Clearing House," but differed from cashiers' checks and clearing house checks in the fact that, unlike the latter, they were not a liability of the clearing house association but of the firm or corporation for whose benefit they were drawn.

The pay check reached its largest development in Pittsburgh, \$47,000,000 being issued there during the panic of 1907. Many of them were in denominations of \$1 and \$2. Their issue involved much labor to the clearing house, to the banks, and to corporations using them. They came to banks by the basketfuls, requiring many extra clerks working far into the night to assort them. Where concerns issued them it was found that clerks could not sign over 400 to 500 checks in eight hours; since 30,000 to 40,000 checks were issued semi-monthly, the tremendous amount of labor can be appreciated. It is surprising that such checks were so readily accepted in lieu of cash by shops, stores, places of amuse-

---

<sup>47</sup>Andrew, p. 511.

<sup>48</sup>See Table XVII.

<sup>49</sup>Andrew, p. 511.

State	City	Amount	Date	Rate	Notes
San Antonio, Tex.	A	453,650	Nov. 1, '07	\$50 per day	Discretionary
		344,000	Nov. 1, '08		
San Francisco, Cal.	A	251,500	Oct. 29, '07	\$100 per customer	\$100 with discretion
		12,389,000	Nov. 4, '07		
Savannah, Ga.	B	7,890,000	Nov. 4, '07		Only savings accounts
		265,000	Nov. 4, '07		
Seattle, Wash.	A	1,700,000	Nov. 4, '07		\$25 to Dec. 10, then \$50
		1,150,000	Nov. 8, '07		
Sioux City, Ia.	D	245,000	Oct. 28, '07		Discretionary
		Amount not obtainable	Nov. 10, '07		
South Bend, Ind.	B	120,000	Nov. 10, '07		Only savings accounts, \$25
		669,000	Nov. 1, '07		
Spokane, Wash.	A	1,407,000	Nov. 1, '07		Discretionary
		Amount not obtainable	Nov. 7, '07		
Superior, Wis.	D	500,000	Nov. 7, '07		Only savings accounts, \$25
		Amount not obtainable	Nov. 7, '07		
Tacoma, Wash.	A, B	40,000	Nov. 14, '07		Discretionary
		Amount not obtainable	Nov. 14, '07		
Taunton, Mass.	D	195,000	Nov. 8, '07		Discretionary
		Amount not obtainable	Nov. 8, '07		
Topeka, Kan.	B	173,000	Nov. 8, '07		Discretionary
		Amount not obtainable	Nov. 8, '07		
Wheeling, W. Va.	A	43,000	Nov. 8, '07		Discretionary
		Amount not obtainable	Nov. 8, '07		
Wichita, Kan.	B	264,500	Nov. 20, '07		Only savings accounts, \$25
		Amount not obtainable	Nov. 20, '07		
Wilmington, Del.	D	276,500	Nov. 20, '07		Discretionary
		Amount not obtainable	Nov. 20, '07		
Youngstown, Ohio	B	490,000	Nov. 22-Dec. 11		Discretionary
		Amount not obtainable	Nov. 22-Dec. 11		

Total ..... \$830,066,223

\*Circulation.

A—Clearing-house loan certificates in large denominations for the settlement of bank balances. B—Clearing-house loan certificates in small denominations for general circulation. C—Clearing-house checks in convenient denominations for general circulation. D—Cashiers' checks in convenient denominations payable only through the clearing house, and usually secured by the deposit of collateral with the clearing house. E—New York exchange in convenient denominations for general circulation. F—Certificates of deposit in convenient denominations. G—Pay-checks in convenient denominations payable to bearer, and only through the clearing-house.

<sup>1</sup>A. P. Andrews, "Substitutes for Cash in the Panic of 1907," *The Quarterly Journal of Economics*, Vol. XXII (Aug., 1908) p. 502. Courtesy of *The Quarterly Journal of Economics*.



ment, etc. But this was done despite their variety, liability to counterfeit, and their general lack of security.<sup>50</sup>

The Philadelphia Clearing House Association, in addition to issuing the loan certificates, also made special arrangements to care for checks which were being used by employers in making payments to employees. On account of the temporary scarcity of currency, employers found it necessary to make payments of wages in pay checks, payable through the clearing house rather than in cash. The clearing house association thought such checks should be rendered as readily available as possible, and consequently, by a resolution on November 16, recommended that such payroll checks made payable through the clearing house should be certified before issue by the banks upon which they might be drawn; that no such checks should be certified by any member of the association unless furnished by the American Banknote Company in the form approved by the clearing house association; that they should be furnished only to members of the association upon application to the clearing house association; that members of the association, before certifying such checks, should open a payroll account for the depositor to whom such checks were to be issued and to which account the checks were to be charged when paid; and finally, that returns of the amount of checks issued and outstanding, as shown by the balance to the credit of payroll account, should be made daily to the clearing house committee by the banks which had accepted and certified them.<sup>51</sup> The amount issued in Philadelphia is not known. Duluth and New York seem to have been the only other cities in which they were issued.

TABLE XVII

Currency Substitutes in Cities of Less than 25,000 Inhabitants, 1907<sup>a</sup>

Cities	Kind of Device	Total Amount Issued	Date of First Issue	Date of Retirement
Atchison, Kan. ....	D	40,000	Nov. 1, '07	Jan. 1, '08
Bainbridge, Ga. ....	B	125,000	Nov. 6, '07	Mar. 1, '08
Berlin, N. H. ....	D	Amount not obtainable.		
Berkeley, Cal. ....	F	34,000	Nov. 5, '07	Jan. 10, '08
Bishop, Ga. ....	B	Amount not obtainable.		
Blakely, Ga. ....	B	Amount not obtainable.		
Brunswick, Ga. ....	B	109,000	Nov. 6, '07	Mar. 28, '08
Columbia, S. C. ....	B	250,000	Oct. 24, '07	Mar. 1, '08
Columbus, Ga. ....	B	320,000	Nov. 1, '07	Jan. 22, '08
Danville, Va. ....	B	617,200	Oct. 30, '07	Jan. 9, '08
Dawson, Ga. ....	B	45,000		
Douglas, Ga. ....	B	50,000	Nov. 1, '07	Mar. 1, '08
Fargo, N. D. ....	B	33,500	Oct. 29, '07	Jan. 18, '08

<sup>a</sup>Andrew, pp. 512-513.<sup>b</sup>Cannon, I, pp. 124-125.



TABLE XVII—(Continued)

Cities	Kind of Device	Total Amount Issued	Date of First Issue	Date of Retirement
Gadsden, Ala. ....	B	8,000	Nov. 15, '07	Jan. 1, '08
Gaffney, S. C. ....	B	20,000	Nov. 11, '07	Jan. 1, '08
Greensboro, N. C. ....	B	39,100	Nov. 4, '07	Jan. 25, '08
Greenwood, S. C. ....	B	Amount not obtainable.		
Guthrie, Okla. ....	F	Amount not obtainable.		
Hastings, Neb. ....	{ B F	7,713	Oct. 28, '07	Dec. 20, '07
Hattiesburg, Miss. ....	D	40,000	Oct. 1, '07	Dec. 15, '07
Henderson, Ky. ....	C	82,000	Oct. 30, '07	Jan. 9, '08
Iron River, Mich. ....	D	24,000	Nov. 12, '07	Dec. 24, '07
Jackson, Ga. ....	B	Amount not obtainable.		
Key West, Fla. ....	B	Amount not obtainable.		
Kalamazoo, Mich. ....		Customers asked to make checks payable in exchange.		
Las Vegas, N. M. ....	B	30,000	Nov. 1, '07	Dec. 31, '07
Lynchburg, Va. ....	B	381,000	Nov. 18, '07	Jan. 13, '08
Macon, Ga. ....	B	325,000	Nov. 4, '07	Jan. 31, '08
Milledgeville, Ga. ....	B	Amount not obtainable.		
Muskogee, Okla. ....	D	Amount not obtainable.		
Newman, Ga. ....	B	Amount not obtainable.		
New Carlisle, Ind. ....	D	Amount not obtainable.		
Oklahoma, Okla. ....	A, B	200,000	Nov. 1, '07	Jan. 1, '08
Ogden, Utah ....	D	circ. 275,000	Nov. 1, '07	Dec. 31, '08
Rome, Ga. ....	B	120,000	Nov. 1, '07	Jan. 10, '08
Sedalia, Mo. ....	D	100,000	Nov. 15, '07	Jan. 15, '08
South Boston, Va. ....	B	100,000	Nov. 5, '07	
Sylvester, Ga. ....	B	Amount not obtainable.		
Tampa, Fla. ....	B	125,000	Nov. 22, '07	Feb. 1, '08
Thomaston, Ga. ....	B	10,000	Oct. 28, '07	Mar. 1, '08
Thomasville, Ga. ....	B	40,000	Nov. 1, '07	Jan. 1, '08
Tifton, Ga. ....	B	50,000	Nov. 6, '07	Feb. 15, '08
Valdosta, Ga. ....	B	100,000	Nov. 1, '07	circ. Feb. 1, '08
Vicksburg, Miss. ....	B	170,000	Nov. 23, '07	Apr. 25, '08
Virginia, Minn. ....	D	200,000	Nov. 10, '07	Dec. 20, '07
Waycross, Ga. ....	B	Amount not obtainable.		
Willacoochee, Ga. ....	B	Amount not obtainable.		
Winston-Salem, N. C. ....	F	350,000	Nov. 1, '07	circ. Jan. 1, '08
Total .....		4,420,513		

A—Clearing-house loan certificates in large denominations for the settlement of bank balances. B—Clearing-house loan certificates in small denominations for general circulation. C—Clearing-house checks in convenient denominations for general circulation. D—Cashiers' checks in convenient denominations payable only through the clearing house, and usually secured by the deposit of collateral with the clearing house. F—Certificates of deposit in convenient denominations.

<sup>1</sup>A. P. Andrew, *op. cit.*, p. 505. Courtesy of *The Quarterly Journal of Economics*. This information is known to be very fragmentary. Some towns were known to have issued emergency currency from which no information could be elicited and many more undoubtedly employed emergency currency. As a result this table probably represents but a small fraction of what actually existed in the smaller localities of the country during the panic.

### Official encouragement of suspension

Official encouragement of suspension was an expedient resorted to in several States in order to meet the panic conditions.

Legal holidays were declared by governors, especially in the western States, which were intended to authorize banks, as well as other firms and individuals, to decline payment when unduly pressed or whenever they saw fit. The governor of Nevada was the first to resort to this measure on October 24, and he was followed quickly by the governors of Oregon and California.

#### **Limiting the size of checks to be paid**

In some States, banks limited the size of the checks to be paid at any particular time. The limitations varied from \$10 to \$300. This practice was common in Indiana where only partial payments were made to depositors. The attorney-general ruled that the practice was not a violation of the law. Banks in Iowa, Oklahoma, and Wisconsin did likewise. In 53 cities, with a population of 25,000 or over, depositors were not subjected to restrictions of payments and no resort was made to emergency devices.<sup>52</sup>

#### **The practice of requiring the larger customers to mark their checks "Payable only through the Clearing House"**

This was another expedient resorted to by banks in several cities in order to protect themselves from loss of cash especially where the checks were sent out of town and might be presented for collection through the agency of express companies.

In the following cities of 25,000 or more inhabitants such restrictions were practiced:

Allentown, Pa.	Mobile, Ala.
Bay City, Mich.	New Haven, Conn.
Binghamton, N. Y. <sup>53</sup>	Oshkosh, Wis.
Dayton, Ohio (one trust company)	Pawtucket, R. I.
Erie, Pa.	Reading, Pa.
Evansville, Ind. <sup>54</sup>	Saginaw, Mich.
Fall River, Mass. <sup>55</sup>	Springfield, Mass.
Gloucester, Mass.	Syracuse, N. Y. <sup>56</sup>
Hartford, Conn.	Woonsocket, R. I.
McKeesport, Pa.	York, Pa.

#### **The plan of Group No. 2 of the Ohio Bankers' Association**

In an effort to overcome the disastrous consequences resulting from false rumors in times of stress and to prevent runs on banks

<sup>52</sup>Andrew, p. 503. Andrew also states that there were only six States in which there were no restrictions or substitutes for cash, but his own tables disprove the statement as some of the States named as being immune were included in his tables. The fact that so few escaped, however, shows how widespread was the panic.

<sup>53</sup>In these cities customers sending checks out of town were asked to make their checks payable only through the clearing house in order to prevent their collection by express. Andrew, p. 502.

worthy of assistance, a plan was adopted for the mutual protection of the associated banks of Group No. 2 of the Ohio Bankers' Association.

This group included the banks in the following Ohio counties: Allen, Anglaize, Darke, Hancock, Harden, Logan, Mercer, Miami, Paulding, Putnam, Shelby, and Van Wert. This plan is worthy of notice since it offers the first concrete example of banks uniting in any particular section of any State in an effort to overcome panic conditions.

The agreement provided for three trustees who were to enforce the provisions. This board of trustees was given authority to grant relief to any member bank or banker if satisfactory assets were turned over to the board. The amount to be advanced could not exceed 60 per cent. of the cash value of the assets; all advances were to be repaid within sixty-five days, and were to bear 8 per cent. interest. Such advances could take the form of gold, silver, currency, or checks, if so determined by the executive committee of the group. When relief was granted to any bank the burden was to be apportioned among the member banks according to resources. Failure to assume its share of burden resulted in the forfeiture of the member bank's rights under the agreement; failure to repay the amount received by the relieved bank made it liable to suit by the board of trustees. No bank securing such relief could make any loans or discounts until the relief had been repaid.<sup>54</sup>

### A general summary

Surveying the record as a whole, Mr. Andrew offers the following definite data for \$334,000,000 of emergency currency issued during the panic of 1907, classified as follows:

Clearing house certificates (large) .....	\$238,000,000
Clearing house certificates (small) .....	23,000,000
Clearing house checks .....	12,000,000
Cashiers' checks .....	14,000,000
Manufacturers' pay checks .....	47,000,000
Total .....	<u>\$334,000,000</u>

He thinks the estimate of the total issue of substitutes for cash issued during the panic may be placed safely above \$500,000,000.<sup>55</sup>

<sup>54</sup>Cannon, I, pp. 131-135.

<sup>55</sup>Andrew, *op. cit.*, p. 515.

**Did the currency substitutes violate the 10 per cent. tax provision of the Act of 1865?**

Clearing house loan certificates have been criticized on the ground that they were issued in violation of the 10 per cent. tax on banknote currency other than national banknote currency, and the provision of the National Bank Act which states that no national banking association shall issue "any other note to circulate as money than such as are authorized by the provisions of this title."<sup>68</sup> This criticism becomes pertinent when such loan certificates find their way into general circulation as was the case in the southeastern part of the United States in 1893, and in other parts of the United States in 1907. But since they were looked upon as strictly emergency currency and retired as soon as possible they escaped taxation, although technically subject to the tax. Most of the substitutes for cash which were issued during the panic of 1907 and which for two months or more furnished the principal means of payment for the greater part of the country, were illegal and subject to the 10 per cent. tax. But no one thought of prosecuting or collecting the tax. As most of it bore the words "Payable only through the Clearing House," its holders could not demand payment for it in cash. In nature it was convertible paper issued without the sanction of law.

Where the certificates did not circulate outside the clearing house associations, they were essentially loans made by the banks, banded together as a clearing house association, to members of the association, for the purpose of settling balances due to each other. In nature they were due-bills.

**Clearing house loan certificates in 1914**

With the outbreak of the War in 1914, this country experienced another strain on its financial machinery which called forth loan certificates once more. The Federal Reserve System was too young and unorganized to meet the sudden stress. Nor did the emergency currency under the Aldrich-Vreeland Act meet the immediate needs of the banks.

Inquiries were sent to one hundred clearing houses by the Comptroller of the Currency and as a result he learned that certificates were issued by the twelve clearing houses listed in the following table:

---

<sup>68</sup>Section 5183 as amended 1875; Act, June 3, 1864, c. 106, sec. 23; 13 Stat. L., 106; Act, Feb. 18, 1875, c. 80; 18 Stat. L. 320.

## CLEARING AND COLLECTION OF CHECKS

TABLE XVIII<sup>1</sup>

Clearing Houses	First issue	Last issue	First cancellation	Final cancellation	Aggregate issue	Maximum amt. outstanding	Date of maximum amt. outstanding
New York .....	Aug. 3	Oct. 15	Aug. 26	Nov. 28	\$124,695,000	\$109,185,000	Sept. 25
Chicago .....	Aug. 4	Oct. 14	Oct. 2	Dec. 14	42,190,000	41,890,000	Oct. 14
Philadelphia .....	Aug. 3	Oct. 2	Oct. 16	Nov. 28	11,530,000	11,530,000	Oct. 2-16
Boston .....	Aug. 4	Oct. 5	Oct. 7	Nov. 24	11,385,000	11,385,000	Oct. 5-6
St. Louis .....	Aug. 5	Sept. 2	Sept. 8	Dec. 10	10,805,000	10,725,000	Sept. 2-7
Baltimore .....	Aug. 4	Sept. 15	Aug. 13	Dec. 9	2,350,000	2,235,000	Aug. 15-26
New Orleans .....	Aug. 4	Aug. 5	Aug. 23	Oct. 23	2,150,000	2,150,000	Aug. 5-23
St. Paul .....	Aug. 5	Aug. 18	Aug. 29	Nov. 7	2,040,000	2,040,000	Aug. 18-29
Minneapolis .....	Aug. 6	Aug. 29	Sept. 30	Nov. 5	1,915,000	1,915,000	Aug. 29-Sept. 29
Detroit .....	Aug. 5	Aug. 13	Oct. 8	Nov. 9	1,350,000	1,350,000	Aug. 13-Oct. 7
Louisville .....	Aug. 5	Aug. 5	Dec. 1	Dec. 1	1,200,000	1,200,000	Aug. 5-Dec. 1
Des Moines .....	Aug. 6	Aug. 15	Aug. 15	Nov. 7	168,000	159,000	Aug. 15
<b>Total .....</b>					<b>\$211,778,000</b>	<b>\$195,754,000</b>	

<sup>1</sup>Report of the Comptroller of the Currency, Vol. I (1915), pp. 102-103.

In New York City the certificates were first issued August 3, 1914; the last issue was October 15; and the aggregate amount authorized was \$124,695,000. The last cancellation was November 28, 1914; the largest amount outstanding at any one time was \$109,185,000 which was on September 25. Certificates were issued to 44 of the 61 members of the association, who paid 6 per cent. interest, amounting to \$1,497,534.16, which was disbursed to the members holding the certificates.<sup>57</sup>

The issue of loan certificates in 1914 marks the last issue up to date. It is expected that the necessity for them has been removed since the Federal Reserve System is able to supply a more elastic deposit and note currency due to the fact that it has concentrated and rendered mobile a large proportion of the banking reserves of the country, provided rediscount facilities for member banks, created a more effective clearing and collection system, and introduced a new form of note currency. If enough elasticity has been secured to obviate the necessity of any future issues of clearing house loan certificates, then one of the important functions exercised by the clearing house associations in the past will have passed away. Elasticity is one of the most desirable attributes of a currency system, and while our currency prior to the inauguration of the Federal Reserve System was notoriously inelastic, conditions would have been much worse had it not been for clearing house loan certificates. With the exception of the provision for the Aldrich-Vreeland notes (1908-1915), these clearing house loan certificates provided the only means of injecting any elasticity into the old currency system.

---

<sup>57</sup>For additional data on the issue in New York City, see the *Report of the Comptroller of the Currency*, Vol. I (1915), p. 103.

## CHAPTER VI

### HISTORY OF THE FEDERAL RESERVE CLEARING AND COLLECTION SYSTEM

#### Legal provisions

Incorporated in the Federal Reserve Act were provisions, which when put into effect, would create a new system for clearing and collection of checks. These provisions were found in Sections 13 and 16 of the Act. Both Sections were originally distinguished for their want of clearness which was partially responsible for the difficulties experienced in inaugurating the system. Section 13 seemed to be permissive while Section 16 was both permissive and mandatory.

Section 16 provided for two types of clearing: (1) An intra-district clearing system among member banks by authorizing the Federal Reserve Board to require each Federal reserve bank to act as a clearing house for its member banks, and (2) an inter-district clearing system by authorizing the Federal Reserve Board itself to act as a clearing house for the Federal reserve banks or to designate one of the Federal reserve banks to exercise such functions. This Section as affecting clearings and collections read as follows: "Every Federal reserve bank shall receive on deposit at par from member banks or from Federal reserve banks checks and drafts drawn upon any of its depositors, and when remitted by a Federal reserve bank, checks and drafts drawn by any depositor in any other Federal reserve bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank. (Nothing herein contained shall be construed as prohibiting a member bank from charging its actual expense incurred in collecting and remitting funds or for exchange sold to its patrons.) The Federal Reserve Board shall, by rule, fix the charges to be collected by the member banks from its patrons whose checks are cleared through the Federal reserve bank and the charge which may be imposed for the service of clearing or collection rendered by the Federal reserve bank.

"The Federal Reserve Board shall make and promulgate from

time to time regulations governing the transfer of funds and charges therefor among Federal reserve banks and their branches, and may at its discretion exercise the functions of a clearing house for such Federal reserve banks or may designate a Federal reserve bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing house for its member banks." <sup>1</sup>

It will be noted that in this Section member banks were permitted to charge for their actual expenses in collecting and remitting and also that charges might be imposed for the service of clearing or collection rendered by the Federal reserve bank, the Federal Reserve Board to fix the charges by rule.

Section 13 prescribed in a general way the character of the items that might be received on deposit by Federal reserve banks and seemed to contemplate the performance of a certain clearing function by such banks for their members. The portion applying to clearings and collections read: "Any Federal reserve bank may receive from any of its member banks, and from the United States, deposits of current funds in lawful money, national bank notes, Federal reserve notes, or checks and drafts upon solvent member banks, payable upon presentation; or, solely for exchange purposes, may receive from other Federal reserve banks deposits of current funds in lawful money, national bank notes, or checks and drafts upon solvent member or other Federal reserve banks, payable upon presentation."

### The institution of the system

From the beginning, the Federal Reserve Board looked upon the organization and institution of a new clearing and collection system as one of the most novel as well as one of the most difficult and intricate problems with which it was faced under the Act. Despite the fact that it believed substantial benefits would accrue from a well organized system of clearings national in scope, the Board considered it the better part of wisdom to proceed cautiously lest the innovations dislocate to too great an extent the established commercial and banking practices. As a result of this belief on the part of the Board, the history of the Federal reserve clearing and collection system naturally divides itself into two parts: (1) The voluntary system which obtained from June, 1915, to July, 1916, and (2) the compulsory system which has existed since that time. However, before beginning a study of these sys-

<sup>1</sup>See *First Annual Report of the Federal Reserve Board* (1914), p. 38.



tems it will be well to review briefly the nature of the system of reserves which existed at this time, since a vital connection exists between the type of reserve structure which happens to obtain at any particular time and the clearing and collection system also existing at the same time.

#### **Relation of the voluntary system to decentralized reserves**

The necessity for attempting a voluntary rather than a compulsory system at the beginning can be understood better in the light of the system of reserves which existed during the first three years of the Federal Reserve System. Section 19 of the original Act fixed a period of three years after the establishment of the system by official announcement, within which there was to be a gradual transfer of a part of the required reserves from approved reserve agents to the Federal reserve banks. Member banks in central reserve cities were required to keep reserves of 18 per cent. against demand deposits and 5 per cent. against time deposits;  $6/18$  of the required reserve was to be kept in their own vaults,  $7/18$  in the Federal reserve bank, and  $5/18$  could be held in either place. The  $7/18$  was to be transferred to the Federal reserve bank at once.

Member banks in reserve cities were required to maintain reserves of 15 per cent. against demand deposits and 5 per cent. against time deposits. Of this amount,  $6/15$  was to be held in their own vaults for three years after which time  $5/15$  was required;  $3/15$  was to be deposited at once in the Federal reserve bank for the first year and for each additional six months an additional  $1/15$  was to be added until  $6/15$  was deposited in the Federal reserve bank. For the three-year period the balance could be held in either place, or *in national banks in reserve or central reserve cities*<sup>2</sup>, but after the three years the balance was to be held either in the member banks' vaults or in the vaults of the Federal reserve bank.

Country banks were required to hold reserves of 12 per cent. against demand deposits and 5 per cent. against time deposits. For the first three years they were to hold  $5/12$  of the reserve, and thereafter  $4/12$ . In the Federal reserve bank they were to hold  $2/12$  for the first year, and for each succeeding six months an additional  $1/12$ , until  $5/12$  was deposited, which was to be required permanently thereafter. For the first three years the balance could be held in their own vaults, with Federal reserve banks, or *in*

<sup>2</sup>Italics are the author's.

*national banks in reserve or central reserve cities*<sup>3</sup>, after which time the balance was to be held in their own vaults or those of the Federal reserve banks, or both<sup>4</sup>.

It will be seen from the above that the reserves would be scattered widely for three years. To force a compulsory clearing and collection system upon the member banks under such circumstances especially since the reserve and clearing systems are so inextricably bound up with each other, seemed highly unwise to the Federal Reserve Board which hoped to bring the member banks to recognize of their own free will the advantages of a general and nation-wide clearing system—"advantages which would inure not only to the direct benefit of the public at large, but ultimately to the direct benefit of the member banks themselves from the purely business standpoint."<sup>5</sup>

#### Initial steps preceding the voluntary system

Before the formal institution of the voluntary system in June, 1915, a few halting steps were taken towards the establishment of clearing and collection machinery in certain sections of the United States in conformity with tentative suggestions made by the Federal Reserve Board. On October 17, 1914, the Board issued a circular to the Federal reserve banks with tentative suggestions for organization in order to promote a desirable uniformity.<sup>6</sup> Included in the suggestions for organization were two plans for a uniform clearing system, the regulations defining (1) the relations between the Federal reserve banks and the member banks in the same city, (2) the relations between the Federal reserve banks and their members outside the city, and (3) the relations between the Federal reserve banks themselves. This circular laid down regulations applying to procedure, forms, advices, accounting systems, and organization of departments conforming to the rules applied by all well-known clearing house associations. It was suggested that every Federal reserve bank should inaugurate the clearing system at the earliest possible moment consistent with success, beginning with a partial system and subsequently extending it as rapidly as they found themselves able to do so. Inasmuch as the plans suggested were tentative and, in fact, not approved finally

<sup>3</sup>Italics are the author's.

<sup>4</sup>*Federal Reserve Act*, Section 19. *First Annual Report of the Federal Reserve Board* (1914), p. 40.

<sup>5</sup>*Second Annual Report of the Federal Reserve Board* (1915), p. 15.

<sup>6</sup>Circular No. 8, Exhibit E, *First Annual Report of the Federal Reserve Board* (1914), p. 119f.

by the Federal Reserve Board, no effort will be made to analyze at this point the clearing organizations which were suggested. Three Federal reserve banks, however, made a beginning before the inauguration of the voluntary system in June, 1915.

Early in December, 1914, two districts, No. 8 (St. Louis) and No. 10 (Kansas City), obtained permission to apply to their members a complete system of compulsory clearing, which worked with such success that, when, upon inauguration by the Federal Reserve Board of the voluntary clearing system, St. Louis offered to her member banks the option of withdrawing, comparatively few retired, about 80 per cent. of all continuing their membership.<sup>7</sup> The Federal Reserve Bank of Kansas City continued its compulsory system after the introduction of the voluntary system without giving its member banks the option of withdrawing.

With the country clearing system of New England as a basis on which to build,<sup>8</sup> the Federal Reserve Bank of Boston took early steps to establish a clearing and collection system. It announced that it would receive on deposit for immediate credit checks drawn on any Federal reserve bank and checks drawn by member banks on member banks in Boston only. On November 13, 1914, the Federal Reserve Bank of Boston was elected a limited member of the Boston Clearing House Association, and on November 18 began to clear Boston checks. Beginning with that date the Boston banks made clearing house settlements by checks drawn on the Federal reserve bank, a policy which still continues, and which has done away with the payment of money in clearing house transactions and the necessity of carrying large sums of money through the streets to and from the clearing house. Under the new plan, Boston banks having debit balances against the clearing house each day drew their check in favor of the clearing house manager, who, in turn, opened a temporary account in the Federal reserve bank. He deposited these checks each day and drew his checks in favor of banks having a credit balance. This system continued, in general, until the institution of the voluntary system by the Federal Reserve Board, at which time the Boston bank also established the system which was adopted generally by the Federal reserve banks.<sup>9</sup>

On July 15, 1916, with the institution of the compulsory system, the Federal Reserve Bank of Boston took over the Clearing House of Boston and assumed the task of collecting all the checks

<sup>7</sup>*Second Annual Report of the Federal Reserve Board* (1915), p. 16.

<sup>8</sup>See above, pp. 126-128.

<sup>9</sup>*Second Annual Report of the Federal Reserve Board* (1915), p. 132.

on New England. The old Boston Clearing House became a part of the Federal reserve bank, but as a department in the bank, in which capacity it continued to clear Boston checks.<sup>10</sup> In line with the usual progressive banking ideas for which New England has been distinguished, the Federal Reserve Bank of Boston was soon able to collect checks at par on all the banks in New England. It was the first Federal reserve bank to bring all the banks of its district into the system.<sup>11</sup>

#### Inter-district clearing system precedes voluntary intra-district system; the Gold Settlement Fund

Before beginning our study of the voluntary intra-district clearing and collection system it is necessary, in the interest of good chronology, to point out briefly that the Federal Reserve Board was able to establish the mechanism for inter-district clearings and collections about a month before it was able to install the voluntary intra-district system. This inter-district mechanism took the form of the well-known Gold Settlement Fund, described briefly elsewhere in this chapter and more fully in a separate chapter. It is analogous to a clearing house and stands at the peak of the system. While the Federal reserve banks serve as clearing houses for their respective districts, the Federal Reserve Board, through the Gold Settlement Fund, serves as a clearing center for the Federal reserve banks and their direct-settling branches.<sup>12</sup> This Fund, which is controlled by the Federal Reserve Board and to which each Federal reserve bank was compelled to contribute funds, provides the mechanism by which all cash items throughout the country may be cleared by means of book transfers. The ideal clearing system is one of complete offsets, but to attain this perfection all banks must enter the system. Only then can all debits and credits balance and be liquidated by book transfers rather than by the actual transfer of funds. To the extent that banks do not enter the system, the mechanism must function imperfectly. Theoretically then, the Gold Settlement Fund is virtually perfect in conception. It makes possible the maximum use of credit with the minimum of friction and expense. It makes the medium of exchange the most efficient and economical ever conceived.

<sup>10</sup>*Federal Reserve Bulletin*, Vol. II (1916), p. 317.

<sup>11</sup>See *Federal Reserve Bulletin*, Vol. III (1917), pp. 162-164.

<sup>12</sup>For a discussion of the two types of Federal reserve bank branches see pp. 186-187, 216, 547-550 below.

The Gold Settlement Fund was established in May, 1915, in order to meet pressing demands for some means of clearing and collecting inter-district checks which were multiplying rapidly in numbers as a result of the organization and rapid development of the Federal reserve banks. The only mechanism in existence for the clearing and collection of such items prior to this time was reciprocal accounts carried by the Federal reserve banks with each other. This method was too cumbersome and the Gold Settlement Fund was devised as an effective medium for the expeditious and economical transfer of credits from one section of the country to another.<sup>13</sup>

According to the plan as originally instituted, each Federal reserve bank was required to contribute at least \$1,000,000 in gold or its equivalent plus what it owed to all other Federal reserve banks at that time. Each Federal reserve bank by May 27, 1915, had deposited the required amount with the nearest sub-treasury, the amount being determined by means of a preliminary settlement made on May 20. The Assistant Treasurers forwarded telegraphic advices of the deposits to the Treasurer of the United States, who, in turn, issued gold order certificates of \$10,000 denominations payable to the Federal Reserve Board. This Fund was kept in a safe in the Treasury vaults set aside for the exclusive use of the Board. A settling agent and a deputy settling agent were appointed by the Board to keep all necessary records and accounts. The equity of each Federal reserve bank in the Fund counts as part of its legal reserve. It must keep at all times at least \$1,000,000 in the Fund, but may draw out the surplus at will. The first regular inter-district settlement was made on May 27, 1915, with approximately \$18,450,000 in the Fund, below which amount it has never fallen. Settlements through the Fund were originally made at the close of business each Wednesday, but since July 1, 1918, they have been made each day. Other changes in the method of operating the Fund are described briefly elsewhere in this chapter and at greater length in Chapter VIII.

#### **The establishment of the Federal Reserve Agents' Fund**

After the establishment of the Gold Settlement Fund it seemed advantageous to apply the same principle to the reserve funds which Federal reserve agents were required to maintain as secu-

<sup>13</sup>See *Collection of Checks*, Letter No. 5, Federal Reserve Bank of Richmond (March, 1922). Hereafter cited as *Letter No. 5*.

rity against Federal reserve notes. These reserves, which the agents held apart from the reserves of the Federal reserve banks against other obligations, had been increasing steadily. The increasing issues and retirements of the notes rendered more frequent the payment of large sums from banks to their agents and vice versa. This necessitated much counting and recounting on the part of the banks and the representatives of the Federal reserve agents which it was desirable to eliminate.

On September 8, 1915, the settling agent and deputy settling agent of the Federal Reserve Board opened on their books a distinct and separate account for each Federal reserve agent and received from them deposits of gold certificates held subject to the agents' order. As in the case of the Gold Settlement Fund, the Federal Reserve Agents' Fund was evidenced by gold order certificates in denominations of \$10,000. These were held in the vaults of the United States Treasury, but separated from those certificates representing the Gold Settlement Fund. Their removal, or transfer upon the order of the agents, was governed by the same regulations applying to the Gold Settlement Fund. The first transfer under this system was made by the Federal Reserve Bank of Atlanta, September 8, 1915, when it transferred part of its holdings in the Gold Settlement Fund to the credit of the Federal reserve agent at Atlanta.<sup>14</sup>

Changes in the method of operating this Fund parallel those affecting the operation of the Gold Settlement Fund and will be noted in that connection. For example, the Federal Reserve Agents' Fund was affected in the same manner as was the Gold Settlement Fund by the abolition of the gold order certificates, June 21, 1917; the introduction of the leased wire system, June 4, 1918; the introduction of telegraphic transfers, June 10, 1918; the introduction of the system of daily settlements, July 1, 1918; and other changes that will be mentioned more at length elsewhere, especially in Chapter VIII, devoted to the Gold Settlement Fund.

#### The voluntary intra-district system, June, 1915-July, 1916

On March 4, 1915, the Federal Reserve Board announced that it had determined to direct the introduction of a voluntary reciprocal plan for clearance at all Federal reserve banks where a clearing plan was not already in operation. The Board did not attempt to prescribe details, since it had been found that in dis-

<sup>14</sup>See *Second Annual Report of the Federal Reserve Board* (1915), p. 82.

tricts where clearing was being practiced the best results were obtained by leaving the control with the bank officers. It merely required that the Federal reserve banks make such a system effective by June, 1915. Letters were sent to Federal reserve agents directing that they take up this question with their boards of directors at once. Circulars were issued by the Federal reserve banks to their member banks outlining plans and inviting them to participate.

Using the plan adopted by the Federal Reserve Bank of Chicago as a typical illustration, we find that these first efforts to establish a voluntary intra-district clearing and collection system provided, in general, for the following arrangements: Membership in the system was voluntary and items were received at par by the Federal reserve bank only from and upon those banks of its district which joined. The items were to be immediately credited and debited to the accounts of the sending and paying banks, subject to final payment; a practice, it will be noticed, which did not recognize the factor of time in the collection of checks. This system of immediate debit and credit resulted in the Federal reserve banks carrying a float which has been estimated to equal half of the deposits. The practice resulted in many overdrafts and meant a great and unreasonable burden on the Federal reserve banks, especially in case of any financial stringency when some of these banks might have become bankrupt.<sup>15</sup> Fortunately this practice was abandoned with the introduction of the compulsory system in July, 1916. There was no intention of superseding or supplanting local clearing houses or the exchange of checks between nearby towns or cities, or of handling checks drawn on banks in other districts. Each member bank was required to keep sufficient funds with the Federal reserve bank to offset the items charged against its account without impairing the reserve required to be kept in the Federal reserve bank. The Federal reserve bank acted only as the collecting agent of the member banks and received authority from them to send items direct to the banks on which drawn if it so desired. Member banks under the Chicago plan could come in at any subsequent time or withdraw after thirty days' notice, while the Federal reserve bank could withdraw the privilege of membership from any member not observing the rules. The Federal reserve bank was to make no charge nor pay any charge in operating the system, although the Federal Reserve

<sup>15</sup>E. W. Kemmerer, *Six Lectures on the Federal Reserve System*, given at the Federal Reserve Bank of Philadelphia (1920), pp. 52-53.

Act permitted it to levy charges on the member banks to cover cost.<sup>16</sup>

Similar plans were inaugurated in the other Federal reserve districts with varying degrees of success,<sup>17</sup> but it was felt that all these plans were largely experimental and that no satisfactory basis of clearing could be reached until some plan was evolved by which all member banks, and possibly a considerable number of non-member banks, could be induced or required to co-operate.

### The voluntary system a failure

It was hoped that a large number of the member banks would promptly affiliate themselves with the new system of clearing and that the natural force of economic competition would attract ultimately to it those who at first might hesitate. But the results were disappointing. At the end of the year 1915, less than 25 per cent. of the institutions eligible for membership had joined the system. In addition to the 950 banks which were compelled to join in the Kansas City district and the 365 in the St. Louis district which remained in the system, only about 1,150 banks of their own free will assented to the voluntary clearing plan, making a total of 2,465 which had joined in 1915.<sup>18</sup>

This small proportion of membership proved a severe disappointment to those who had confidently expected that the foresight and enlightened self-interest of the member banks would speedily accomplish the desired result. Some progress was made through the action of the banks, both member and non-member, in improving exchange conditions and in providing for the clearance of country checks at points where this practice had never prevailed before, but in the main, comparatively small advance was made in rendering effective the provisions of the law which provided for the standardization of exchange and clearance practices.<sup>19</sup> The following table will present a summarized view of the growth, or rather lack of growth, of the voluntary system:

<sup>16</sup>*Federal Reserve Bulletin*, Vol. I (1915), pp. 6-9.

<sup>17</sup>Dallas, in December, 1915, established a system somewhat different from the others when she established the Reserve City Clearing House Association of Texas. It was operated for the convenience of the reserve city banks and at their expense. With the inauguration of the compulsory system it was carried on as an adjunct to the new system. In 1916, its operations extended to twenty-seven banks in the cities of Fort Worth, Waco, Houston, Galveston, San Antonio and Dallas. See *Third Annual Report of the Federal Reserve Board* (1916), pp. 432-435. *Fourth Annual Report of the Federal Reserve Board* (1917), p. 552. See especially p. 188 below.

<sup>18</sup>*Second Annual Report of the Federal Reserve Board* (1915), p. 16.

<sup>19</sup>*Ibid.*



TABLE XIX  
GROWTH OF THE VOLUNTARY INTRA-DISTRICT CLEARING  
SYSTEM<sup>1</sup>

	July-Aug., 1915	September	October	November	December	January, 1916	February	March	April	May	June
Boston .....	50	49	49	50	50	50	50	50	50	47	47
New York .....	115	116	125	126	128	129	129	129	130	134	134
Philadelphia ..	125	124	120	120	119	119	117	114	110	109	109
Cleveland .....	126	127	126	123	123	118	118	116	115	114	114
Richmond .....	89	88	89	91	90	90	90	90	87	82	81
Atlanta .....	71	81	83	74	74	74	74	74	71	72	71
Chicago .....	111	121	121	116	116	114	114	113	113	113	115
St. Louis .....	366	368	364	365	363	362	362	363	362	359	359
Minneapolis ...	166	182	186	184	184	187	187	187	187	187	187
Kansas City ..	951	951	951	951	951	951	951	951	951	951	951
Dallas .....	93	92	105	96	83	79	74	72	70	67	67
San Francisco .	110	209	217	160	161	162	162	161	157	157	157

Totals ..... 2,373 2,508 2,536 2,456 2,442 2,436 2,428 2,420 2,403 2,392 2,392

<sup>1</sup>Compiled from the *Federal Reserve Bulletins*.

At this point it will be worth while to inquire into the reasons why eligible banks did not join the system.

### Objections to the voluntary system

The common grounds for opposition to the system were: (1) Loss of exchange charges. Under the old system it was the general practice of banks to charge in remitting for items sent for collection. Under the new system, although the Act authorized them to make charges for remittance and collection, they were not given the opportunity to exact remittance charges, since the items were charged directly against the accounts of the paying banks. Consequently, only those banks joined which were ready to forego this charge. Usually the city banks which had been bearing the brunt of the exchange charges entered; the smaller exchange-charging banks held aloof.<sup>20</sup>

(2) Membership obliged many banks to carry larger reserves. It had been the practice of the Comptroller's office to permit banks to compute the reserves from their own books, that is, as soon as checks were mailed out by banks they were counted as reserves, and checks sent to them by collecting banks were not deducted

<sup>20</sup>G. B. Anderson, "Some Phases of the New Check Collection System," *Annals of the American Academy of Political and Social Science*, Vol. LXVIII (1916), pp. 122-131.

until received, leaving the correspondent reserve banks to carry the float. Under the new system the reserves were to be computed from the books of the Federal reserve bank, which would require larger and real reserves from the member banks.

(3) The fact that the system was voluntary and not all the banks, indeed but few of them, were coming in, was considered a hardship on those that did enter. The Federal reserve bank would receive at par all checks on the members of its collecting system whereas it could send as an offset only checks on the few banks in the district which had joined.

(4) Some banks maintained that there was no power to compel a member bank not located in a Federal reserve city to pay or have charged to its account at the Federal reserve bank of its district a check which it had not seen and approved prior to the time of presentation at its own counter. This principle of immediate debit and credit was one of the most distinguishing characteristics of the voluntary system, but was destined to give way to the deferred debit and credit principle, as it did not stand the tests of practical banking experience. While it is a sound principle, in general, to substitute clearing for collection so far as possible, practical limits to the application of this principle are sometimes reached in banking. The practice of making immediate debits and credits represents an offsetting or clearing principle and may be supposed to be desirable, but any gains that may have resulted under the voluntary system were more than overbalanced by the following disadvantages: (a) Charging items to the accounts of the member banks before they could be advised of the amounts charged or see the items, not only constantly impaired their reserve balance, but almost daily created overdrafts in the accounts of the several banks. (b) The member banks could not control their reserves and the Federal reserve banks not only had less in deposits than the law contemplated but daily had to assume either the responsibility of permitting the overdraft of accounts or decline to accept checks drawn upon them. (c) The system gave the member banks no chance to maintain their reserves by remitting or rediscounting. A system which defers both debit and credit gives the banks time to do this.<sup>21</sup> For these reasons, therefore, it has not seemed desirable to carry the clearing principle so far as to include out-of-town banks, as considerable time must elapse before the items can be converted into reserve funds. The prin-

<sup>21</sup>Pierre Jay, *The Country Banker and the Federal Reserve System*, 64th Cong., 1st Sess., Sen. Doc. No. 458 (April 17, 1916).

ciple of immediate debits and credits forced the Federal reserve banks to absorb a very heavy float, made a large proportion of the member banks' reserves mere paper rather than collected funds, and thus continued one of the worst evils that characterized the clearing and collection system under the old National Banking System.<sup>22</sup>

Another difficulty facing the Board was the fact that the Federal Reserve Act granted a period of three years to all banks, except those within central reserve cities, within which to effect the final transfer of reserves to the Federal reserve banks, balances with correspondents counting as reserves in the meantime. The fact that these reserve balances in some reserve cities were used for the purpose of providing for exchange and collection operations together with the fact that they would continue, in all probability, the functions for some time in the future, pending the time when State banks would enter the system in large numbers, seemed to indicate that it might be necessary for some member banks to collect and clear through their correspondents in reserve cities. In the last analysis, the question of reserves was vital. To this problem the Board turned its attention. But the fact that reserves were yet decentralized was one of the principal conditions that caused the Board to ease the difficulties of the banks by instituting first the voluntary system.

The voluntary system had demonstrated that the plan was not sufficiently comprehensive, the number of members had not increased appreciably, the objections raised indicated that the system in that form worked a hardship on certain classes of banks, and it seemed most unlikely that the system could ever attain any great degree of efficiency for the entire country. Consequently, in April, 1916, the Board decided to establish a more comprehensive system which became operative on July 15, 1916, as a compulsory system. The history of the compulsory system may be divided into two periods. The first period, extending from July, 1916, to June 21, 1917, was one in which the reserves were decentralized, a situation which gave rise to consequences different from what might have been expected had the reserves been concentrated.

---

<sup>22</sup>When banks, such as the Federal reserve banks, give immediate credit for uncollected items, they are virtually making an investment in uncollected checks. There is a theory that if such investments are practically equal throughout the country no harm is done through giving immediate credit. But at least two objections to this theory present themselves: First, that such investments are not equal at all times and may result in adverse currents of exchange involving even actual transfers of funds; second, a considerable float is almost certain to be present and this, of course, means paper reserves. In times of extreme expansion fictitious reserves are dangerous.

The second period is one in which the reserves are concentrated in the Federal reserve banks and covers the period since June 21, 1917. It will be convenient to survey the development of the clearing and collection system under these two heads.

**The compulsory system under decentralized reserves, July, 1916-  
June 21, 1917**

All member banks were automatically brought into this system under the conditions laid down by the Federal Reserve Board in Regulation J, Series of 1916, which required all Federal reserve banks to exercise the functions of a clearing house for their member banks. The detailed working out of the system was left, however, to each Federal reserve bank. Consequently, there were some variations as to details although, in the main, the banks followed rather uniform practices.<sup>23</sup>

Each Federal reserve bank was required to receive at par from its member banks, checks drawn on all member banks, whether in its own district or other districts, and checks drawn upon non-member banks when such checks could be collected by the Federal reserve banks at par. Each Federal reserve bank was required to receive at par from other Federal reserve banks all checks drawn upon all member banks of its district and upon all non-member banks of its district whose checks could be collected at par by the Federal reserve bank. According to the requirements the Federal reserve banks prepared par lists of all non-member banks which were revised from time to time and furnished all member banks. In selecting collecting agents for handling checks on non-member banks, member banks were to be given preference.

The new system did not mean that member banks were not free to continue to carry accounts with their correspondents and with other banks to which they might send items for collection and from which they might receive for similar purposes checks drawn upon themselves or upon other banks. A member bank could send items for collection through the Federal reserve bank regularly, occasionally, or not at all; or it might collect them through its regular correspondents or in any other manner considered advantageous.<sup>24</sup> It did mean, however, that all Federal reserve banks were to install the system and that all member banks were required to pay without deduction checks drawn upon themselves and presented by their Federal reserve banks at their own counters.

<sup>23</sup>See *Federal Reserve Bulletin*, Vol. II (1916), pp. 312-315.

<sup>24</sup>*Ibid.*

Herein lay the compulsion in the system. Remittance of such checks by the Federal reserve bank of their own district through the mail was construed as presentation at their own counters and bankers were required to settle with the Federal reserve bank for such checks in acceptable funds. Remittance of lawful money or Federal reserve notes could be made at the expense of the Federal reserve bank in case they were unable to send in offsetting checks on other banks. In this manner the most severe aspects of the compulsion were mitigated. It also indicated a recognition of the fact that checks are not payable at par except at the counter of the drawee bank. In making payment elsewhere banks had become accustomed to charging exchange in making remittances on the ground that an expense was involved, especially since they might be called upon to ship currency. The charges were always predicated on the fact that they might be compelled to ship currency even though they did not do so. Now the expense was to be assumed by the Federal reserve banks and these banks were deprived of their chief reason for exacting charges in making remittances. Any impairment of reserves was to be subjected to a penalty of 2 per cent. per annum on the amount of the deficiency above the ninety-day discount rate of the Federal reserve bank of the district in which the member bank was located. A progressive penalty also became effective under certain conditions.<sup>25</sup> The Board reserved the right to increase the penalty whenever conditions required.

#### **Checks sent direct by a Federal reserve bank to its drawee member banks for collection**

In handling items for member banks a Federal reserve bank acted as agent only. The Board required each member bank to authorize its Federal reserve bank to send checks for collection direct to the banks on which they were drawn, and, except for negligence, the Federal reserve banks were to assume no liability. This was a practice which was considered illegal under the old National Banking System, although it was indulged in frequently. A bank was not considered a good agent, in the eyes of the law, to collect on itself. In some instances, however, there would be but one bank in a town; in other instances, it would be necessary to use a weak or otherwise undesirable bank as a collecting agent if an effort were made to conform to the letter of the law. Prior to the time under consideration many banks had learned that it was

<sup>25</sup>See pp. 330-331, 366-367.

better to send their checks direct to the bank on which they were drawn in case they were compelled to use an undesirable bank as a collecting agent, or some other agent in cases where but one bank existed in the town. Although legally unsound the practice soon became rather widespread. Consequently, the Federal reserve banks introduced no innovation in this respect.<sup>26</sup>

#### **The deferred availability principle; the zone system**

It will be recalled that the Federal reserve banks under the voluntary system did not recognize the time factor in collecting checks but resorted to the practice of making immediate debits and giving immediate credits for checks sent to them for collection. Under the compulsory system the time factor was recognized. The system of immediate debits and credits, as pointed out above, had been unsatisfactory to both the member banks and the Federal reserve banks. The member banks, having items charged to their accounts before the items could reach them, were always uncertain how their reserve accounts with the Federal reserve bank stood until some time later. This uncertainty required them either to keep large excess balances with the Federal reserve bank or expose their reserve accounts to impairment, even to being overdrawn. Usually a large percentage of the accounts of the country members of the collection system was impaired, many of them to such an extent that they were actually overdrawn. The Federal reserve banks would find their resources reduced by the impairment of these reserve balances and themselves compelled, against their express determination to the contrary, to purchase from their member banks their out-of-town checks, commonly called "float."<sup>27</sup>

Under the new regulation it was provided that checks received by a Federal reserve bank on its member banks were to be forwarded direct to the member banks but were not to be charged to their accounts until advice of payment had been received or until sufficient time had elapsed within which to receive advice of payment. Upon receipt of items from its member banks for collection immediate credit entry upon the books of the Federal reserve bank at full face value was to be made subject to final payment but the proceeds were not to be counted as part of the minimum reserve nor become available to meet checks drawn until

<sup>26</sup>For a discussion of this question, see *Proceedings of Departmental Conferences held at Baltimore Convention of the American Institute of Banking* (July, 1924), pp. 323-341.

<sup>27</sup>*Third Annual Report of the Federal Reserve Board* (1916), p. 231.

actually collected. Under this system each Federal reserve bank determines by analysis the amount of uncollected funds appearing on its books to the credit of each member bank and furnishes to each member bank a schedule of the time required within which to collect checks, in order to enable it to determine the time at which any item sent to its Federal reserve bank may be counted as reserve and become available to meet any checks drawn.

### The nature of the time schedules

Each Federal reserve bank developed its own time schedule showing the number of days which must elapse before the proceeds of items deposited with it would become available as reserve to be drawn against. Each of these schedules covers the entire country and is based upon the average time required for the Federal reserve bank to send items to its member banks and receive remittances from them plus the one-way mail time between Federal reserve banks and their branches. For certain items received from member banks immediate credit is given; for others, deferred credit, as, for example, for one day, two days, three days, or any number of days up to nine days.<sup>28</sup> Supplementing, or rather serving as a common basis for the schedules of the Federal reserve banks, is an inter-district time schedule, approved by the Federal Reserve Board in 1920, which shows the collection time for cash items between all Federal reserve banks and branch banks.<sup>29</sup> This schedule is based upon the one-way mail time between the Federal reserve banks and their branches and constitutes the common frame-work on which each Federal reserve bank builds its schedule, adding to this time the average time required for each Federal reserve bank to send items to its member banks and receive remittances from them. Average time has been used since it is impossible to calculate the exact time with respect to each point. As a result of the average time basis, the Federal reserve banks are carrying, without doubt, a "float" to some extent, although perhaps inconsiderable under the system of daily settlements, as compared with the weekly settlements through the Gold Settlement Fund.

As an example of the manner in which the time is computed on an inter-district check by using the inter-district time schedule

<sup>28</sup>See the Time Schedule of the Federal Reserve Bank of New York, p. 184. From the Portland and Seattle branches of the Federal Reserve Bank of San Francisco to some of the eastern States, such as Alabama or Florida, the time is nine days.

<sup>29</sup>See Inter-district Time Schedule, pp. 182-183.

as a basis and adding to it the collection time indicated by the time schedule of another Federal reserve district, let us suppose that a check drawn on a bank in Rochester, New York, is sent to the Federal Reserve Bank of Richmond by one of its member banks. Credit would be given three days after receipt. One of the days would be consumed in sending the item from Richmond to the Federal Reserve Bank of New York, one in forwarding the item from the Federal Reserve Bank of New York to the bank in Rochester, and the third day in the sending of returns by the Rochester bank to the Federal Reserve Bank of New York. Upon receipt of the returns settlement would be made between the Federal Reserve Bank of New York and the Federal Reserve Bank of Richmond without further delay, that is, through the Gold Settlement Fund.

It is to be observed that the time schedule just described is a published time schedule for the benefit of collecting banks, and indicates when the items sent to the Federal reserve bank or branch will be available as reserve deposits. In other words, it is the basis by which the payee banks determine the amount of their deferred credits which become available on certain days. Theoretically all deferred credits (uncollected items), should equal all deferred debits (the same uncollected items). As a matter of fact all deferred credits do not equal, necessarily, all deferred debits. This is due partly to the fact that drawee banks do not have their accounts debited until sufficient time has elapsed for the collecting Federal reserve bank or branch to have heard from them, regardless of the published time schedule. There is thus an unpublished time schedule for the drawee banks based upon *actual* collection time, rather than upon the average time as indicated in the published schedule. The latter schedule was devised in the interest of simplicity; consequently, some banks may be placed in a two-day zone which cannot be reached and heard from in less than three days, others in the same zone may be heard from in two days or perhaps in one day. The average time is two days, however, and checks sent to the three-day banks in the two-day average zone, become available funds to the payee banks in two days, but the drawee banks will not have their accounts debited until three days have elapsed. The Federal reserve bank, in this instance carries a float.<sup>30</sup> The combined statement of all Federal reserve banks for June 11, 1924, showed that the amount of float

---

<sup>30</sup>For a further treatment of the nature of the time schedule, see pp. 539-541, 551, below.





INTER-DISTRICT TIME SCHEDULE APPROVED BY THE FEDERAL RESERVE BOARD, SHOWING COLLECTION TIME FOR CASH ITEMS BETWEEN ALL FEDERAL RESERVE BANKS AND BRANCH BANKS

From—	To—	Los Angeles	Salt Lake City	Seattle	Portland	Spokane	San Francisco	Houston	El Paso	Dallas	Oklahoma City	Denver	Omaha	Kansas City	Helena	Minneapolis	Little Rock	Memphis	Louisville	St. Louis	Detroit	Chicago	Nashville	Jacksonville	Birmingham	New Orleans	Atlanta	Baltimore	Richmond	Pittsburgh	Cincinnati	Cleveland	Philadelphia	Buffalo	New York	Boston	
Omaha	.....	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Denver	.....	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Oklahoma City	..	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Dallas	.....	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
El Paso	.....	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Houston	.....	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
San Francisco	...	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Spokane	.....	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Portland	.....	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Seattle	.....	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Salt Lake City	..	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Los Angeles	.....	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Explanation: This schedule shows the elapsed time before final credit is given to a member bank for cash items deposited with its Federal reserve bank drawn upon other Federal reserve bank and branch bank cities. For example, a member depositing a check in the Federal Reserve Bank of Cleveland (as shown in the vertical column) drawn upon Omaha (as shown in the horizontal column) would be given credit upon the books of the Federal Reserve Bank of Cleveland at the expiration of two days. See *Federal Reserve Bulletin*, Vol. VI (1920), p. 987.

If, however, a Federal Reserve bank finds it can reduce the collection time below that given in the inter-district schedule, it may do so with the consent of the Federal Reserve Board. Consequently, there will be found to be considerable differences in the individual time schedules of the Federal Reserve banks and the one given above. For example, Spokane, Portland, and Seattle branches of the Federal Reserve Bank of San Francisco, are now in the four-day zone of the Federal Reserve Bank of New York. The above schedule has not been revised, is not accurate today, and has little value aside from showing the general principles on which the time schedules were constructed.

was about 10 per cent. of the amount of uncollected items on hand. Much of this is due, so it is alleged, to the fact that New York and Philadelphia have placed their most remote banks on a two-day basis although the items on many of these banks cannot be collected in less than three days.<sup>31</sup>

**FEDERAL RESERVE BANK OF NEW YORK**  
Schedule Showing When the Proceeds of Items Will Become Available<sup>1</sup>

Effective January 2, 1923 (Superseding Schedule Issued August 1, 1922)

**IMMEDIATE CREDIT**

When received by 9 a. m.

New York Clearing House banks (Reference to List A, page 4)

Other New York City banks (Reference to List B, page 6)

Northern New Jersey Clearing House banks (Reference to List C, page 7)

Checks and warrants on Treasurer of the United States, Washington, D. C.

Brooklyn banks and bankers—Also Bank of Coney Island and Branch

When received by 3 p. m. (Saturdays 1 p. m.)

Checks on Federal Reserve Bank of New York and Buffalo Branch

Officers' checks of other Federal Reserve Banks

Federal Reserve Exchange Drafts

Federal Reserve Transfer Drafts

**ONE DAY AFTER RECEIPT**

New York City—Balance of Manhattan, when received by 9 a. m.

	No.
Boston	District 1
Philadelphia	District 3
Richmond	District 5
Baltimore	Branch of 5
Pittsburgh	Branch of 4
Buffalo	Branch of 2

**TWO DAYS AFTER RECEIPT**

		Banks in
Cleveland	District 4	Connecticut **New Jersey
Cincinnati	Branch of 4	Delaware *New York
Chicago	District 7	Dist. of Columbia *Pennsylvania
Detroit	Branch of 7	Maine Rhode Island
Atlanta	District 6	*Maryland Vermont
Birmingham	Branch of 6	*Massachusetts *Virginia
Jacksonville	Branch of 6	New Hampshire
Nashville	Branch of 6	
Minneapolis	District 9	
St. Paul	In District 9	
St. Louis	District 8	
Louisville	Branch of 8	

**THREE DAYS AFTER RECEIPT**

New Orleans	Branch of 6
Memphis	Branch of 8
Little Rock	Branch of 8
Kansas City, Mo.	District 10
Kansas City, Kans.	In District 10
Omaha	Branch of 10
Oklahoma City	Branch of 10
Dallas	District 11

<sup>1</sup>The time schedule also includes instructions to member banks for the sorting and forwarding of items. See below, p. 471.

<sup>2</sup>*Proceedings of Departmental Conferences held at Baltimore Convention of the American Institute of Banking (July, 1924), p. 379.*

## FEDERAL RESERVE CLEARING AND COLLECTION 185

### FOUR DAYS AFTER RECEIPT

	No.		Banks in
Helena	Branch of 9	*Alabama	*Minnesota
El Paso	Branch of 11	*Arkansas	Mississippi
Houston	Branch of 11	*Florida	*Missouri
Denver	Branch of 10	*Georgia	North Carolina
Spokane	Branch of 12	*Illinois	*Ohio
Salt Lake City	Branch of 12	Indiana	South Carolina
Portland, Ore.	Branch of 12	Iowa	*Tennessee
Seattle	Branch of 12	*Kansas	West Virginia
		*Kentucky	Wisconsin
		*Michigan	

---

### FIVE DAYS AFTER RECEIPT

	No.
San Francisco	District 12
Los Angeles	Branch of 12

---

### EIGHT DAYS AFTER RECEIPT

	Banks in
Arizona	North Dakota
*California	*Oklahoma
*Colorado	*Oregon
Idaho	South Dakota
*Louisiana	*Texas
*Montana	*Utah
*Nebraska	*Washington
Nevada	Wyoming
New Mexico	

\*Except banks in cities referred to in the first column.

\*\*Except banks in Northern New Jersey Clearing House Association referred to on Page 7. [Page 7 omitted here]

### The deferred availability principle and the collection of intra-district cash items

It must not be inferred that a member bank will send all of its intra-district transit items through its Federal reserve bank for collection. Quite often much time can be saved by sending such items by more direct routes. It has been pointed out elsewhere that cash items may be collected either through the mechanism provided by the Federal Reserve System or in any other manner that a bank sees fit to use. If the Federal reserve mechanism is used intra-district cash items may be collected in three ways: (1) By sending the items to the Federal reserve bank as agent for collection, (2) by sending them direct to a branch of the Federal reserve bank when the branch is nearer the drawee bank, and (3) by sending the items direct to the drawee bank.

#### 1. Collecting intra-district cash items through the Federal reserve bank

The method of collecting intra-district cash items through the parent Federal reserve bank has been explained sufficiently in the discussion of the nature of the time schedules and the deferred availability principle immediately above and need not be ampli-

fied here.<sup>32</sup> Our attention will be confined to the second and third possibilities which offer more speedy results. It is obvious that it would require more time in many instances to send items through the parent Federal reserve bank than to send them by more direct routes which may be through branches of the Federal reserve bank or in some cases direct to the drawee banks.

## **2. Collecting intra-district cash items through Federal reserve bank branches**

A Federal reserve district may be so large that it is advisable to establish branches of the Federal reserve bank. These branches, of which there are now twenty-three, are of two types. One type, which we will designate for convenience as Class I, has its capital, territory, member banks and reserves allotted to it, and performs most of the functions performed by a Federal reserve bank. Intra-district clearings and collections in its district are handled through it just as they would be handled through a Federal reserve bank. It has its own time schedule for the banks in its district and for inter-district collections worked out on exactly the same principles as that of the parent Federal reserve bank. It settles directly through the Gold Settlement Fund for its inter-district items in a manner quite similar to that of the parent bank. For this reason this type of branch, of which there are sixteen, is known as a direct-settling branch.

If a bank in the northern part of the district occupied by the Federal Reserve Bank of San Francisco has a check on a member bank near the Portland branch of the Federal Reserve Bank of San Francisco, it obviously would involve a loss of time to send the item to San Francisco for collection from which place it would then be sent to the Portland branch to be forwarded to the drawee bank. Instead, the payee bank would send the item to the Portland branch for collection, using the time schedule of the Portland branch. All banks in the twelfth district are provided with the schedules of these branches and may remit their items direct in this manner.<sup>33</sup> When intra-district items are sent direct to the branches, settlements are made by telegraph between the parent bank and the branches. The Federal Reserve Bank of San Francisco maintains a Branch Clearing Settlement to facilitate the daily settlement of balances resulting from transactions between

---

<sup>32</sup>A thorough discussion of clearing and collecting intra-district items through the Federal Reserve bank will also be found below, pp. 537-554.

<sup>33</sup>All branches in the twelfth district are Class I or direct-settling branches. They are Spokane, Seattle, Portland, Salt Lake City, and Los Angeles.

the head office and its branches. Unlike the Gold Settlement Fund, which is not used to make settlements between a parent Federal reserve bank and its branches, there is no actual money carried in the Branch Clearing. The entire process is carried out through a system of bookkeeping at the head office and amounts due to and due by the head office and branches are accounted for over the leased wire maintained between the head office and the branches.<sup>84</sup>

The second type of branch, which we will designate as Class II, and of which there are seven, does not have any definite capital, territory, member banks, or reserves allotted to it, nor does such a branch settle through the Gold Settlement Fund for its inter-district items. One of its main functions is to act as a clearing and collection agent and, as a result, has a collection zone assigned to it. All member and properly qualified non-member clearing banks and trust companies within this zone may be collected upon through this branch. The resulting credit, inter-district as well as intra-district, is reported by this branch daily to the Federal reserve bank of that district.

### 3. Sending intra-district items direct to drawee banks for collection

Member banks, ordinarily, may not send items direct to drawee banks for remittance to the Federal reserve bank or branch for credit to the account of the payee bank. There are two important exceptions to the general principle, however, when intra-district items are involved. One is the system of county collections found in the second and third Federal reserve districts; the other is the so-called Reserve City Clearing House Association in Texas, in which direct sendings go beyond county lines.

(a) *County clearing of checks.* In the second, and to a less degree in the third, Federal reserve districts, banks in certain counties, whose business is essentially local, are permitted to send checks direct to drawee banks in the same county. This system as used in the second district has been described as follows: "A bank in Newark has \$10,000 worth of checks drawn on a bank in Orange which it receives in the ordinary course of business. The bank in Newark will send such checks direct to the bank in Orange and at the same time mail an advice to the Federal Reserve Bank of New York, showing the total of such checks sent. The advice

<sup>84</sup>A more detailed treatment of the two types of branches, the nature of their time schedules, and the methods of clearing and collecting intra- and inter-district items is given below, pp. 547-553.

will be received by the Federal Reserve Bank at the same time that the checks are received by the bank in Orange. . . . On receipt of the advice, the Federal reserve bank will credit the account of the bank in Newark with the total amount of such checks which it sent to the bank in Orange and charge the account of the bank in Orange on its books; thus, instead of the usual three days for the collection of such checks, the bank in Newark will receive credit in its reserve account in one day, saving the two days' time."<sup>35</sup>

When banks wish to send items direct to drawee banks in order to save time they must make suitable arrangements not only with the Federal reserve bank but with the member banks on which they wish to collect direct. Otherwise they make themselves liable for remittance charges. In April, 1920, the question was asked the Federal Reserve Board whether a member bank, either State or national, could be required under the terms of the Federal Reserve Act, to remit at par for checks drawn upon it and received from another bank, other than a Federal reserve bank, with directions to remit in payment direct to the Federal reserve bank for the account of the bank owning the items. The Board ruled that the remitting banks could not be required to remit at par as Section 13 of the Federal Reserve Act prohibited member banks from charging the Federal reserve banks only, when remitting, and did not prohibit one member bank from charging another. In a case like the one submitted to the Board in this instance, the Board held that the charge is made against the bank for whose account remission is made and not against the Federal reserve bank which, in the circumstances, is merely a depository of the proceeds of the checks, less the amount of the exchange charge.<sup>36</sup> Consequently, for direct sendings to be successful, suitable arrangements must be made in advance.

(b) *The Reserve City Clearing House Association of Texas.* The so-called Reserve City Clearing House Association of Texas includes the following six principal cities in Texas: San Antonio, Dallas, Houston, Ft. Worth, Galveston, and Waco. One of the purposes of the association is to enable its members to obtain settlement on the books of the Federal Reserve Bank of Dallas in one

<sup>35</sup>A. J. Lins, "County Clearing of Checks," *Bulletin of New Jersey Bankers Association* (December, 1922), pp. 8-9. See also *Eighth Annual Report of the Federal Reserve Board* (1922), p. 512. Among the counties in New York and New Jersey in which this system is operating successfully, are to be mentioned the following: (1) In New York—Broome, Tioga, Tompkins, Chemung, Delaware, Herkimer, Nassau, Otsego, Saratoga, Warren, Washington, Steuben, Sullivan, and Westchester; (2) in New Jersey—Bergen, Middlesex, and Monmouth counties.

<sup>36</sup>*Federal Reserve Bulletin*, Vol. VI (1920), p. 494.

day for checks and drafts drawn on each other. For example, Ft. Worth will send all of its Waco checks and drafts to a particular bank in Waco, draw a draft on this bank for the amount and send it to the Federal Reserve Bank of Dallas which effects a clearing of all those reserve city items in its own office by charging the reserve account of the Waco bank and crediting the account of the Ft. Worth bank. Considerable time is saved in this manner.<sup>37</sup>

Another purpose of the association is to enable country bank correspondents of members of the association to make their drafts on reserve city clearing house banks immediately available for credit upon receipt by the Federal Reserve Bank of Dallas, which arrangement places the banks that are members of the Reserve City Clearing House Association on an equal footing with banks located in Dallas in so far as concerns the exchange facilities that they can offer to their country correspondents.<sup>38</sup>

#### **The collection of and settlement for inter-district cash items**

Inasmuch as a complete and detailed discussion of the present methods used in making inter-district collections of cash items is given below in Chapter VIII which deals with the nature and operation of the Gold Settlement Fund and especially on pp. 558-569, no attempt will be made at this time to give more than a general outline of the mechanism used. This will suffice to give the reader enough knowledge of the system to understand the significance of the later topics treated in this chapter.

Inter-district cash items, like intra-district cash items, may be collected through the Federal reserve clearing and collection system or in any other manner that the member or non-member clearing banks may choose. If they use the Federal reserve mechanism these items may be collected in any one of three ways. (1) A member or non-member clearing bank may send its items to its own Federal reserve bank or branch of the Federal reserve bank (if it is assigned to that branch) which will send them to the Federal reserve bank or branch to which the drawee bank belongs; (2) a member or non-member clearing bank in one district may send the items direct to the Federal reserve bank or branch in the district to which the drawee banks belong; and (3) in certain

<sup>37</sup>*Proceedings of Departmental Conference held at Baltimore Convention of the American Institute of Banking* (July, 1924), p. 378.

<sup>38</sup>Letter from Mr. W. O. Ford, Assistant Cashier, Federal Reserve Bank of Dallas, March 5, 1925.



instances items may be sent direct to the drawee member and non-member clearing banks in another district.

**1. Collecting inter-district cash items through a bank's own Federal reserve bank or branch**

Banks using this medium of collection are required to sort their items into classes according to their availability as shown in the published time schedules. The cash letters including these items are then sent to the Federal reserve or branch banks which give the payee banks a deferred credit and send the items on to the proper Federal reserve banks or branches, which in turn send them to the drawee banks. After sufficient time has elapsed for the Federal reserve banks or branches, to which the drawee banks belong, to hear from the drawee banks, settlement is made through the Gold Settlement Fund. The Class I branches settle directly through the Fund in the same manner as do the parent Federal reserve banks except that the final debit and credit adjustments are made on the books of the Federal reserve banks since the Class I branches do not carry funds in the Gold Settlement Fund. Class II branches telegraph to their parent Federal reserve banks the amounts due to other Federal reserve banks and branches which are then included in the telegram sent by the parent bank to the Gold Settlement Fund. Adjustments between the Class II branches and their parent Federal reserve banks are then made on their books.

**2. Member and non-member clearing banks may send inter-district cash items direct to Federal reserve banks and branches in other districts**

Banks are encouraged to send inter-district cash items direct to the Federal reserve banks or branches to which the drawee banks belong if time can be saved through such procedure. In order to do this the sending bank must secure the permission of its Federal reserve bank or branch which will give it a new time schedule for these direct sendings. Ordinarily the sending bank will save at least the time required to send the items to its own Federal reserve bank or branch.

When the payee banks send out these items they notify their own Federal reserve bank or branch of the amount of the items sent and indicate when each batch should become funds. This is done on forms which are provided and which show the totals available in one, two, three, four, or more days. (See Forms 19,

20 and 21 on pp. 456, 457 and 563, respectively.) These items, properly sorted, are sent direct to the other Federal reserve banks or branches for the credit of the Federal reserve banks or branches to which the payee banks belong. After the expiration of the proper amount of time the Federal reserve banks, direct-settling branches, and the Class II branches through their parent Federal reserve banks, make the proper settlements through the Gold Settlement Fund and then the Federal reserve banks or branches receiving the credits check them against the advices of direct sendings.

The Federal Reserve Banks of Boston and San Francisco led the way in 1916 by permitting their member banks to make arrangements to send items direct to other Federal reserve banks or branches for the credit, respectively, of the Federal Reserve Banks of San Francisco and Boston.<sup>39</sup> By 1919 the volume of such checks had increased to such an extent that the practice of direct routing had become common.

In 1916 the Federal Reserve Bank of New York took a step, later followed by other Federal reserve banks, which was destined to insure the presentation of checks by direct routing to the proper banks. In that year the Federal Reserve Bank of New York announced that it would not accept any item drawn on a bank located outside its district when such item bore the endorsement of a bank located outside of its district. This restriction prevented banks outside of the second district from sending items drawn upon banks in other districts to New York City for the purpose of making New York exchange.<sup>40</sup>

### 3. Sending items direct to member and non-member clearing banks in other districts

Theoretically member and non-member clearing banks in one district may not send inter-district cash items direct to the drawee banks in another district if they wish to use the Federal reserve clearing and collection mechanism. As a matter of fact member and non-member clearing banks do send items direct to drawee banks in other districts and request them to deposit the proceeds with their Federal reserve bank or branch for the credit of the payee banks. Thus, while it may be said that the Federal reserve clearing and collection system is not being used, the payee banks can build up their reserve balances in this manner just as

<sup>39</sup>*Third Annual Report of the Federal Reserve Board* (1916), pp. 207, 459.

<sup>40</sup>*Loc. cit.*, p. 232.

though they had used the Federal reserve clearing and collection system. Banks often are able to save time by doing this. But it should be noticed that the Federal reserve banks have no control over such transactions.

Another type of direct sendings is authorized in exceptional cases, however, which does involve the use of the Federal reserve mechanism. Certain important centers may be in different Federal districts but very near to each other as in the case of Detroit, Michigan, in the Chicago district, and Toledo, Ohio, in the Cleveland district. Ordinarily, if the regular collection procedure were followed, checks on Toledo which are deposited in Detroit banks would be sent to the Federal Reserve Bank of Cleveland, thence to Toledo for collection which would involve a great waste of time. By special arrangement the Detroit branch of the Federal Reserve Bank of Chicago forwards checks on Toledo banks direct to the drawee banks which in turn remit for them to the Federal Reserve Bank of Cleveland for the Detroit branch of the Federal Reserve Bank of Chicago. The same arrangement is made for Indianapolis, Indiana, and Cincinnati, Ohio. Checks on Indianapolis are forwarded by the Cincinnati branch to Indianapolis and remitted for by the Indianapolis banks to the Federal Reserve Bank of Chicago for the credit of the Federal Reserve Bank of Cleveland.<sup>41</sup> The amount of items sent direct to drawee banks in this manner is relatively small. In 1923, only 190,000 items amounting to \$85,996,000 were sent in this manner.<sup>42</sup>

### Service charges

At the time the compulsory system was introduced it was decided that the cost of collecting and clearing checks should be borne by the banks receiving the benefit and in proportion to the service rendered. The Federal Reserve System was comparatively young and few, if any, of the Federal reserve banks were earning their required dividends and current expenses. The compulsory plan provided that a charge not exceeding 2 cents per item might be made at stated intervals against such banks as sent to the Federal reserve banks checks or drafts on other banks for collection and credit, such a charge, of course, not applying to banks which had not availed themselves of the privileges offered. Member banks were not deprived of any income which they had been

---

<sup>41</sup>The writer is indebted to Mr. H. F. Strater, Assistant Cashier, Federal Reserve Bank of Cleveland, for this information.

<sup>42</sup>*Tenth Annual Report of the Federal Reserve Board* (1923), p. 161.

receiving from the collection of drafts<sup>43</sup> or from the purchase or discount of commercial bills of exchange. The Federal Reserve Board ruled that an account should be kept by each Federal reserve bank of the cost of performing this service and the Board then, by rule, was to fix the charge, at so much per item which was to be imposed. For the period of July 15 to December 31, 1916, the service charge per item ranged from .9 of one cent for Boston to 2.0 cents for San Francisco, 1.5 cents being the most common charge. The cost of transporting currency, however, was to be borne by each Federal reserve bank.<sup>44</sup> As pointed out below, service charges were gradually lowered and finally abolished on July 1, 1918.

#### The meaning of par collection under this system<sup>45</sup>

The expression "collectible at par through the Federal reserve bank" as used by the Board in Circular No. 1 and Regulation J, Series of 1916, merely meant that checks were collectible at full face value through the Federal reserve bank, that is, that remitting banks would remit without deductions when remitting to Federal reserve banks. It did not mean that banks sending checks for collection to their Federal reserve banks could not charge their customers for the expense involved. Indeed, the Federal Reserve Board expected the collecting banks to charge enough to cover costs. Items sent through the Federal reserve banks for collection by member banks were not available until actually collected which meant that the funds would not be available for the depositors of the member banks until actually collected. Consequently, if member banks gave their customers immediate credit for checks deposited they were carrying the float for their depositors and were entitled to interest on the funds advanced in this manner. The Federal Reserve Board specifically stated that it did not expect member banks to collect checks at a loss, but on the contrary, expected them to charge not only enough to cover the charges levied on them by the Federal reserve bank, but enough to cover interest on the advances made by giving immediate credit.<sup>46</sup> On the other hand, the Federal Re-

<sup>43</sup>Other than bank drafts.

<sup>44</sup>*Third Annual Report of the Federal Reserve Board* (1916), pp. 9-11. At no time did the Federal Reserve Board fix the charges to be levied by member banks. See below pp. 211-213.

<sup>45</sup>A fuller explanation of the meaning of this term will be found on p. 232, note 1.

<sup>46</sup>*Federal Reserve Bulletin*, Vol. II (1916), pp. 263-264, 310-311.

serve Board thought that if they could reduce the charges by having a well organized system, these benefits should be passed on by the member banks to their depositors. Some banks charged, while others accepted items at par for collection, bearing the expense themselves. In other instances clearing houses required their member banks to make uniform charges. Thus, it will be seen, that no uniformity of practice relative to charges for collection, existed among the various banks. Where clearing houses established uniform collection charges on items received from depositors, there was not, ordinarily, a proper differential established between items on member banks of the Federal Reserve System which cleared at par, and items on State banks which declined to remit at par. In such cases the depositor was not getting the benefit of the Federal reserve par system.<sup>47</sup> In addition to these charges it will be recalled that the Federal Reserve Act permitted members to charge for making remittances also, provided the charges were not levied against a Federal reserve bank. As a result, it was to the interest of the member banks to have their checks collected through the Federal reserve banks in order to avoid being charged by remitting banks.

#### **The question of reserves; the Board's proposal to concentrate**

It was estimated by the Board that as soon as the new clearing system could be put into operation checks upon about 15,000 national banks, State banks, and trust companies could be collected by the Federal reserve banks at par, subject to the small service charge referred to above. As any bank would be likely to lose desirable business when checks drawn upon it were at a discount, while checks drawn upon a nearby competitor circulated at par, it was believed that in a short time checks upon practically all banks in the United States could be collected at par by Federal reserve banks. On the other hand, many banks had found it necessary to maintain balances with a number of correspondent banks for exchange purposes thus compelling them to keep an undue proportion of the funds away from home. This was a defect that required correction. Despite this burden, the number of banks upon which par collections were made under this new plan had exceeded 15,000 by December 15, 1916, and the total daily clearance at all Federal reserve banks aggregated at that date over \$125,000,000.<sup>48</sup>

<sup>47</sup>*Third Annual Report of the Federal Reserve Board (1916)*, p. 305.

<sup>48</sup>*Ibid.*, pp. 10-11.

In order to make the system effective, the Board found it necessary to solve the question of reserves, that is, to permit no bank balances to be available as reserves for national banks, except balances in Federal reserve banks. This would check the carrying of balances with correspondents, as the maintenance of such non-reserve balances would then mean a real hardship to banks practicing it. Such a concentration of reserves would naturally carry with it the clearing and collection functions which the Board was anxious to accomplish.

The desire to solve this problem, combined with the desire to meet the war emergency, caused the Board to propose an amendment to Section 19, which provided that all reserves of member banks should be maintained with Federal reserve banks on the basis of 7, 10, and 13 per cent. against demand deposits, plus 3 per cent. against time deposits, for country banks, reserve city and central reserve city banks, respectively. The Board proposed an amendment, also, to the Act to permit non-member State banks and trust companies, even though too small to be eligible for membership in the Federal reserve banks, to avail themselves of the clearing and collection facilities of the Federal reserve banks, provided they would cover at par checks on themselves sent for collection by the Federal reserve bank and provided further that they keep compensating balances with the Federal reserve bank in amounts to be prescribed by the Federal Reserve Board.<sup>49</sup> The purpose was to make the plan comprehensive enough to include all checks. At the time this amendment was proposed, the par lists of the Federal reserve banks included the names of banks, checks on which could be collected in any circumstances at a minimum of time and expense, but did not embrace a large number of towns in every State where there were no member banks; and in order to make collections on such points many banks were obliged to maintain accounts in addition to their reserve accounts with the Federal reserve banks. A necessary factor in any successful clearing plan is the offset whereby only balances, instead of the total volume of transactions, require settlement. So long as the clearing system does not embrace all of the banks this offset is lost in a corresponding degree and the value of the system diminished in proportion. Hence the justification of the proposals of the Federal Reserve Board.

---

<sup>49</sup>*Ibid.*, pp. 11, 28.

### The question of non-member banks; amendment of September 7, 1916

Section 13 as originally passed did not specifically allow Federal reserve banks to receive from their member banks, or from other Federal reserve banks, checks drawn upon non-member banks although many were remitting at par. In order to develop the par collection plan this Section was amended September 7, 1916, to make this possible. The significant part of Section 13 as originally enacted read:

“Any Federal reserve bank may receive from any of its member banks . . . checks and drafts upon solvent member banks, payable upon presentation; or solely for exchange purposes, may receive from other Federal reserve banks . . . checks and drafts upon solvent member or other Federal reserve banks. . . .” This clause as amended read: “Any Federal reserve bank may receive from any of its member banks . . . checks, and drafts, payable upon presentation . . . ; or solely for purposes of exchange or of collection, may receive from other Federal reserve banks . . . checks upon other Federal reserve banks, and checks and drafts payable upon presentation within its district. . . .”<sup>50</sup>

The natural inference flowing from this amendment was that the Federal reserve banks were not only to accept checks on non-member banks from their member banks and other Federal reserve banks, but were to exercise the power necessary to collect them.<sup>51</sup>

### The concentration of reserves, June-July, 1917

In harmony with the recommendations made by the Federal Reserve Board in 1916, Section 19 of the Federal Reserve Act was amended June 21, 1917, repealing the original reserve requirements and substituting new requirements which reduced the amounts required and concentrated them entirely in the Federal reserve banks. Against demand deposits, member banks in central reserve cities were required to keep 13 per cent.; those in reserve cities 10 per cent.; and those members designated as country banks, 7 per cent. Against time deposits all member banks were required to keep 3 per cent. reserve. Member banks in central reserve cities were required to move the remainder of their reserves by June 27; other member banks were given to July, 1917, to make the change.<sup>52</sup>

<sup>50</sup>*Ibid.*, p. 134.

<sup>51</sup>*Letter No. 5*, p. 8.

<sup>52</sup>*Federal Reserve Bulletin*, Vol. III (1917), p. 508.

## FEDERAL RESERVE CLEARING AND COLLECTION 197

This amendment effected a concentration of reserves which, doubtless, did more than anything else to make effective a centralized clearing and collection system, as banks were now deprived of one of their chief incentives for having their checks collected through other channels. The concentration combined with the slight reduction, also contributed substantially to the elasticity of deposit currency. While the reserve requirements were decreased the real decrease was not as great as might appear, since all member banks must necessarily carry a certain amount of cash in their own vaults to meet current needs. These reserves, moreover, with the Federal reserve banks had to consist of realized balances made real through the operation of the zoning system.

With the concentration of all reserves in the member banks, the next important problem facing the Board in its efforts to develop a centralized clearing and collection system was the bringing of non-member banks into the system.

### **Non-member banks admitted to the privileges of the system, June 21, 1917**

From the beginning of the collection system non-member banks could obtain the benefits of the system through their member bank correspondents since Federal reserve banks, under the law, were required to receive certain items sent to them by their member banks and no discrimination could be made in the case of items bearing the endorsement of a non-member bank ahead of the endorsement of the member bank by which they were offered. By the amendment of September 7, 1916, express permission had been given the Federal reserve banks to accept from their member banks and other Federal reserve banks checks drawn upon certain non-member banks. Non-member banks could be collected upon by Federal reserve banks but could not use the Federal reserve banks directly as collecting agents. It was felt that justice required that the non-member banks co-operating in the collection system should be safeguarded in their right to use the system and not be left wholly at the mercy of the member banks. Consequently, the Federal Reserve Board proposed that Section 13 be amended so that non-member banks could be admitted to the privileges of the system and use the Federal reserve banks as collecting agents. Acting upon the suggestion of the Federal Reserve Board, Congress amended Section 13 in order to permit non-member banks and trust companies to become clearing members in the system. This amendment permitted Federal reserve



banks to receive accounts for collection and exchange purposes from such non-member banks and trust companies as might agree to remit to the Federal reserve banks at par for checks drawn upon themselves and which, in addition, would maintain balances with the Federal reserve bank sufficient to offset items in transit held for their account by the Federal reserve bank.<sup>53</sup>

At the outset several large non-member banks opened clearing accounts, but as most of these later became members of the Federal Reserve System, the number of non-member clearing accounts did not become large.<sup>54</sup> Non-member banks found it more convenient to use the Federal reserve collection system through their member bank correspondents. Free use of the system was made through member bank correspondents not only by all the non-member banks that from time to time agreed to co-operate by remitting at par for checks drawn upon themselves, but also by the non-member banks that maintained what they called their "right to charge exchange." Even during the time they were seeking by means of injunctions and suits, to prevent the Federal reserve banks from presenting and collecting at par checks drawn upon them, they unhesitatingly made free use of the Federal reserve collection system through member bank correspondents for the collection of checks deposited with them and drawn upon member banks or non-member banks whose names appeared upon the par list of the Federal Reserve System.<sup>55</sup> This amendment consequently was rather unsuccessful and the Federal reserve banks found themselves unable to collect checks drawn on many non-member banks except at heavy expense.

#### **Problem of collecting checks on non-member banks**

The Federal Reserve Board had interpreted Sections 13 and 16 to mean that the Federal reserve banks were required to accept at par all checks payable upon presentation when deposited with them by member banks. It is evident, that a Federal reserve bank receiving checks on non-member banks for deposit would proceed to collect those checks, and that if the banks upon which they were drawn would not remit at par the Federal reserve bank was obliged to provide itself with some other means of making the collection. Various means were resorted to where there were no

<sup>53</sup>*Fourth Annual Report of the Federal Reserve Board (1917)*, pp. 12-13, 23-24.

<sup>54</sup>Governor W. P. G. Harding's Report to the Senate, 66th Cong., 2d Sess., Sen. Doc. No. 184, p. 3.

<sup>55</sup>*Letter No. 5*, p. 10.

member banks in the same town through which the collections could be made over the counter. Express companies and other agencies were used, depending upon the circumstances. But in order to simplify the problem the Federal reserve banks called the attention of the non-member banks to the provisions of the law and stated that stamped envelopes would be sent in each case to the remitting bank, in order that there might be no actual expense incurred by the drawee bank in making the remittance and that if it were more convenient, remittance might be made in currency at the expense of the Federal reserve bank.

As the opposition to the provisions of the Act increased on the part of the non-member banks which were anxious to maintain this old source of profit due to charging exchange for remittance, the issue was raised as to whether Congress had a right to legislate in any way that would diminish the profits of the non-member banks. The Board, in answer to this issue, pointed out that Congress clearly has the power to legislate in matters relating to the manner in which the Federal reserve banks should operate. The Board further pointed out that it was its view that Congress (1) had directed all banks, non-members as well as members, not to make exchange charges against Federal reserve banks; (2) had directed the Federal reserve banks to receive on deposit at par any checks and drafts which were payable on presentation; and (3) had directed the Federal reserve banks not to pay any exchange charges to banks in making these collections.

The Federal Reserve Board then suggested that if it were desired to question the constitutional right of Congress to enact a law prohibiting a Federal reserve bank from paying exchange to a non-member bank on checks drawn upon a non-member bank by its own depositors, the banks which questioned its validity should initiate the proceedings rather than the Federal Reserve Board; that should they concede the right but believe the law oppressive, unjust or unwise, they should appeal to Congress with the view of having the objectionable features stricken out or modified; that if banks doubting the validity of the law felt that the length of time necessarily involved in obtaining a judicial and final interpretation made it undesirable to litigate they should appeal directly to Congress; that the banks should not obstruct the law as it then stood pending a final determination of policy by Congress; and finally, that if non-member banks should be required to remit at par no longer, member banks should also be relieved from such an obligation, for the member banks were

supporting the Federal Reserve System and it would be unfair to deprive them of opportunities for profit given to non-members.<sup>56</sup>

### **The Hardwick Amendment, June 21, 1917**

During 1917 a determined effort was made by some of the exchange-charging member and non-member banks to amend the Federal Reserve Act in order to provide for a standardized exchange charge not to exceed 1/10 of 1 per cent. to be made by member banks against the Federal reserve banks for checks sent for collection. The fight resulted in the so-called Hardwick Amendment which provided "that nothing in this or any other section of this act shall be construed as prohibiting a member or non-member bank from making reasonable charges, to be determined and regulated by the Federal Reserve Board, but in no case to exceed 10 cents per \$100 or fraction thereof, based on the total of checks and drafts presented at any one time, for collection or payment of checks and drafts and remission therefor by exchange or otherwise; *but no such charges shall be made against the Federal Reserve Banks.*"<sup>57</sup> The Attorney General was requested to give his opinion as to whether this proviso applied to non-member banks. He held that it did not apply to State banks not connected with the Federal Reserve System and that the provisions prohibited the Federal reserve banks from paying exchange charges to member or non-member banks.<sup>58</sup>

It was thought that had he given an affirmative opinion it would have made much easier the establishment of a universal par collection system. The adverse opinion holding that the proviso applied to member banks only, meant that the further development of the collection system would necessarily be retarded and in the absence of further legislation would depend upon voluntary action of many small banks.<sup>59</sup>

### **Other attempts to develop the system**

In addition to the attempts already made by the Federal Reserve Board to enlarge the scope of the clearing and collec-

<sup>56</sup>*Federal Reserve Bulletin*, Vol. VI (1920), p. 489.

<sup>57</sup>Italics are the author's; *Fourth Annual Report of the Federal Reserve Board* (1917), p. 23; *Seventh Annual Report of the Federal Reserve Board* (1920), p. 64.

<sup>58</sup>For this opinion see *Federal Reserve Bulletin*, Vol. IV (1918), pp. 367-371. See also *Fourth Annual Report of the Federal Reserve Board* (1917), pp. 23-24; *Seventh Annual Report of the Federal Reserve Board* (1920), p. 64.

<sup>59</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), p. 76; *Seventh Annual Report of the Federal Reserve Board* (1920), p. 64.

tion system, the Board consciously and persistently made arrangements and innovations that were designed to make the system more advantageous and attractive to the non-member banks. The scope of the system was enlarged through (1) provisions for the collection of notes, drafts, and other items, (2) provision for exchange and transfer drafts, (3) the development of the telegraphic transfer system, and (4) the elimination of service charges and the absorption of other costs by the Federal reserve banks.

#### The collection of notes, drafts, and other items

The Federal Reserve Act as originally passed did not include provisions for the collection of notes, drafts and other maturing items. By an amendment to Section 13, approved September 7, 1916, the Federal reserve banks were given authority to "receive from any of [their] member banks, and from the United States . . . for collection, maturing bills; or solely for purposes . . . of collection, may receive from other Federal reserve banks . . . maturing bills payable within [their districts.]"<sup>60</sup> This Section was further amended on June 21, 1917, so as to make it possible for Federal reserve banks to receive for collection such maturing notes and bills from any non-member bank or trust company, provided such banks, or trust companies maintained with their Federal reserve bank a balance sufficient to offset the items. The Act does not authorize a Federal reserve bank to collect maturing notes and bills payable within its own district which are forwarded to it for collection by any member bank located outside of its own district. Section 16, however, authorizes a Federal reserve bank to receive from any member bank, regardless of its location, checks and drafts drawn upon a member bank of its district. This, it will be noted, is the only collection service which a Federal reserve bank may perform directly according to the provisions of the Federal Reserve Act for any member bank located outside of its own district. Until 1920 the collection service of maturing notes and bills was limited to items sent to a Federal reserve bank by its own member banks or by other Federal reserve banks.<sup>61</sup> In that year, however, an arrangement was made by the Board whereby a member bank might send maturing notes and bills direct to a Federal reserve bank of another district for collection and credit to the account of

<sup>60</sup>*Third Annual Report of the Federal Reserve Board* (1916), p. 134.

<sup>61</sup>*Federal Reserve Bulletin*, Vol. V (1919), p. 467.

the Federal reserve bank of the district in which the sending bank was located, although there was no provision of law which authorized a Federal reserve bank to receive such items from a member bank located outside of its own district.<sup>62</sup>

On August 11, 1917, the Board requested the Federal reserve banks to establish general collection departments in order to receive such maturing paper for collection. The paper was to consist of maturing notes, bills and miscellaneous drafts made by or drawn upon individuals, firms, or corporations other than banks, and was to be subject to a moderate collection charge.<sup>63</sup> As a result, member banks which were obliged to rely upon other banks for service of this sort could now obtain it from the Federal reserve banks. Such a move on the part of the Board and banks seemed necessary, since reserves were now concentrated, if banks were not to experience the hardships of being compelled to carry additional deposits with banks other than the Federal reserve banks for purposes of collecting such items.<sup>64</sup>

The handling of items of this kind presented problems quite different from those involved in the handling of checks. The Federal Reserve Board clearly distinguished between checks and drafts on banks and maturing notes and bills of exchange sent through the banks for collection. There were no provisions in the law requiring Federal reserve banks to receive bills and notes at par as in the case of checks and drafts on banks. Obviously, such items could not be received at par for the reason that no bank could properly be forced to credit at par an unmatured or uncollected note or bill. Neither did the Hardwick Amendment to Section 13 prohibit member banks charging the Federal reserve banks for collecting such items nor give the Board any authority to regulate such charges.<sup>65</sup> In 1917, the Federal Reserve Bank of New York, for example, made a service charge of 10 cents per item, in addition to such collection charges as might be imposed by the collecting bank, and in case a collection item was returned unpaid, a charge of 10 cents was imposed, to be paid by the bank presenting the item for payment. No charge was made, however, for the collection of coupons other than the charge made by the collecting bank plus mail or ex-

---

<sup>62</sup>*Federal Reserve Bulletin*, Vol. VI (1920) pp. 276, 949.

<sup>63</sup>As early as October, 1915, the Board had ruled that the Federal reserve banks might and should make such collections but the matter did not become urgent until 1917.

<sup>64</sup>*Fourth Annual Report of the Federal Reserve Board* (1917), pp. 12, 23, 181; *Federal Reserve Bulletin*, Vol. III (1917), p. 656.

<sup>65</sup>*Federal Reserve Bulletin*, Vol. III (1917), pp. 662-663.

press charges. So far as possible, items were sent direct to their place of payment and when payable outside of the district, the collecting bank was permitted to make remittance either direct to the Federal Reserve Bank of New York in New York exchange, or, if more convenient, in available exchange to any other nearby Federal reserve bank for the credit of the Federal Reserve Bank of New York.<sup>66</sup> In April, 1918, the Board approved certain recommendations that the 10 cents charge on collection items between Federal reserve banks and their member banks be eliminated until further notice, but that a charge of 15 cents per item be made on all such items returned unpaid in order to prevent the sending of dunning items through the Federal reserve banks. This rule became effective June 15, 1918.<sup>67</sup> At the same time the Federal Reserve Board recommended that while trade acceptances should be treated as collection items, bankers' acceptances should be treated as cash items. Early in 1920, the question was presented to the Federal Reserve Board as to whether a member bank might make an exchange charge lawfully on one of its own acceptances presented to it for collection by the Federal reserve bank of its district. The Board ruled that a banker's acceptance was a draft within the meaning of that part of Section 13 which prohibited member banks making any charge against the Federal reserve banks for collection or payment of checks and drafts presented to them by the Federal reserve banks.<sup>68</sup> It was pointed out, however, that Section 13 did not prohibit a member bank from charging the Federal reserve bank for the service of collecting maturing notes and bills of exchange drawn upon individuals, firms or corporations other than banks. The fact that such a note or bill of exchange not drawn on a bank might be made payable at that bank did not bring it within the restrictions of Section 13 and did not preclude the member bank from making a charge against the Federal reserve bank for effecting its collection and remitting therefor by exchange or otherwise.<sup>69</sup> In April, 1918, the Board ruled, also, that bill-of-lading drafts could be received by the Federal reserve banks only as collection items, and not as cash items for which immediate credit could be given even though drawn payable at sight.<sup>70</sup>

<sup>66</sup>*Fourth Annual Report of the Federal Reserve Board* (1917), p. 269; *Federal Reserve Bulletin*, Vol. III (1917), pp. 743-744.

<sup>67</sup>*Federal Reserve Bulletin*, Vol. IV (1918), p. 371.

<sup>68</sup>*Federal Reserve Bulletin*, Vol. VI (1920), p. 162.

<sup>69</sup>*Ibid.*, p. 699.

<sup>70</sup>*Ibid.*, pp. 372, 436.

In August, 1918, the New York City Clearing House took a forward step with reference to the collection of acceptances through the clearing house which did much to eliminate at least one day's float. The clearing house agreed to pass acceptances through the clearings and charge them to the accounts of their acceptors at the banks at which they were payable upon the date of their maturity precisely as if they were checks, and established regular methods for the reimbursement of acceptances by those in whose favor they were made. This practice supplanted the long established custom of presenting such items at maturity and receiving either certification thereof or checks, final payment thus being delayed for one day after maturity.<sup>71</sup>

In 1920 the question was raised as to whether a non-member bank which was not even a clearing member, but a correspondent of a member bank, could send bill-of-lading drafts direct to the Federal reserve bank for collection and credit to the member bank's account when so authorized by the member bank. The Federal Reserve Board ruled that this could be done if the Federal reserve bank had received specific notice from the member bank that it had authorized the sending bank to act as agent of the member bank in forwarding the items for the member bank's account. The Federal Reserve Board, however, reserved to each Federal reserve bank the right to decline to receive such items at its discretion.<sup>72</sup>

The question was raised, also, as to whether a Federal reserve bank might collect maturing notes and bills drawn upon firms, individuals, or corporations which were located within its district but which were not member banks, when such notes and bills were forwarded to it for collection by a member bank of another district for the account of the Federal reserve bank of that other district. On this point the Board ruled that such a service might be performed by a Federal reserve bank at its own option whenever it had received satisfactory advice that the Federal reserve bank for whose account the collection was being made had authorized its member bank to act as its agent in forwarding maturing items of this character for collection and credit to its account. It was considered, by the Board, to be immaterial whether the authority to act as agent was specific as to the particular member bank or whether it was general as to all

---

<sup>71</sup>See *Federal Reserve Bulletin*, Vol. IV (1918), pp. 806, 819-821.

<sup>72</sup>*Federal Reserve Bulletin*, Vol. VI (1920), pp. 948-949.

## FEDERAL RESERVE CLEARING AND COLLECTION 205

member banks of the Federal reserve bank for whose account the collection was being made.<sup>73</sup>

### Schedule for availability of proceeds of bankers' acceptances

The following schedule became effective on and after March 1, 1919, indicating when the proceeds of bankers' acceptances received by Federal reserve banks for collection from or for the account of other Federal reserve banks, and subject to final payment, would be available:

#### SCHEDULE FOR AVAILABILITY OF PROCEEDS OF BANKERS' ACCEPTANCES<sup>1</sup>

District	Credit available at maturity for items payable in—	Credit for items payable elsewhere in district available—
Boston.....	Boston, Mass.....	1 day after maturity
New York.....	New York, N. Y.....	Do
	Buffalo, N. Y.....	Do
Philadelphia.....	Philadelphia, Pa.....	Do
Cleveland.....	Cleveland, O.....	Do
	Cincinnati, O.....	Do
	Pittsburgh, Pa.....	Do
Richmond.....	Richmond, Va.....	2 days after maturity for Maryland, District of Columbia, and Virginia; 3 days after maturity for West Virginia, North Carolina and South Carolina
	Baltimore, Md.....	Do
Atlanta.....	Atlanta, Ga.....	1 day after maturity for acceptances of member banks only; acceptances of non-member banks when collected
	New Orleans, La.....	Do
	Jacksonville, Fla.....	Do
	Birmingham, Ala.....	Do
Chicago.....	Chicago, Ill.....	1 day after maturity
	Detroit, Mich.....	Do
St. Louis.....	St. Louis, Mo.....	Do
	Louisville, Ky.....	Do
	Memphis, Tenn.....	Do
	Little Rock, Ark.....	Do
Minneapolis.....	Minneapolis, Minn.....	Do
	St. Paul, Minn.....	Do
Kansas City.....	Kansas City, Mo.....	Do
	Omaha, Neb.....	Do
	Denver, Colo.....	Do
Dallas.....	Dallas, Tex.....	Do
	El Paso, Tex.....	Do
San Francisco.....	San Francisco, Cal.....	Do
	Spokane, Wash.....	Do
	Portland, Ore.....	Do
	Seattle, Wash.....	Do
	Salt Lake City, Utah....	Do

<sup>1</sup>From *Federal Reserve Bulletin*, Vol. V (1919), pp. 245-246.

<sup>73</sup>*Ibid.*, pp. 276, 949.



### Introduction of Federal reserve exchange and transfer drafts

With the concentration of reserves it was felt that some machinery should be provided for the transfer of funds for banks which had been in the habit of using drafts on central reserve city banks. The provision for such a mechanism would serve as an additional inducement to non-member banks to enter the system. While it is true that member banks could draw drafts upon their own Federal reserve banks, and indeed, did so from the beginning of the Federal Reserve System, such drafts, after July 15, 1916, were acceptable for immediate credit only at the Federal reserve bank of the district in which the drafts originated. This ordinary type of bank draft, when sent into other Federal reserve districts, was acceptable only on a deferred credit basis, that is, in accordance with the published time schedules.

To meet the needs of the large number of banks which had obligations to meet outside their own district, two types of Federal reserve drafts were created, the Federal reserve exchange draft and the Federal reserve transfer draft. These drafts, which were officially introduced on June 1, 1917, provided all member banks in the several districts with a means of remittance which was acceptable for immediate credit at any one of the Federal reserve banks or branches. They were designed to supplement not only the ordinary bank draft, but also telegraphic transfers, and to facilitate payments that did not need to be made by telegraph, thus giving bank exchange a wider currency and usefulness.

A Federal reserve exchange draft is one drawn by a member bank upon its own Federal reserve bank and made receivable at par for immediate availability at *any* Federal reserve bank, although actually payable only at the drawee Federal reserve bank. Such drafts were originally drawn in amounts not to exceed \$250, but on September 3, 1918, the maximum was increased to \$5,000. The bank drawing such drafts is required to give advice by mail to its Federal reserve bank of the total amount of drafts drawn each day. This amount is charged to the member bank's account and the funds placed in a special account against which the drafts will be charged when presented for payment. Special forms for the drafts and advices are provided.<sup>74</sup>

<sup>74</sup>*Federal Reserve Bulletin*, Vol. III (1917), pp. 348-349; *Fourth Annual Report of the Federal Reserve Board* (1917), pp. 23-24; *Federal Reserve Bulletin*, Vol. IV (1918), p. 819. When member banks' reserve accounts are kept with Federal reserve bank branches, such drafts are drawn on and payable at the branch. In such cases the daily advices are mailed to the branches.

Each member bank must apply for and receive permission from its Federal reserve bank before drawing Federal reserve exchange drafts, and the Federal reserve bank reserves the right to withdraw this privilege from the member bank should it violate the prescribed regulations. No draft can be drawn except against an available balance in excess of the required reserve of the bank.

It is to be observed that although the Federal reserve bank, to which such exchange drafts are sent by one of its own member banks, gives immediate credit for the draft (subject to final payment), it really advances no funds of its own, due to the fact that it is permitted to deduct the total amount of these drafts from what it owes the drawee Federal reserve bank when it makes its daily settlement through the Gold Settlement Fund. Nor is the drawee Federal reserve bank out of the funds, since it immediately charges the account of the member bank drawing the draft upon receipt of the daily advices.

Up to the present time comparatively little use has been made of the Federal reserve exchange draft. This has been due to inertia in adopting new methods, to the fact that many banks for various reasons cling to their old correspondents, to the fact that many banks have found that the ordinary bank draft drawn on their own Federal reserve banks has met most of their demands, to the increased efficiency in the check clearing and collection system which lessens the demand for drafts, and to the fact that banks can transfer balances between their correspondents without expense and without loss of time by using the telegraphic transfer system. These drafts did not attain any importance whatever until their maximum was raised from \$250 to \$5,000.<sup>75</sup>

The Federal reserve transfer draft is a draft drawn by a member bank upon its own Federal reserve bank and made payable at any Federal reserve bank *specified in the draft*. The minimum for these drafts was fixed at \$250, the maximum originally placed on the Federal reserve exchange drafts. While this minimum requirement has never been changed, it is generally understood that no transfer drafts will be drawn for amounts under \$5,000, since that amount now constitutes the maximum for the exchange drafts. The drawing bank is required to give advice by mail to its Federal reserve bank of the numbers, amounts, and total made payable at each Federal reserve bank of drafts drawn each day. It also sends a duplicate of this advice to the specified Federal

---

<sup>75</sup>*Federal Reserve Exchange*, Letter No. 17, Federal Reserve Bank of Richmond (September, 1924), pp. 9-10. Hereafter cited as *Letter No. 17*.

reserve bank at which the drafts are made payable. The drawee Federal reserve bank, upon receipt of this advice, charges the total amount of the drafts to the account of the member bank and makes provision for payment at the Federal reserve bank or branches specified. At the same time it telegraphs the Federal reserve banks at which the drafts are payable, confirming the advice sent by the drawing bank. These drafts will not be paid unless the paying Federal reserve bank has the duplicate advice of the drawing bank and the confirmation of the drawee Federal reserve bank. Due to the cumbersome nature of the transfer drafts, their use has not become common.<sup>76</sup>

### *The telegraphic transfer system*

Soon after the establishment of the Gold Settlement Fund a system of telegraphic transfers was established. The Federal Reserve Bank of New York inaugurated a transfer system as early as May 26, 1915, by which it undertook to transfer funds for any member bank to any other member bank in that district and to any other Federal reserve bank for account of any of its member banks. When the transfers were advised by mail no charge was made; when advised by telegram a slight charge was made, but after December 30, 1916, the bank reduced the charges for telegraphic transfers to the cost of the telegram.<sup>77</sup> Apparently these transfers were largely, if not entirely, among member banks within the Federal reserve bank's own district, for when the question came before the Federal Reserve Board in March, 1917, as to the wisdom of permitting the use of the Gold Settlement Fund for the purpose of making transfers between distant member banks, the Board declined to sanction such practice.<sup>78</sup> During the last six months of 1917, however, the Federal Reserve Bank of New York made many transfers, probably mostly intra-district, and at the close of that year reported that telegraphic transfers had been made for member banks without limit as to amount and without charge other than the cost of the telegram.<sup>79</sup> The Federal Reserve Bank of San Francisco reported in 1917, however, that it performed for its member banks a service that involved

<sup>76</sup>*Letter No. 17*, pp. 4-5.

<sup>77</sup>*Third Annual Report of the Federal Reserve Board* (1916), pp. 234-235.

<sup>78</sup>*Federal Reserve Bulletin*, Vol. III (1917), p. 238; *The Gold Settlement Fund*, Letter No. 7, Federal Reserve Bank of Richmond (September, 1922), p. 1. Hereafter cited as *Letter No. 7*.

<sup>79</sup>*Fourth Annual Report of the Federal Reserve Board* (1917), p. 270.

inter-district transfers for member banks through the Gold Settlement Fund.<sup>80</sup>

Nevertheless, it was not until after the installation of the leased wire system in June, 1918, that the present highly developed system of telegraphic transfers had its most rapid growth, that is, a system by means of which a Federal reserve bank could make through the Gold Settlement Fund telegraphic transfers of funds for member banks, or for individuals and non-member banks through the medium of the member banks. On June 10, 1918, the Federal Reserve Bank of Richmond announced to its member banks that it was ready to make such transfers for them without charge. Similar announcements were made by all other Federal reserve banks to members in their respective districts.<sup>81</sup>

Prior to the introduction of the Federal reserve clearing and collection system and of wire transfers, distant payments were made by check or draft, which naturally consumed much time in effecting a settlement. For example, suppose a merchant in New York deposited in his bank a check for \$50,000, drawn upon a bank in San Francisco. The check would travel to San Francisco, where on arrival it would be charged to the account of the man who drew it, and his bank would mail the New York bank a New York check in payment. The \$50,000 would not be available to the merchant at his New York bank until the check arrived, at least ten and probably twelve days after the merchant deposited the original check.<sup>82</sup> The new Federal reserve clearing and collection system cut the time at least in half through the use of the Gold Settlement Fund. Instead of mail remittance, the San Francisco bank upon which the check is drawn makes payment at the Federal Reserve Bank of San Francisco. The same day the funds are transferred through the Gold Settlement Fund to the Federal Reserve Bank of New York which, in turn, settles immediately with the bank that had presented the check for collection.

But the system of transfers by wire virtually eliminates the time element. Suppose that the \$50,000 payment due from the man in San Francisco to the New York merchant could not wait for a check to be transmitted through the mail. The payer's bank would charge his account, and at the same time instruct the Federal Reserve Bank of San Francisco to telegraph the Federal Reserve Bank of New York, asking it to place \$50,000 to the

<sup>80</sup>*Ibid.*, p. 598.

<sup>81</sup>*Letter No. 7*, p. 11.

<sup>82</sup>Some banks give immediate credit but deduct interest.

credit of the New York merchant in his own bank. The San Francisco member bank is charged \$50,000 on the books of the Federal reserve bank, and \$50,000 in the Gold Settlement Fund passes from the ownership of the Federal Reserve Bank of San Francisco to that of New York. Since the introduction of daily settlements these transactions are settled daily through the Gold Settlement Fund as are those growing out of the clearing and collection of checks.

Such transfers are usually for large sums; to make a large number of small transfers which might have been made by check equally well would clog unduly the private wire system of the Federal reserve banks and hamper the efficiency of the service.<sup>83</sup> When the Federal reserve banks first undertook to make transfers of funds for their member banks, there were numerous instances in which member banks, with the best of intentions, started to make use of the facilities for practically all transfer operations for their customers, both small and large. The transfer facilities are intended primarily for the adjustment of balances between banks, and it was soon found necessary to set limits as to the size of transfers that would be accepted in order to avoid congestion of the wires with a multitude of small and relatively unimportant transactions which would tend to lessen the efficiency of the transfer system. As soon as the member banks understood the situation, they responded willingly and gave their full measure of co-operation toward making the transfer facilities effective. Originally there were no limits set on the size of the transfers which would be accepted from member banks, the matter being left entirely to the member banks. If a member bank appeared to be making use of the transfer facilities for unimportant items to such an extent that the service was retarded, the fact was pointed out to that bank that while the Federal reserve transfer system was open to them for such use they might desire to make of it, yet a situation might arise in which a very important large transfer would be seriously delayed by reason of a multitude of smaller and less important transactions taking precedence over it. By this method a most effective co-operation between the Federal reserve banks on the one hand, and their member banks on the other, was secured.<sup>84</sup>

<sup>83</sup>"Transferring Funds Under the Federal Reserve System," *Monthly Review*, Federal Reserve Bank of New York (June 1, 1921).

<sup>84</sup>Frederick Greenwood, "Relations Between Federal Reserve Banks and Member Banks," *Bulletin of the American Institute of Banking*, Vol. V, No. 1 (January, 1923), pp. 36-37. Federal reserve banks now make transfers over

## FEDERAL RESERVE CLEARING AND COLLECTION 211

With the installation of the leased wire system no charges whatever were made for these transfers, which included not only transactions between banks but also payments through member banks to individuals. This was in harmony with recommendations made by the Federal Reserve Board in May, 1918, that telegraphic transfers be bought and sold at par, each Federal reserve bank absorbing the telegraphic expense.<sup>85</sup>

With such facilities available, mail transfers were greatly reduced, as was the buying and selling of domestic exchange, since funds actually available could be transferred at par by telegraph. With reference to mail transfers, the Board recommended in 1918 that the discount rate on mail transfers be based upon the fifteen-day rate, but, because it was thought desirable that the rate for such transfers should remain as nearly uniform as possible and not vary too frequently, it suggested that for the time being and until further notice a charge of 10 cents per day per thousand dollars, or, at the rate of 3.65 per cent., be fixed as the rate for all transfers.<sup>86</sup> Rates seemed to have varied from this recommended rate, however. In 1919 the Federal Reserve Bank of Chicago, for example, reported that their policy of promoting mail transfers as well as telegraphic transfers was being continued and that uniform charges were maintained "of 15 cents discount per day per thousand—say 5½ per cent. per annum—for mail purchases and 7½ cents discount per thousand for mail sales."<sup>87</sup>

### ✓ Service charges lowered and finally abolished July 1, 1918

It has been pointed out already that with the inauguration of the compulsory clearing system on July 15, 1916, service charges were exacted by the Federal reserve banks to cover costs of collection. These charges during the remainder of the year 1916 ranged from .9 of 1 cent to 2.0 cents per item. After 1916 they ranged from .9 of 1 cent to 1.5 cents per item, although some of the Federal reserve banks in 1917, with the authority of the Federal Reserve Board, began exempting a certain number of items, usually five hundred per month, for each member bank. This was a part of the general movement on the part of the Federal reserve banks designed to encourage the use of the par collection facilities

---

the Federal reserve private wire system free of charge only when such transfers are accepted from and payable to member banks, are limited to bank balances, and are in multiples of \$100.

<sup>85</sup>*Federal Reserve Bulletin*, Vol. 1V (1918), p. 371.

<sup>86</sup>*Ibid.*

<sup>87</sup>*Sixth Annual Report of the Federal Reserve Board* (1919), p. 412.

of the system. For example, in September, 1917, the Federal Reserve Bank of Atlanta put into effect a rule whereby member banks were permitted to clear through the Federal reserve bank without any charge whatever checks to the number of five hundred per month, the number above five hundred being charged at the rate of  $1\frac{1}{2}$  cents per item. It also permitted State banks to remit to it in eastern exchange, since some of the banks which agreed to remit to it at par had no Atlanta account.<sup>88</sup> The Federal Reserve Bank of Kansas City in the same year exempted from the service charge a maximum of five hundred items per month received from any one bank, besides making provisions for the reduction of the service charges on items exceeding the five hundred limit. The Federal Reserve Banks of San Francisco and Kansas City also made provision to supply banks which remitted at par with return postage.<sup>89</sup> On July 1, 1918, the service charge was abrogated entirely and the Federal reserve banks began to collect without charge all checks and drafts on member and other banks on the par list.<sup>90</sup> This move was justified because of the increased earnings of the Federal Reserve System and the desire of the Board to extend the benefits of the system in every way possible.

As an illustration of the extent to which business was relieved of the burden of exchange charges the situation as reported by the Board for the year 1919 is interesting and instructive. The total volume of transactions through the Gold Settlement Fund in the year 1919 was approximately \$74,000,000,000 and the total cost, including the expense of the leased wires, was about \$250,000. This cost was borne by the Federal reserve banks and did not represent any expense whatever to the member banks or their customers. The basic cost of making domestic exchange in that year was 0.3 of a cent for each \$1,000 transferred. A charge of 10 cents per \$100 on the amount cleared through the Gold Settlement Fund would have involved an expense of \$1 for each \$1,000 transferred, or about \$74,000,000 for the entire amount.

The intra-district clearings made by Federal reserve banks in 1919, eliminating duplications, amounted to about \$135,000,000,000 and the total expense of these transfers was borne by the Federal reserve banks. Had the Federal reserve banks been obliged to pay for these transfers at the rate of 10 cents per \$100 the total expense would have been \$135,000,000, which amount

---

<sup>88</sup>*Fourth Annual Report of the Federal Reserve Board* (1917), p. 418.

<sup>89</sup>*Ibid.*, pp. 520, 597.

<sup>90</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 76-77.

was far in excess of the total earnings of the Federal reserve banks and, therefore, could not have been absorbed by them. If not absorbed, it would have been necessary to transfer the charge to the depositors of the checks, so that a charge of 10 cents per \$100 upon the business handled by the Federal reserve banks would have involved a cost to commerce and industry of this country of at least \$135,000,000.<sup>91</sup>

#### Absorption of other costs by Federal reserve banks

In October, 1918, new inducements were extended, in the form of additional facilities, to member banks and their customers through the absorption by the Federal reserve banks of all cost of postage, expressage, insurance, etc., incident to shipments of currency to and from member banks, not including silver and silver coin, also of the cost of telegrams between the Federal reserve banks and member banks in connection with currency, exchange transfers and deposit transactions. Under a similar arrangement for non-member banks maintaining clearing accounts, the Federal reserve banks absorbed the cost of postage, insurance and expressage in connection with shipments of currency in settlement of clearing balances, and a further saving of expense to non-member banks on the par list was provided by inclosing stamped envelopes with collection letters for return remittances. All expenses incident to shipments of currency made in payment of items sent for collection were to be borne by the Federal reserve banks.<sup>92</sup> This step removed one of the strongest arguments against the Federal reserve clearing and collection system presented by the non-member banks, especially those country banks which came in direct contact with the farmers and furnished them with the necessary financial resources during crop moving seasons. The cost of securing the necessary funds with all the attending risks involved had been borne by these outlying banks and for the assumption of these heavy burdens these banks had been justified in exacting payment.<sup>93</sup>

These inducements combined with those made in 1917 in the inauguration of the system of transfer drafts and the collection of maturing notes, bills, etc., impresses one as being sufficient to bring most of the non-clearing banks into the system. But they

<sup>91</sup>*Seventh Annual Report of the Federal Reserve Board* (1920), pp. 67-68.

<sup>92</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), p. 77.

<sup>93</sup>The problem of these banks is set forth well by Mr. Joseph T. Talbert, *Proceedings of the Academy of Political Science*, Vol. IV (1913-1914), pp. 197-198.



failed to accomplish the desired result and opposition became more pronounced. The nature and growth of this opposition will be reviewed briefly after mentioning some of the more important changes made in the operation of the Gold Settlement Fund.

#### **Changes in the operation of the Gold Settlement and Federal Reserve Agents' Funds**

Since Chapter VIII gives a full account of the history and nature of the Gold Settlement Fund, it will be necessary to survey but briefly the principal changes that were made relative to its operation. Details relative to the increased use of the Fund can be found in Table XXVII, p. 318.

The first important change affecting the Gold Settlement Fund after its creation on May 24, 1915, was the result of the amendment of June 21, 1917. Regulations in harmony with this amendment, which applied to the Federal Reserve Agents' Fund also, abolished the use of gold certificates as evidences of deposits made by the Federal reserve banks with the United States Treasury, as they had grown in such amounts as to be a burden. Under the old system these certificates in denominations of \$10,000 were constantly being transferred from the Treasury to the Federal Reserve Board and back again, according to whether Federal reserve banks were building up their deposits with the Board or withdrawing them. This amendment reduced the transactions to merely bookkeeping operations. The Treasurer of the United States simply opened an account with the Federal Reserve Board, giving credit to the Board for the sum of the deposits of the Federal reserve banks, the individual accounts being kept as before by the Federal reserve banks. When a Federal reserve bank wished to build up its deposit in the Gold Settlement Fund it deposited gold with the nearest sub-treasury. The Assistant Treasurer gave a receipt to the Federal reserve bank, wired the Treasurer of the United States, who issued a duplicate receipt to the Federal Reserve Board, and credit was given to the Federal reserve bank upon the books of the Gold Settlement Fund. Payment out of the fund was made by the Federal Reserve Board drawing a check upon the Treasurer of the United States, who now held the gold.<sup>94</sup>

#### **The leased wire system, June 4, 1918**

On June 4, 1918, the Federal reserve banks began operating a special leased wire system by which all Federal reserve banks and

<sup>94</sup>*Federal Reserve Bulletin*, Vol. III (1917), p. 521.

branches, the Federal Reserve Board, and the Treasury Department at Washington, were kept in communication with each other. Prior to this time the Federal reserve banks had used the commercial wires. Good service had been given, but the volume of business was increasing to such an extent that it seemed the better part of wisdom for the Federal reserve banks to control their own wires. The installment and operation of this system, which has been used continuously since, has facilitated not only settlements through the Gold Settlement Fund but has greatly facilitated many other operations of the Federal reserve banks and rendered possible services to member banks which could not have been undertaken without this facility. Under this system Washington and Chicago were made relay points for the East and West, respectively. The Federal Reserve Bank of Chicago was given charge of the operations of the system, and the chief telegraph operator is stationed at the Chicago office, with a supervising operator at Washington as an assistant. In 1918 there were twenty-nine operators, including the chief, employed in the main line offices, and about 20,000 messages carried monthly over the system, while 65 per cent. of this number were relay.<sup>95</sup> The leased wire system made possible the daily settlements which were provided for about one month later.

#### Daily gold settlement plan, July 1, 1918

Daily settlements through the Gold Settlement Fund were substituted for the weekly settlements on July 1, 1918. This rendered the transfers and clearings through the Fund much more effective and much better organized. It brought about the proper adjustments in the holdings of gold to the credit of each Federal reserve bank in the Gold Settlement Fund in as nearly automatic a manner as possible. Under the weekly settlement system many credit transfers were being made by the Federal reserve banks between settlement periods and the practice was on the increase, although it covered but a small proportion of the credits. Daily settlements meant a better organized and a more effective system in every respect.<sup>96</sup>

Under the system of daily settlements as originally devised, the settling agent made his settlements on the morning following the wiring of the credits by the Federal reserve banks to the Federal Reserve Board. The Federal reserve banks, upon receipt of

<sup>95</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 558-559.

<sup>96</sup>*Federal Reserve Bulletin*, Vol. IV (1918), p. 591.

these advices would make the appropriate entries as of the day on which they received the advices. Thus, the payments through the Gold Settlement Fund were always at least one day late. In order to eliminate any inter-Federal reserve bank float that might be carried by the Federal reserve banks, a system of evening settlements was provided for on March 1, 1920. According to this plan each Federal reserve bank and direct-settling branch telegraphs the Board its credits before the final closing of its books for the day. The settling agent makes settlements the same day and telegraphs to the Federal reserve banks and settling branches in time for the telegram to reach them before the opening for business on the following day when the necessary entries are made and their books finally closed as for the preceding day.

#### **Certain branches of Federal reserve banks clear directly through the Gold Settlement Fund<sup>97</sup>**

In order to eliminate unnecessary work between the Federal reserve banks and their branches and other Federal reserve banks, and delays in reconciling differences due to the distances between the parent bank and branches, a plan was instituted by which certain branches were authorized to make settlements through the Gold Settlement Fund in the same manner as the Federal reserve banks, except that the net debit or credit balance of each branch in the Fund is adjusted through the Gold Settlement Fund account of the parent Federal reserve bank, as the branches do not maintain accounts with the Fund. On December 2, 1918, the first move in this direction was made, when the four branches of the Federal Reserve Bank of San Francisco<sup>98</sup> were authorized to make settlements directly through the Gold Settlement Fund.

#### **Relation of the Gold Settlement Fund to rediscounting between Federal reserve banks**

Rediscounting between Federal reserve banks was not resorted to until June, 1918, although rediscounting by Federal reserve banks for their own member banks began in November, 1914, soon after the Federal reserve banks opened for business.

---

<sup>97</sup>See pp. 186-187 above.

<sup>98</sup>Located at Seattle, Spokane, Portland, and Salt Lake City. *Fifth Annual Report of the Federal Reserve Board* (1918), pp. 32-35. Los Angeles now constitutes a fifth branch. Of the 23 branches of Federal reserve banks in existence today all but the following seven are direct-settling branches: Pittsburgh, Buffalo, Cincinnati, Birmingham, Jacksonville, Nashville, and Oklahoma City.

## FEDERAL RESERVE CLEARING AND COLLECTION 217

The process of rediscounting between Federal reserve banks and its relation to the Gold Settlement Fund may be described briefly as follows: The Federal reserve bank requiring the rediscount for the purpose of increasing its reserve against deposits or Federal reserve notes wires the Federal Reserve Board, stating the amount needed<sup>99</sup> and the character and maturities of the paper offered. The Board, which is at all times advised of the reserve position of each Federal reserve bank, designates the bank to which the rediscount is to be assigned.<sup>100</sup> Upon receipt of this advice, the second Federal reserve bank transfers the gross amount to the other Federal reserve bank through the Gold Settlement Fund, although this transfer is not included in the regular settlement growing out of the clearing and collection of checks. The discount is calculated by the bank requesting the discount and later is verified by the other Federal reserve bank, to be handled as an ordinary credit and cleared through the Gold Settlement Fund on the next settlement day. Maturing discounts are paid in like manner by means of transfers through the Gold Settlement Fund, made independently of the regular settlement.<sup>101</sup> It should be observed that these rediscount transactions between the Federal reserve banks are not included in the settlements growing out of the clearing and collection of checks and drafts, which are effected daily, but are carried on independently.<sup>102</sup> They are settled directly at any time and the transactions are consummated in a very few minutes, depending upon the details to be adjusted between the Federal reserve banks.<sup>103</sup> Settlements growing out of the exchange of Federal reserve notes between Federal reserve banks, transfers from the Gold Settlement Fund of a Federal reserve bank to the gold fund of its Federal reserve agent, and vice versa, and transfers to the redemption funds, are also settled independently of the daily settlements which result from the clearing and collection of checks.<sup>104</sup>

<sup>99</sup>Usually \$5,000,000 or some multiple thereof.

<sup>100</sup>The transactions through the Fund have an important bearing upon the reserve position of the banks, and as all entries affecting the Fund are made on the books of the Board and all the banks simultaneously, the Board is informed at once as to the effect of the day's transactions upon the reserves of each bank.

<sup>101</sup>Letter No. 7, pp. 11-12.

<sup>102</sup>*Practical Operation of the Gold Settlement Fund*, Letter No. 8, Federal Reserve Bank of Richmond (October, 1922), p. 4. Hereafter cited as *Letter No. 8*.

<sup>103</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 33-35.

<sup>104</sup>See pp. 315-319 below.

### The growth of membership in the Federal Reserve System

Before reviewing the growth of membership in the clearing and collection system additional light will be thrown on that particular problem by reviewing first the growth of membership in the Federal Reserve System. Obviously, the growth of membership in the Federal Reserve System is to be separated from the question of the growth of membership in the clearing and collection system; the latter includes the former and involves problems different from those connected with the former.

The provision of the Federal Reserve Act, making membership compulsory for national banks, brought all of them at once into the system as the price of retaining their charters. By the end of 1914, ninety-three State banks and trust companies had been converted into national banks. During the same year nine State banks and four trust companies were admitted to the system as members.<sup>105</sup> The following table shows the growth of membership in the system:

TABLE XX  
GROWTH OF MEMBERSHIP IN THE FEDERAL RESERVE SYSTEM,  
1914-1924<sup>1</sup>

End of year	Total	Member banks	
		National	Non- national
1914.....	7,582	7,574	8
1915.....	7,631	7,600	31
1916.....	7,614	7,577	37
1917.....	7,907	7,657	250
1918.....	8,692	7,762	930
1919.....	9,066	7,885	1,181
1920.....	9,606	8,125	1,481
1921.....	9,779	8,165	1,614
1922.....	9,859	8,220	1,639
1923.....	9,774	8,179	1,595
1924.....	9,587	8,043	1,544

<sup>1</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 1175; *Tenth Annual Report of the Federal Reserve Board* (1923), p. 47; *Federal Reserve Bulletin*, Vol. XI (1925), p. 219.

State institutions entered slowly. The above table shows that there were but 31 non-national member banks at the close of the

<sup>106</sup>*First Annual Report of the Federal Reserve Board* (1914), p. 20. Unfortunately the data given here do not agree with those given in Table XX, which were taken from the *Federal Reserve Bulletin*, Vol. IX (1923), p. 1175. Nor do they agree with data given by Mr. Pierre Jay in "The Federal Reserve System, State Banks and Par Collections," *Annals of the American Academy of Political and Social Science*, Vol. XCIX (January, 1922), p. 79. He says: "The provision of the Act making membership compulsory for national banks, brought at once into the System about 7,600 national banks with capital and surplus of \$1,788,000,000 and total resources of \$11,492,000,000, thus giving a membership at the outset comprising 42.6 per cent. of the total resources of the country." He does not state whether any State institutions entered the system during the years 1914 or 1915.

year 1915, that is, that but 23 had entered during the year 1915.<sup>106</sup> The year 1916 witnessed a slight decrease in the total membership of the system. The number of national banks declined from 7,600 to 7,577 and the number of non-national banks increased from 31 to 27 if the data in the table given above may be taken as authoritative. Mr. Pierre Jay<sup>107</sup> pointed out that most of the State institutions were either passive or opposed to the plan of the Federal Reserve System. The number of such members at the close of 1916 was 37, of which only seven had a capital and surplus of over \$1,000,000. Membership on the part of the State banks increased in 1917 as a result of two things: (1) The amendment of the Act<sup>108</sup> in that year which permitted State banks to carry on their banking business in substantially the same manner as they had done previously, with the right to withdraw from the system upon six months' notice. (2) The entrance of the United States into the World War gave a new and strong impetus toward membership. The necessity of strengthening the banking system of the country to the maximum degree possible, in order to meet the strain of war financing, led President Wilson in the autumn of 1917 to make a strong appeal to State banking institutions to join the Federal Reserve System. The officers of Federal reserve banks carried the appeal to the individual institutions. Many of the more important ones responded and during the fall of 1917 and the first half of 1918, a considerable number of State institutions throughout the country became members. The movement was particularly noteworthy with respect to the aggregate resources which thus augmented the strength of the system. The major portion of the large institutions in New York City entered the system promptly, and the close of the year 1917 found the system with a State bank and trust company membership of 250, having aggregate capital and surplus of \$520,000,000 and aggregate resources of about \$5,000,000,000. This represented 2.9 per cent. of the number and 37.3 per cent. of the resources of the State institutions eligible for membership.<sup>109</sup> The Federal Reserve Board estimated that the total membership of the Federal Reserve

<sup>106</sup>Again one finds a lack of agreement in data presented by the Federal Reserve Board. The *Second Annual Report of the Federal Reserve Board* (1915), p. 13, says: "While the attitude of State banks and trust companies has been such that but 32 have been admitted to membership, 84 others have become members by conversion or by organization as national banks during 1915."

<sup>107</sup>*Op. cit.*, pp. 79-80.

<sup>108</sup>Amendment to Section 9 of the Federal Reserve Act, approved June 21, 1917.

<sup>109</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), p. 27.

System at the close of the year 1917 represented about 75 per cent. of the total commercial banking assets of the country.<sup>110</sup>

From the year 1917 to the end of the year 1922 there was a steady annual increase in both national and non-national banks. The year 1918 witnessed a large increase in the number of non-national banks admitted to membership—930 as against 250 at the end of 1917.<sup>111</sup> These 930 non-national banks had total resources of over \$7,000,000,000.<sup>112</sup> The Federal Reserve Board estimated that the membership of the State banks and trust companies represented at that time 54.5 per cent. of the total banking assets of all State banking institutions eligible for membership in the Federal Reserve System, although but 11 per cent. of the number eligible for membership.

With the end of the War there came a slowing down of the efforts of the Federal reserve banks to convince institutions of the importance of becoming members of the Federal Reserve System, although there was a substantial movement of State institutions into the system. The laws of many States contained provisions concerning reserves, character of investments or other vital matters which hindered or prevented institutions in those States from taking membership in the system. As these obstacles from time to time were removed, more and more State institutions took advantage of the opportunity to join. Many States, for example, have passed laws providing that a State institution, becoming a member of the Federal Reserve System, need keep only the legal reserves required by the Federal Reserve Act. The influence of this factor is strikingly illustrated in California where 61 institutions with total resources of \$1,110,000,000 became members in the eighteen months following the amendment of the State law in respect to reserves to be carried by member banks.<sup>113</sup> With the end of the War it was expected that some of the State banks would withdraw, as some of them had entered the system with that intention, but their experience as members was such that but few withdrew. In 1919 the membership of non-national banks increased from 930 to 1,181, representing a total capital and surplus of over \$891,200,000, and total resources of about \$9,913,700,000. In 1920 the non-national bank membership increased

<sup>110</sup>*Fourth Annual Report of the Federal Reserve Board (1917)*, p. 14.

<sup>111</sup>At this time the American Bankers' Association was conducting an active campaign for membership.

<sup>112</sup>Pierre Jay, *op. cit.*, p. 80. The *Fifth Annual Report of the Federal Reserve Board (1918)*, pp. 25, 27, says there were 936 such institutions on January 1, 1918, having aggregate resources of about \$7,339,000,000.

<sup>113</sup>Pierre Jay, *op. cit.* p. 80.

from 1,181 to 1,481, representing capital and surplus of \$1,035,023,000 and total resources of \$9,826,794,000. In 1921 the number had increased to 1,614, with capital and surplus of \$1,110,663,000 and total resources of \$9,904,860,000.<sup>114</sup> In 1922 the number reached 1,639 with an aggregate capital and surplus of approximately \$1,175,000,000 and total resources of \$11,917,000,000. According to the *Annual Report of the Federal Reserve Board* for that year,<sup>115</sup> there were, on June 30, 1922, 30,325 banks in the United States<sup>116</sup> with an aggregate capital and surplus of \$5,599,134,000 and resources of \$50,147,513,000. Of these institutions 9,892 were members of the Federal Reserve System, with a capital and surplus of \$3,496,319,000 and resources of \$31,723,950,000.<sup>117</sup> The resources of member banks of the Federal Reserve System therefore constituted about 63 per cent. of the total banking resources of the country. There were 9,678 State banks and trust companies with capital stock sufficient to enable them to become members which were not members at the end of June, 1922, their aggregate capital and surplus being \$1,209,115,000 and their resources \$8,983,580,000. If the mutual savings and private banks which are not eligible for membership are excluded, it is found that at the end of June, 1922, the national banks and State banks and trust company members represented about 78 per cent. of the banking power of all banks eligible for membership.<sup>118</sup>

On June 30, 1923, the total had dropped to 9,856, of which 8,236 were national banks and 1,620 State banks and trust companies. Approximately 33 per cent. of all the banks, representing over 70 per cent. of the total banking resources of the country, were members of the system. By the end of the year 1923 the total had dropped to 9,774, of which 8,179 were national and 1,595 were non-national. The reduction of 85 in Federal reserve membership for the year 1923 was the net result of the addition of 210 member banks and the loss of 295. Of the banks added to the membership, two were banks previously closed which resumed

<sup>114</sup>*Eighth Annual Report of the Federal Reserve Board* (1921), p. 60. On p. 59 of the *Eighth Annual Report of the Federal Reserve Board*, the number is given as 1,621. Such repeated inconsistencies in data are unfortunate.

<sup>115</sup>*Ninth Annual Report of the Federal Reserve Board* (1922), p. 29.

<sup>116</sup>Including national and State commercial banks, mutual and stock savings banks, private banks, and loan and trust companies.

<sup>117</sup>If this statement is correct it seems that the total membership in the Federal Reserve System reached its peak about June 30, 1922, since the total membership at the end of the year was but 9,859 and has declined since that time.

<sup>118</sup>*Ninth Annual Report of the Federal Reserve Board* (1922), p. 29.



activities during the year, 89 were newly organized national banks, and 121 were formerly non-members which joined the

TABLE XXI  
MEMBERSHIP IN THE FEDERAL RESERVE SYSTEM, JUNE 30 AND DECEMBER 31, 1923.<sup>1</sup>

Federal Reserve District	Number				Resources (In millions of dollars)				
	All banks		Non-national banks		All banks		Non-national banks		
	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	June 30	Dec. 31	
Boston .....	427	429	390	388	37	36	2,508	1,743	765
New York .....	821	835	680	692	141	143	9,882	5,193	4,689
Philadelphia .....	730	732	660	656	60	66	2,401	1,891	520
Cleveland .....	880	877	764	759	116	118	3,349	2,027	1,322
Richmond .....	629	627	561	561	68	66	1,481	1,275	206
Atlanta .....	530	525	389	385	141	140	1,191	768	423
Chicago .....	1,434	1,427	1,062	1,058	372	369	4,948	2,813	2,135
St. Louis .....	621	624	497	497	124	127	1,443	912	531
Minneapolis .....	989	940	868	831	123	109	1,183	1,013	120
Kansas City .....	1,145	1,122	1,106	1,066	39	36	1,543	1,376	166
Dallas .....	857	849	658	659	199	190	978	864	114
San Francisco .....	803	802	602	607	201	195	2,940	1,637	1,308
Total .....	9,856	9,774	8,236	8,179	1,630	1,595	33,796	21,502	12,294
December 31 .....							35,239	22,395	12,843

<sup>1</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 1176; Vol. X (1924), p. 319.

system. Of the losses in membership, mergers accounted for 87, of which the largest number were in the San Francisco district,

voluntary liquidation accounted for 31, absorption by non-member banks for 48, voluntary withdrawal of State banks and trust companies for 29, and insolvencies or suspensions for 102.<sup>119</sup>

A survey of the distribution of membership by Federal reserve districts shows that the largest number of member banks is in the four middle western districts, which have nearly half the member banks, while the larger proportion of member bank resources, as is to be expected, is in the eastern districts, nearly a third of the total resources being in the New York district alone. The non-national banks, which constitute less than one-sixth of the number of member banks, represent more than one-third of the resources. This reflects the much larger average size of State bank and trust company members than of national banks. In fact, the total resources of the more than 8,000 national banks are about \$22,000,000,000, or an average of about \$2,500,000, while the total for the 1,600 State bank and trust company members is about \$12,000,000,000, or an average of about \$7,500,000.<sup>120</sup> Table XXI shows the situation.

For the country as a whole, two-thirds of all the banks, both eligible and ineligible, are still outside the system, although they represent less than one-third of the total banking resources. The geographic distribution of non-member banks is far from uniform. The largest number of such banks is concentrated in the agricultural districts, while in the eastern financial and industrial districts the proportion of the non-membership is low. The following table shows the percentages of non-member banks by districts:<sup>121</sup>

	Per cent.		Per cent.
Boston .....	35	Chicago .....	75
New York .....	30	St. Louis .....	81
Philadelphia .....	41	Minneapolis .....	73
Cleveland .....	55	Kansas City.....	73
Richmond .....	71	Dallas .....	55
Atlanta .....	74	San Francisco.....	54

The Agricultural Credits Act of 1923, passed on March 3 of that year, provided for a committee to inquire into the reasons that have actuated eligible non-member banks in remaining outside of the Federal Reserve System. This committee, consisting

<sup>119</sup>*Tenth Annual Report of the Federal Reserve Board* (1923), p. 48; for a discussion of the changes during the year 1924, see *Federal Reserve Bulletin*, Vol. XI (1925), pp. 218-219. Although the total membership has declined since 1922, the resources of the members have increased from \$33,883,000,000 at the end of 1922 to \$38,987,000,000 at the end of 1924.

<sup>120</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 1176.

<sup>121</sup>*Ibid.*

of three members of the Banking and Currency Committee of the Senate and five members of the corresponding committee of the House of Representatives, has been conducting hearings and has heard the views of the Governor of the Federal Reserve Board, the Comptroller of the Currency, other members of the Federal Reserve Board, members of the Federal Advisory Council, the Director of the War Finance Corporation, members of the Farm Loan Board, and representatives of banking and farm organizations.<sup>122</sup> This committee has learned that capital requirements have not been the chief impediment to increased membership. Since the Agricultural Credits Act of 1923 reduced the capital requirements, making about 4,200 more State banks and trust companies eligible for membership, but one application for membership from the new group made eligible was received up to the end of November, 1923. It appears that the reserve requirements of the Federal Reserve System can offer little, if any, inducement, although the total required balances that must be carried with the Federal reserve banks plus the till money now carried by member banks is somewhat less than the cash they formerly carried in their vaults. Many of the States subsequently enacted legislation reducing the reserve requirements, so that at present, although there is no uniformity in the State requirements, in general the reserves required of non-member banks are lower than they were prior to the establishment of the Federal Reserve System. In 30 States member banks are controlled by the requirements of the Federal Reserve Act, while in 18 States banks must conform to both Federal and State law.<sup>123</sup> The fact that the Federal reserve banks do not pay interest on deposits seems to act as a deterrent. The committee thinks that the addition to membership of the smaller rural banks would add little to the reserves of the system, while it would increase its responsibilities. The desirability of their admission rests not upon their contribution to the strength of the system, but upon the fact that through their admission the benefits of the reserve system would be more widely distributed, especially to the communities which these non-member banks serve.<sup>124</sup> Mr. Pierre Jay<sup>125</sup> points out also that many of these banks have learned that they can enjoy many of the advantages of the system, such as the avoidance of the old-

<sup>122</sup>*Ibid.*, p. 1175.

<sup>123</sup>*Ibid.*, p. 1178.

<sup>124</sup>*Ibid.*, pp. 1178-1179.

<sup>125</sup>*Op. cit.*, p. 81.

fashioned money panic and the stabilization of banking conditions, without assuming any burdens of membership. Finally, and above all, there is the opposition to the plan of par check collection, the subject with which we are primarily interested, and to which we now will turn our attention, although a separate chapter is devoted to this problem.

**The growth of the clearing and collection system**

Since a detailed account of the growth and opposition to the Federal reserve clearing and collection system is given in Chapter VII, a brief resume will suffice at this time.

Although the original provisions of the Federal Reserve Act did not authorize Federal reserve banks to collect checks on non-

TABLE XXII  
MEMBERSHIP IN THE FEDERAL RESERVE CLEARING AND COLLECTION SYSTEM<sup>1</sup>

Date	Member banks	Non-member banks on par list	Total on par list	Non-member banks not on par list	Total non-member banks, computed from columns 3 and 5
Aug. 15, 1916	7,624	7,032	14,656	....	....
Jan. 15, 1917	7,622	8,130	15,752	....	....
Jan. 15, 1918	7,909 <sup>2</sup>	9,268	17,177	10,836	20,604 <sup>3</sup>
Jan. 15, 1919	8,692	10,595	19,287	9,923	20,518
Jan. 15, 1920	9,089	16,986 <sup>3</sup>	26,075	3,566	20,552
Jan. 15, 1921 <sup>4</sup>	9,637	19,101	28,738	1,705 <sup>4</sup>	20,806
Jan. 15, 1922	9,847	18,066	27,913	2,350	20,416
Jan. 15, 1923	9,911	17,777	27,688	2,289	20,066
Jan. 15, 1924	9,875	16,484	26,359	3,013	19,497
May 31, 1924	9,785	15,981	25,766	3,240	19,221

<sup>1</sup>Compiled from *Federal Reserve Bulletins* and *Annual Reports of the Federal Reserve Board*.

<sup>2</sup>This item as given in the *Federal Reserve Bulletin*, Vol. V (1919), p. 775, does not harmonize with data given on p. 181 of the same volume.

<sup>3</sup>In some places this item is given as 16,985, in others as 16,986.

<sup>4</sup>This month also marks the peak for the number of non-member banks on the par list.

member banks, as many as 7,032 such banks had agreed to remit at par by August 15, 1916, making a total of 14,656 member and non-member banks on which the Federal reserve banks could collect checks at par on that date. On September 7, 1916, Section 13 was amended so as to authorize the Federal reserve banks to receive for collection from any member bank or other Federal reserve banks checks drawn upon non-member banks and trust companies within their respective districts and payable upon pres-

entation.<sup>126</sup> By December 15, 1916, only 37 of approximately 20,000 State banks had become members of the Federal Reserve System and about 8,065 of the non-member State banks had agreed to remit at par.<sup>127</sup> An amendment of June 21, 1917, made it possible for the Federal reserve banks to act as collecting agents for non-member banks provided they carried sufficient deposits with the Federal reserve banks to offset the cash items being collected. The concentration of reserves, the development of a collection system for maturing notes, bills and drafts, the introduction of a system of transfer and exchange drafts and of wire transfers, the assumption by the Federal reserve banks of the expenses of currency shipments and remittances, combined with campaigns for increased membership, resulted in a steady increase in membership until January, 1921, after which time there came a gradual decrease. The table on page 225 will give a summarized picture of the situation.

#### **Opposition to the clearing and collection system**

Strenuous opposition to the clearing and collection system developed from member as well as non-member banks, the principal opposition coming, however, from the non-member exchange-charging banks. These banks opposed the extension of the par clearing and collection system on the ground that they were deprived unjustly of a source of income since there was a real expense involved in paying checks at places other than at their own counters. This objection, which was the chief one, was bolstered up by various minor ones, such as their contentions that Congress had never intended that they should not charge for remitting, that holders of checks have no unlimited right to collect them in cash or in unlimited amounts, that the methods used by the Federal reserve banks to collect checks on them were oppressive and consequently illegal, that the principle of par remittance cannot be justified on any ground other than that remission by the bank is a service to the drawer of the check which these banks contended it was not, and finally, that the holder of a check has no right to demand payment of a check except at the bank on which drawn.

Opposition on the part of these banks assumed various forms. They resorted to dilatory tactics in tendering payments; they stamped various kinds of legends on their checks in order to pre-

<sup>126</sup>*Third Annual Report of the Federal Reserve Board* (1916), p. 134.

<sup>127</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 790.

vent the Federal reserve banks from presenting them for payment; they organized the National and State Bankers' Protective Association in order to present a unified front in opposing the system; they succeeded in persuading various State legislatures to pass acts designed to protect them in the practice of charging exchange; they petitioned Congress for hearings and amendatory legislation; and finally, they resorted to suits and injunctions in an effort to protect themselves in what they conceived to be their rights. A more complete treatment of this opposition is deferred until Chapter VII is reached. At this time it will be sufficient to point out the consequences that have resulted from the opposition. Certain important principles have been established as a result of various court decisions, which on the whole, have been favorable to the opposing banks.

The most outstanding principles of the clearing and collection system which may be said to obtain today as a result of the court decisions may be summarized as follows:

The Federal reserve banks, as collecting agents, have the right to present checks directly to the drawee banks for payment without deduction (assuming there are no State laws to the contrary), even though such a procedure may inconvenience the drawee banks somewhat, provided the Federal reserve banks do not abuse their power by accumulating checks with the intention of embarrassing and coercing banks.<sup>128</sup> In the same case the United States Supreme Court upheld the lower courts which had ruled that the Federal reserve banks, in publishing the names of the banks on their par lists, that is, the names of the banks on which they would attempt to collect checks at par, could not include the names of banks which had not given their consent. It had been the practice of the Federal reserve banks in making up their par lists to include any banks on which they would undertake to collect checks at par by direct presentation over the counter regardless of whether the banks consented or were aware that their names were to be published. The so-called San Francisco par collection case definitely established the principle that a Federal reserve bank cannot use the check collection system to coerce non-member banks to

<sup>128</sup>*American Bank and Trust Company et al. v. Federal Reserve Bank of Atlanta et al.*, 284 Fed. 424 (1922). An appeal was taken from this decision, which was rendered in the United States Circuit Court of Appeals, to the United States Supreme Court, which upheld the lower court. See *American Bank and Trust Co. et al. v. Federal Reserve Bank of Atlanta et al.*, 262 U. S. 643 (1923). These cases are discussed at some length in Chapter VII; see especially pp. 260-263 below.

remit at par.<sup>129</sup> The same principle was declared in the Cleveland par collection case decided in the same year.<sup>130</sup> In the Richmond par collection case the United States Supreme Court upheld an act passed by the legislature of North Carolina which had for its purpose the protection of the non-member State banks in their attempts to make exchange charges for remittances.<sup>131</sup> In this case the United States Supreme Court held that non-member banks could discharge their obligations lawfully by means of a draft when checks were presented for payment unless the bank's depositors, that is, the drawers of the checks, stipulated otherwise, as the bank's obligation, according to the Court, is to the depositor and not to the holder of the check; that the payment of the Federal reserve bank by drafts on reserve deposits did not deprive the Federal reserve bank of any legal right protected by due process of law<sup>132</sup>; that the State had a right to direct such an act against the Federal reserve bank if it considered it an instrument oppressing State banks; that the Federal Reserve Act is permissive only and does not place any obligation upon the Federal reserve banks to collect on non-member banks which do not wish to remit at par; and finally, that Congress did not confer upon the Federal Reserve Board or Federal reserve banks a duty to establish universal par clearance and collection of checks.

As a result of and in conformity with the rulings of the courts, the Federal Reserve Board made new rulings to the effect (1) that no Federal reserve bank shall receive on deposit or for collection any check drawn on a non-member bank which refuses to remit at par in acceptable funds, and (2) whenever a Federal reserve bank receives on deposit for collection a check drawn by, endorsed by, or emanating from any non-member bank which refuses to remit at par in acceptable funds, it shall make a charge for the service of collecting such check of 1/10 of 1 per cent., the

---

<sup>129</sup>*Brookings State Bank v. Federal Reserve Bank of San Francisco*, 281 Fed. 222 (1922). See pp. 263-266 below.

<sup>130</sup>*Farmers and Merchants Bank of Catlettsburg, Ky. v. Federal Reserve Bank of Cleveland, Ohio, and Mary B. McCall*, 286 Fed. 610 (1922). See pp. 266-269 below.

<sup>131</sup>*Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 262 U. S. 649 (1923). See pp. 269-276 below.

<sup>132</sup>In the case of *Federal Reserve Bank of Richmond v. Malloy et al., Trading as Malloy Brothers*, 44 Sup. Ct. 296 (1924), the same Court held that that the Federal reserve banks acting as collecting agents could not accept such drafts without assuming liability to the payee banks for any losses that might result from the acceptance of drafts instead of cash. See pp. 284-286.

minimum charge to be 10 cents for each item.<sup>133</sup> Regulation J, Series of 1923, which embodied these two rulings was to have been effective August 15, 1923, but was postponed and finally suspended, Regulation J, Series of 1920, again becoming effective. In November, 1923, the Board also directed the Federal reserve banks to discontinue the use of agents other than banks for the purpose of making collections at par upon non-member banks in any district in which such practice still existed.<sup>134</sup> On May 9, 1924, the Board issued Regulation J, Series of 1924, which superseded the regulation of 1920 and which includes the following ruling: "No Federal reserve bank shall receive on deposit or for collection any check drawn on any non-member bank which cannot be collected at par in funds acceptable to the Federal reserve bank of the district in which such non-member bank is located." In addition, the Federal reserve banks, under authority of this regulation, require all banks which use them as collecting agents to enter into an agreement releasing them from any liability for losses incurred in accepting drafts in payment for items sent for collection.<sup>135</sup>

#### Success of the Federal reserve clearing and collection system

Despite the fact that the Federal reserve clearing and collection system is far from universal in its application, is bitterly opposed by certain interests, and is impeded somewhat by adverse State legislation and court decisions, it must be conceded that the system is highly successful in the main, and marks a distinct achievement in banking progress. It has reduced the time factor and facilitated the use of deposit currency, the most efficient, economical and elastic sort of currency; it has reduced the customary float to a negligible factor and thereby increased the solidity and reality of the reserves which support the superstructure of credit, a fact appreciated by bankers and economists, especially since witnessing the disastrous effects of the tremendous float that had been present prior to and had been one of the important factors contributing to the panic of 1907. It has relieved business of a burden in the form of exchange charges, reduced the charges to a small per cent. of what they were formerly and has distributed the expense which is now almost negligible in a more

<sup>133</sup>Regulation J, Series of 1923, *Federal Reserve Bulletin*, Vol. IX (1923), pp. 903-904.

<sup>134</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 1194.

<sup>135</sup>*Federal Reserve Bulletin*, Vol. X (1924), p. 489. A fuller discussion of this subject is given on pp. 282-288 below.



equitable manner. It has made it much easier to transfer funds and mobilize reserves where most needed with little, if any, physical movements of gold, and with little, if any, discrepancies in discount rates between different sections of the country.<sup>136</sup> Cer-

TABLE XXIII  
AVERAGE DAILY NUMBER AND AMOUNT OF ITEMS HANDLED,  
1916-1918, INCLUSIVE.<sup>1</sup>

For month ending 15th of 1916	Average daily number of items handled drawn on banks	Average daily amount of items handled drawn on banks	Average daily number of items handled drawn on U. S. government	Average daily amount of items handled drawn on U. S. government
August .....	133,113	\$59,301,696	.....	.....
September .....	177,397	78,559,704	.....	.....
October .....	204,891	97,666,107	.....	.....
November .....	227,489	115,061,224	.....	.....
December .....	236,038	125,603,732	.....	.....
1917				
January .....	241,933	121,814,589	.....	.....
February .....	220,421	110,188,028	.....	.....
March .....	234,475	116,404,430	.....	.....
April .....	231,777	127,648,503	12,582	\$2,643,408
May .....	238,288	160,680,956	15,925	3,597,865
June .....	250,241	174,236,737	16,344	4,414,508
July .....	255,039	197,489,674	19,100	11,637,899
August .....	243,625	176,410,219	19,533	9,701,569
September .....	251,061	182,303,483	23,492	11,006,515
October .....	293,742	220,732,251	26,797	13,518,566
November .....	325,690	283,938,810	30,426	17,496,974
December .....	343,787	314,623,152	33,806	27,179,053
1918				
January .....	359,067	292,585,856	38,130	21,116,293
February .....	325,301	282,785,363	48,224	21,316,033
March .....	369,898	321,805,317	58,991	25,827,757
April .....	388,058	319,977,817	59,228	31,563,675
May .....	399,812	366,126,872	60,771	30,928,185
June .....	407,866	346,005,044	77,750	39,054,003
July .....	538,984	427,741,091	82,536	47,181,467
August .....	546,358	373,404,503	81,323	41,063,646
September .....	588,710	397,327,936	87,213	45,695,643
October .....	649,827	448,657,299	106,539	51,048,149
November .....	717,714	490,142,831	98,168	52,790,232
December .....	764,185	452,935,793	135,173	60,766,938

<sup>1</sup>*Federal Reserve Bulletin*, Vol. V (1919), p. 775.

tainly no one who has the interests of the country at heart could advocate a return to a system similar to the one that existed prior to the establishment of the present one. It seems equally certain that advocates of measures which hamper the further development of the present system to its logical conclusion must

<sup>136</sup>See pp. 319-326 on inter-district gold movements.

bear the burden of proof and must present grounds of justification which cannot be understood now to be in the interest of the country at large or in the interest of sound banking.

TABLE XXIV  
OPERATIONS OF THE FEDERAL RESERVE CLEARING AND COLLECTION SYSTEM FOR THE YEARS  
1919-1923<sup>1</sup>

[Numbers in thousands. Amounts in thousands of dollars]

Items drawn on banks in—

Year	Federal reserve bank city		Federal reserve branch cities		Federal reserve bank and branch cities		District outside Federal reserve		Other Federal reserve districts		Items drawn on United States Treasurer		Total items handled (exclusive of duplications)	
	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.
1919.....	43,206	62,481,093	14,832	13,115,715	214,177	46,340,904	43	37,240	32,900	14,518,471	305,159	136,493,423		
1920.....	63,599	72,494,620	23,447	20,228,821	337,628	57,083,187	75	23,593	27,367	6,679,043	452,116	156,509,264		
1921.....	78,374	58,363,284	33,142	16,297,746	377,845	38,509,397	104	22,017	33,200	5,649,747	522,665	118,844,391		
1922.....	97,517	87,698,642	39,544	17,320,887	413,670	40,082,121	162	48,641	33,980	5,014,383	584,873	150,164,674		
1923.....	94,643	109,479,604	42,804	34,612,128	465,736	48,146,789	190	85,996	35,803	4,511,735	639,176	195,836,252		

<sup>1</sup>Compiled from *Annual Reports of the Federal Reserve Board*. It is impossible to develop this table to cover the years 1914-1918 due to the change in method of reporting data.

## CHAPTER VII

### THE PAR COLLECTION CONTROVERSY

#### **Growth of opposition to the Federal reserve par collection system <sup>1</sup>**

In the development of the Federal Reserve System in general, opposition to some aspects of it has been in evidence almost continuously, but it is probably true that in no particular line of development has there been more constant or bitter opposition than in the attempt to establish a uniform Federal clearing and collection system based upon the principle of par remittance.

It has been pointed out elsewhere that the Federal Reserve Board in taking its first steps towards establishing a clearing and collection system in the United States instituted, first of all, a voluntary system which was in existence from June, 1915, to July, 1916. During this period the opposition on the part of the member banks was so pronounced that the Federal Reserve Board found it necessary to make the system compulsory. The opposition during the voluntary period was due not only to the loss of exchange by the banks but also to the reserve situation, which involved additional burdens to the banks that were compelled to carry reserves not only with the Federal reserve banks, but with other banks for clearing and collection purposes.

---

<sup>1</sup>The term "par collection" as used in this chapter is synonymous with par remittance. The former term is used because it is the one in popular use. One frequently meets the expression "par clearance" which also refers to par remittance, but the writer believes it is less common than "par collection." The controversy is over the question of par remittance and regardless of what term is used the meaning should be clear from the context. Unfortunately, also the term "exchange charges" is used in a variety of senses. Sometimes it refers to remittance charges, sometimes to charges for drafts on distant centers, and sometimes to the charges made by banks for collecting out-of-town items. Again the context must be relied upon for clarity. When banks make charges for collecting out-of-town checks, the charges are properly called collection charges. Obviously, the par collection controversy does not refer to these charges. Bankers today prefer to call collection charges "interest charges" because, in the main, they represent the loss of interest experienced by the bank as a result of giving the depositor immediate credit for out-of-town items deposited. The par collection controversy might be extended easily to include the question of interest charges for collection, thus raising the question of the advisability of forcing banks to absorb this expense as a part of the general expense incidental to the banking business.

The same opposition continued during the compulsory system which was instituted in July, 1916. The member banks chafed because all banks were not in the system; they felt that this fact forced additional burdens on them. It will be recalled that the first step in the campaign of compulsion was taken in the summer of 1916, when the Federal Reserve Board issued a regulation requiring every drawee bank which was a member of the Federal Reserve System to remit at par for all checks upon it presented through the mail by the Federal reserve bank of the district. The operation of this requirement was at first limited in scope by the provisions of Section 13 which, at that time, authorized the reserve banks to collect only those checks which were drawn on member banks and which were deposited by a member bank or another reserve bank. Under this system but few of the non-member banks chose to become members. On September 7, 1916, Section 13 was amended so as to authorize a Federal reserve bank to receive for collection from any member bank or other reserve bank checks drawn upon non-member banks and trust companies within its district.<sup>2</sup> Regulation J then issued by the Board provided that the Federal reserve banks would receive from member banks at par, checks only on those of the non-member banks which would remit to the Federal reserve bank at par. It was recognized that non-member banks were left free to refuse assent to the par collection system, although it was hoped and expected that the Federal Reserve Board would be enabled, by this amendment, to extend par clearance to a large proportion of all checks issued in the United States. By December 15, 1916, however, only 37 of approximately 20,000 State banks within the United States had become members of the Federal Reserve System, and only 8,065 of the non-member State banks had assented to par clearance.<sup>3</sup>

Federal reserve banks, according to the law as it then existed, could not make collections for non-member banks. It was believed that if Congress would grant the Federal reserve banks permission to make collections for non-members also, the Board could offer to all banks inducements adequate to secure their consent to par clearance. Consequently a further amendment to Section 13 on June 21, 1917, provided that the Federal reserve banks might receive from non-member banks checks payable upon presentation if the non-member banks maintained sufficient bal-

<sup>2</sup>*Third Annual Report of the Federal Reserve Board* (1916), p. 134.

<sup>3</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 790.

ances with the Federal reserve banks to offset the items in transit. To this amendment, which had been recommended by the Board, was added a proviso, known as the Hardwick Amendment, which provided that nothing in the Act "shall be construed as prohibiting a member or non-member bank from making reasonable charges, to be determined and regulated by the Federal Reserve Board, but in no case to exceed 10 cents per \$100 or fraction thereof . . . but no such charges shall be made against the Federal reserve banks." From this time on the Federal reserve banks considered it their duty to collect any check on any bank.

Strenuous efforts were made to induce non-member banks to agree to remit at par, even though the law did not compel them to do so. Many refused and continued to make remittance charges. With the concentration of reserves in the Federal reserve banks, which was ordered by the Federal Reserve Board immediately after the amendment of the law in June, 1917, which provided for concentration, one big barrier to the unified clearing and collection system was removed. Other steps taken by the Federal Reserve Board to encourage non-member banks to enter the system have been reviewed. Among other things, the Board developed a collection system for maturing notes, bills and drafts at a small charge, a system of transfer and exchange drafts, a system of wire transfers, and assumed the costs of currency shipments and remittances. In fact, they left the opposing banks with little real ground on which to rest their opposition.

On March 21, 1918, Attorney-General Gregory ruled that "the Federal Reserve Act, however, does not command or compel these State banks to forego any right they may have under the State laws to make charges in connection with the payment of checks drawn upon them. The Act merely offers the clearing and collection facilities of the Federal reserve banks upon specified conditions. If the State banks refuse to comply with the conditions by insisting upon making charges against the Federal reserve banks, the result will simply be, so far as the Federal Reserve Act is concerned, that since the Federal reserve banks cannot pay these charges they cannot clear or collect checks on banks demanding such payment from them."<sup>4</sup> This opinion restricted the operations of the Federal reserve banks to checks which could be collected without the payment of exchange to the bank as collecting agent.

<sup>4</sup>31 *Opinions of the Attorneys General*, pp. 245, 251; *Federal Reserve Bulletin*, Vol. IX (1923), p. 790.

In accordance with this ruling the Federal reserve banks were compelled either to refuse checks on banks which would not remit at par or make plans to collect on the opposing banks in such a manner as to give them no legal grounds for exacting a charge, that is, by presenting the checks over the counter. The Federal Reserve Board interpreted the Federal Reserve Act as imposing a duty upon it to establish a universal par clearance and collection system. This interpretation of the Act, combined with the fact that the legality of the Board's actions was well established by previous court decisions as well as by general practice, that is, that checks were demand obligations payable upon demand and without deduction when presented over the counter, placed the opposing banks in a weak position. Justification of the Board's position did not convert the non-par banks; it merely established the basis for a prolonged fight. At this point it will be well to examine the grounds of opposition.

#### **The basis of opposition to par collection**

The grounds on which the opposing banks have attacked the par collection system which the Federal Reserve Board has endeavored to develop, have been set forth many times in various forms and places, and have occupied a predominant place in the literature circulated by Mr. L. R. Adams, General Secretary of the National and State Bankers' Protective Association.<sup>5</sup> They may be summarized briefly as follows:

1. The nature of checks and the obligations of a bank toward its depositors and other persons are governed by the laws of the States, not by Federal enactment. Under State law a bank becomes a debtor when it receives an ordinary deposit and the terms of the debt are that the bank will repay on demand at its place of business to the depositor or to his order. The bank contracts with the depositor to pay at its place of business and nowhere else. It has not undertaken to pay in another city or country. Consequently, when a depositor sends his check to a person in another place and the recipient of the check accepts it in payment, the recipient becomes only the transferee of the depositor's right, that is, his right to have the money paid on demand over the bank's counter or the credit transferred to him upon the bank's books. But such recipients ordinarily do not wish to be-

---

<sup>5</sup>See especially L. R. Adams, *The Case Against Enforced Par Clearance*, a pamphlet issued by Mr. Adams as General Secretary for the National and State Bankers' Protective Association (Atlanta, Ga., no date).

come depositors in the drawee banks, and ask for a transfer of the credit from the place where it exists to the place where they desire it. This request is beyond the conditions of the credit as it was originally created by the bank. As a result, par clearance in reality amounts to a change in contract without the consent of one of the parties, and to making the check payable anywhere in the United States at the option of the holder, instead of at the one known place provided for in the original contract. To comply with such a request involves the bank in an expense for which it is entitled to make a charge. This charge is for a banking service over and above the service which the bank contracted with its depositor to render to him or to any person he might designate in his check. This service would differ only in degree if the request were that the credit should be made available in another country.<sup>6</sup>

Banks have in general, it is alleged, but two sources of income—interest and exchange. State banks have the right to these sources of income by virtue of State authority, and the Federal Reserve Board has no right or power to deprive them of one of the sources.<sup>7</sup> The Board has no rights not conferred upon it by act of Congress, and Congress has no power of jurisdiction over such

---

*Referendum No. 39 on the Report of the Committee on Par Remittance for Checks*, Chamber of Commerce of the United States of America (Washington, D. C., Aug. 30, 1922), pp. 5, 7. Hereafter cited as *Referendum No. 39*.

It is interesting and instructive to note that while the non-par banks have put forth the argument of expense as one of the chief justifications for making remittance charges, they continued to fight the Federal reserve banks when the latter met that argument by presenting the checks at the counters of the drawee banks for payment without deduction. It becomes obvious that the non-par banks wish to exact tribute regardless of the soundness of any principle or the reality of the expense involved. They have even gone to the State legislatures and secured laws authorizing them to make payment, when such checks are presented over the counter, in drafts with the regular charge for remittance deducted from the face and forbidding notaries or others to protest checks for non-payment when such payment is refused. It is thus reasonable to conclude that the argument of expense so boldly urged by the non-par banks cannot be taken too seriously. These banks have placed themselves in the position of showing bad faith regarding the real merits of the controversy. That their sole purpose is to exact charges regardless of any justification is seen in the following statement made by one of their number: "Even though the country perish, we must keep our collection charges." See *Hearings before the Committee on Banking and Currency*, United States Senate, 63d Cong., 1st Sess., Vol. XV, pp. 192-196, 202, 206; Vol. XVI, pp. 1517, 1519, 1618.

It was pointed out in the hearings before the Senate Committee on Banking and Currency in 1913 that about 63 per cent. of the national banks at that time operated with capital under \$100,000 and over 2,000 with \$25,000 capital, that a large part of their revenue was derived from exchange charges, and if deprived of the opportunity to make such charges they would not enter the Federal Reserve System. It was estimated that the profit from exchange charges in a southern bank with a capital of \$75,000 was from 35 to 50 per cent. Heavier charges were made in the South than in the North and West.

matters as relate to non-member State banks, a contention upheld by the Attorney-General of the United States.

2. The clearing function performed by a reserve bank for its member banks necessarily differs from the function of a clearing house organized by banks located in one community, by reason of the distance and time involved. In a clearing house the claims of the member banks are offset, each bank being credited with the checks it holds and debited with those drawn upon it, the debit and credit balances being paid or received at once. But the banks in the Federal reserve districts are not all in one place and the Federal reserve banks are not willing to undertake a system of instantaneous settlements.<sup>8</sup> At best the system is one of deferred clearance and, in fact, does not differ essentially from mere collection. There may be a question as to whether these activities amount to the function which the Federal Reserve Act contemplates. The Federal Reserve Board, according to the Act, may and does act as a clearing house for the Federal reserve banks through the Gold Settlement Fund. The law also says that each Federal reserve bank may be required by the Board to exercise the functions of a clearing house for its member banks, but the reserve banks are not really performing this function. Moreover, there may be a question as to whether the reserve banks are complying with the law requiring their acceptance at par of checks deposited by their member institutions when they defer the credit for a certain length of time.<sup>9</sup>

With par clearance resulting from voluntary agreements among banks, the opposing banks have no quarrel, on the grounds that such banks are usually justified by circumstances and compensated by benefits received. It is with enforced universal par clearance that they take issue, because of the fact that the Federal reserve banks will not give immediate credit for checks in process of collection if they are out-of-town checks. They insist that the Federal reserve banks should give immediate credit and absorb the float on items deposited with them, while they (the non-par banks) absorb the float on items deposited with them as they do now and have always done.<sup>10</sup>

---

<sup>8</sup>This was practiced by the Federal reserve banks only during the period of the so-called voluntary system which prevailed from June, 1915 to July, 1916.

<sup>9</sup>*Referendum No. 39*, p. 7.

<sup>10</sup>It was estimated in 1916 that the float would probably equal or exceed the aggregate resources of the Federal reserve banks, that their reserves would be afloat constantly in the mails instead of in their vaults, and that their



3. Congress never intended that non-member banks should not charge exchange, and nothing in the Act gives the Federal Reserve Board authority to force State banks to remit at par. On the contrary, the Federal Reserve Act specifically recognizes exchange charges in the so-called Hardwick Amendment. Nothing in the Federal Reserve Act requires Federal reserve banks to receive and attempt to collect checks at par on the opposing banks. The Act clearly recognizes that the check may be presented through other banking channels which exist and that it is entirely proper for the drawee bank to withhold from its remittance such a charge as the law describes. Reserve banks, however, in many cases have ignored the fact that checks they receive are drawn upon banks which desire to assert their right to make remittance charges and, instead of returning such checks to depositing banks in order that they might be collected through other channels and the charges paid which are contemplated by law, have taken unusual and sometimes expensive courses in order to make collection without paying the drawee banks' charges.

4. Holders of checks have no unlimited right to present an accumulation of checks and demand payment in cash. The conditions on which a bank holds the deposits of its customers and the conditions under which it is obligated to pay them out again are all contractual, for the most part the result of an implied contract, implied from the customs of trade, and in the absence of a specific contract to the contrary, this implied contract is that the deposit is to be received and is to be paid out on the order of the depositor in the regular course of business and according to the customs of banking. The obligation to observe these conditions descends to all holders of checks. Custom is the contract, and where checks are presented in a manner contrary to custom, that is, in large quantities and for cash, it violates the contract between the bank and the drawer, and the bank should not be required to make payment in such a manner. The right to payment of checks in cash is a relative and not an absolute right.

5. Acts lawful in themselves may be committed for unlawful and vicious purposes and are then unlawful. The methods employed by the Federal reserve banks to enforce par clearance, while "embarrassing, annoying and expensive" to the bank against which they are directed, may be legal in themselves when employed in the regular course of business for a usual and lawful purpose,

---

value as reserve agents would be completely nullified. Pierre Jay, *The Country Banker and the Federal Reserve System*, 64th Cong., 1st Sess., Sen. Doc. No. 458, pp. 7-8.

but are clearly illegal when used as oppressive and coercive measures.

6. Genuine par clearance does not exist in the Federal Reserve System. The rules of clearing houses even show that there are few par points on them and that most items are subject to deferred credit or straight-out collection charges.

7. It is only on the theory that the remission for checks is a service to the drawer of a check, that the advocates of par clearance can even attempt to justify it; and this contention is not sound, since the act of remitting is done for the benefit of the holder of the check and at his request, which fact carries with it the obligation on the part of the holder to pay a reasonable compensation for the service, which is a valuable service to him and which involves the bank in some expense. The advocates of remittance charges also reason that the telegraph companies charge for remittance, the express company will not send funds for nothing, and the United States government makes the largest charge of all for its post office money orders.<sup>11</sup>

8. The country banker feels that he is an important element in the financial system of the nation, that he should not be legislated out of business, and that the government should feel some obligation when making laws to so frame them as to give him equal service with the national banks of the country. There are approximately 22,000 State banks as against approximately 8,000 national banks. The resources of the State banks exceed the resources of the national banks, "and the country banker feels that no law affecting any banks of the country should be made which ignores the existence of the majority of the financial institutions of the country."<sup>12</sup>

9. Any intimation that because in many cases competition forces banks to omit their charges, all banks should remit at par, is not sound. No such principle is applied in any other field of business activity. If it is in the public interest that remittances should be made upon all checks at par, the public should pay the cost, either by direct appropriation from the public Treasury or by foregoing some of the earnings of the Federal reserve banks that now go into the United States Treasury.<sup>13</sup>

---

<sup>11</sup>*Hearings before the Committee on Banking and Currency, United States Senate, 63d Cong., 1st Sess., Vol. XVII, p. 2291.*

<sup>12</sup>George H. Bell in *Bulletin on Par Clearance, National and State Bankers' Protective Association* (Atlanta, Ga., Sept. 28, 1920), p. 24.

<sup>13</sup>The non-par banks urge that if a charge were universally made for remittance, the aggregate amount would not be as large as sometimes estimated, for several reasons. In the first place, almost half the total amount of checks

10. Charges for remittance are not a toll levied upon commerce. They are compensation for a definite service, which is just as real, though different in degree, as compensation for the physical transportation of merchandise. Goods have to be transported at the buyer's cost from the place where they lie to the place the purchaser wishes them, and similarly, the seller who accepts payment in a credit at the buyer's bank should transfer it at his own cost to the place where he wants it.

### Arguments for par collection

The important arguments for par collections may be summarized as follows:

1. Par collection would tend to relieve trade generally, and individuals in particular, of the burden of paying for the use of credit which is a trade facility and a trade necessity. It is to the public's interest to reduce costs to the lowest levels and these costs should be borne by some central agency which would reduce them to the minimum. Under the Federal Reserve System the costs would fall upon the Federal reserve banks and reduce to that extent the earnings which go to the government. The cost in the end is borne by the public.

2. If some checks circulate at par, all should circulate at par. Banks have been in the habit of favoring large customers by collecting their checks at par. This discriminates against the smaller customer and places him in a position of even greater disadvantage as compared with his more powerful competitor.<sup>14</sup>

3. Checks, like bank notes, are a substitute for money and perform their function most perfectly when their circulation is as free as possible and their redemption is easily and promptly ac-

---

passing through the Federal reserve clearing system in 1920 and again in 1921, represented checks drawn on banks in the same city as the main office of the reserve bank; obviously, there would be no remittance charge on such checks. Something like twelve per cent. were drawn on banks in cities where the reserve bank had a branch, with which it was in telegraphic communication. Some billions of dollars in checks were drawn upon the United States Treasurer, and would under no circumstances be subject to charges. Only about one-third of the total, or \$57,000,000,000 in 1920, were drawn on banks outside the cities of reserve banks and their branches. *Referendum No. 39*, p. 13.

<sup>14</sup>Various important associations have come out in favor of par remittance such as the National Association of Credit Men, certain manufacturers and jobbers associations, and the United States Chamber of Commerce. The latter conducted an investigation on the merits of the question in August, 1922, submitting the question to its members through a referendum known as Referendum No. 39. The vote of the members stood 1759½ in favor of making par remittance in payment of checks universal throughout the United States, with but 72½ opposed.

completed. Par remittance would benefit all those engaged in commerce by the elimination of the expense and unnecessary delays which are due often to roundabout routing of checks.<sup>15</sup> It would secure for business interests of the country a much prompter collection of checks than formerly, reducing the risk of loss through bad checks and the amount of credit that sellers of goods formerly had to extend involuntarily during the very substantial time required to collect checks.

4. Par collection under the Federal Reserve System accomplishes direct and speedy collection of checks, the reduction of the labor caused by handling checks many times oftener than necessary and eliminates false balances.

5. Although in their origin exchange charges were justified on account of the necessity for and the high cost of actually transporting currency, under the Federal Reserve System such charges can be justified upon no scientific or economic principle. The centralization of reserves reduces to a minimum the actual shipment of cash and the payment of checks at places other than where the drawee banks are located involves little expense and that is borne by the Federal reserve banks.<sup>16</sup> The movements of specie are further reduced since the Federal Reserve System, through its leased wires connecting all Federal reserve banks and branches, and through its Gold Settlement Fund at Washington, offers facilities for the instantaneous transfer of available funds by mere book entry. The Federal Reserve System pays the entire cost of maintaining these leased wires and the Gold Settlement Fund, and the Federal reserve banks pay the cost of transporting currency from member and non-member banks in their districts if such banks wish to make remittances for their checks in this manner. Consequently the justification for exchange charges has ceased to exist.

6. Taking the country as a whole, checks and drafts offset one another to a large extent, and if a plan of general balancing can be developed, the result is to eliminate a large proportion of the cost of collection. As the number of banks which are members of the Federal reserve clearing system increases, the advantage and economy to those already included in the system will correspondingly increase.<sup>17</sup>

<sup>15</sup>See W. M. VanDeusen, "The Clearing of Checks at Par," *Proceedings of the Academy of Political Science*, Vol. IV (1913-1914), pp. 184-186.

<sup>16</sup>*Seventh Annual Report of the Federal Reserve Board* (1920), p. 67.

<sup>17</sup>H. P. Willis, *The Federal Reserve* (New York, 1915), p. 235; *Seventh Annual Report of the Federal Reserve Board* (1920), pp. 67-68.

7. Many banks which decline to remit at par to the Federal reserve banks receive the benefits of the Federal reserve check-clearing facilities by having the checks which they receive collected through a correspondent bank which is a member of the Federal Reserve System, although they contribute nothing to the strength of the system. To the extent that the practice of charging exchange is continued under the operation of the Federal Reserve System, it is an anomaly to permit the charging banks to impose a charge upon commerce and industry after they have ceased to perform the service which in former times justified such a charge. For example, banks that will not remit at par throw a double burden upon the people of their community. In the first place, the expense of the Federal Reserve System is borne by the taxpayers and these communities bear their share. But their banks add to the burden and expense of the Federal Reserve System by not remitting at par, and that means an increased expense for these same people. Then, in the second place, they charge on their own checks and drafts, which is an additional expense to these communities.

8. Under a centralized clearing and collection system, like that which should obtain under the Federal Reserve System, banks would be called upon to do most of their remitting to a single center and this remittance would be made by means of a single draft in one letter. These remittances, which would be large in comparison with the usual amounts paid over the counter for the checks presented, would involve an effort and expense much less than that involved in paying a corresponding amount over the counter of the bank. Moreover, the actual expenses, like postage, stationery and cash shipments, are borne by the Federal Reserve System. Consequently the opposing banks have no real reason for making charges for remittance.

9. If the non-member par banks would keep a deposit in the Federal reserve bank for clearing and collection purposes they could call home all the deposits scattered abroad for collection purposes, and the required centralized deposit for collection purposes would be considerably smaller than the combined deposits scattered among other banks. To bring such funds home and to use them as a basis for building up loans at the prevailing rate of interest, would probably be as profitable, if not more profitable, than receiving 2 per cent. or 3 per cent. interest on the scattered funds. In addition to this, the advertising value which comes to a bank as a result of being able to tell its customers, both present and prospective, that their checks will circulate at par

anywhere must have in it an element of reality, if indeed it does not bring a marked increase in deposits and profits.

10. Since such a large percentage of business, perhaps 90 per cent., is consummated by means of checks, there is all the more reason why checks as compared with bank notes should be made to circulate at par. It hardly seems logical to penalize about 90 per cent. of the business because of the use of checks, while the remaining 10 per cent. is not subjected to such a burden.

The remainder of this chapter will show the relative validity of the arguments advanced by both the friends and the foes of par remittance. In the main, one is compelled to look to the court decisions for final judgment on the merits of the questions involved, but, in addition, there are certain theoretical and practical tests that also may be applied, not only to those questions not definitely settled in the courts, but to a less extent, to those that have been passed upon by the various courts.

#### The growth of the par lists

It will be recalled that the amendment of September 7, 1916, permitted the Federal reserve banks to receive from their member banks or from other Federal reserve banks checks drawn upon non-member banks.<sup>18</sup> The number of non-member banks which agreed to remit at par after this amendment increased but slowly. This was true also following the amendment of June 21, 1917, in which non-member banks were given the privilege of becoming clearing members.<sup>19</sup> Many reasoned as did the opposing member banks, that if they entered the system they would be obliged to assume additional burdens unless all non-member banks would enter. Many also refused to enter the system as clearing members because they were able to have their out-of-town checks credited at par by some city correspondent.

The year 1918 saw banks avail themselves more and more of the clearing and collection facilities afforded by the Federal Reserve System. On December 15, 1918, the number of member banks was 8,612, and the number of non-member banks on the par list was 10,409, a total of 19,021, showing an increase for the twelve months of 1,985 in the number of banks remitting at par. There were something over 10,000 banks which were not remitting at par.<sup>20</sup>

<sup>18</sup>See p. 196 above.

<sup>19</sup>See p. 197 above.

<sup>20</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 74-75.

Although checks on two-thirds of the banks, representing perhaps 90 per cent. of the bank resources of the country, could be collected at par, the number of banks which would not remit at par, including some of substantial size located in important cities, was sufficiently large to make many banks hesitate to use the Federal reserve collection system because of the large number of items which could not be handled by the Federal reserve banks.

At a meeting of the Federal reserve agents in December, 1918, the conclusion was reached that every effort should be made to increase the number of banks on the par list, on the grounds that the banks and the public needed a system able to collect all items, and that it was not a local or selfish undertaking for the benefit of member banks but a national enterprise for the convenience of the public and the promotion of commerce. Continuous effort was to be made through correspondence and personal solicitation to add to the number of banks on the par list.

The year 1919 witnessed rapid progress in the development of the clearing and collection system. Of the 29,586 banks and bankers in the country at the close of the year 1919, 25,571 were on the par list. Checks drawn on all banks and bankers situated in 31 States were collectible at par, as compared with 17 States a year previous. All banks in six Federal reserve districts were on the par list, which meant that items drawn on over 86 per cent. of the total number of banks and bankers throughout the country could be received for collection and credit by the Federal reserve banks. During that year 6,581 banks were added to the par list, leaving only 4,015, or 14 per cent. of the whole, whose checks could not be collected at par.<sup>21</sup>

Despite the increase of banks on the par list during 1919, pronounced opposition began to manifest itself, especially in districts 6, 9, and 10.<sup>22</sup> Prior to this time it had been the general policy of the Federal reserve banks to decline to receive from member banks, for credit or for collection, checks drawn upon non-member banks which had not agreed to remit for them at par. But many non-member banks continued to avail themselves of the facilities of the system to collect their own items without expense through some correspondent bank, without showing any inclination to render a like service or give up exchange charges as a source of profit. Persistent efforts to induce these parasitical non-member banks to become clearing members resulted in little success. In 1919

<sup>21</sup>*Sixth Annual Report of the Federal Reserve Board (1919)*, p. 374.

<sup>22</sup>Atlanta, Minneapolis, and Kansas City.

more active steps were taken; the mere attempt to persuade was superseded by more effective measures.

With the approval of the Federal Reserve Board, several of the Federal reserve banks early in 1919 undertook to collect at par on all banks in their respective districts. The Federal Reserve Bank of Boston had been collecting at par on all banks in its district for more than three years, and other Federal reserve banks felt that in justice to their member banks and to the public no further discrimination should be made. Recourse was had in many cases to means of collection other than through banks, but, to use the words of the Federal Reserve Board, "as a rule such steps were not necessary for any length of time," and of 29,561 banks in the country, 25,565 were remitting on December 31 to the Federal reserve banks at par, while 3,996 still declined to do so.<sup>23</sup> These extraordinary means of collection resorted to by the Federal reserve banks, with the approval of the Federal Reserve Board, created a storm of protest and an organized opposition among these independent banks which resulted, among other things, in court proceedings.

The nature of the par lists was now changed. Prior to this time the par lists included only the names of those banks which had agreed to remit at par; now the par lists included not only those banks which had agreed to remit at par but also those on which the Federal reserve banks had decided to collect at par by direct presentation over the counter through some agent. Many banks thus had their names placed upon the par lists of the Federal reserve banks without their consent, and much to their indignation, as it would give the impression that they had given their sanction to the system. It became the practice of the Federal reserve banks to add entire States or districts to the par lists when a sufficient number of banks had agreed to remit at par to make it possible to collect directly from the few who would not agree to remit at par without involving too much expense. In August, 1919, a special map of the United States was published and circulated, showing the progress of the campaign for par points. Several of these maps were issued from time to time, and on September 1, 1919, the Federal Reserve Board began the regular publication of maps, one map appearing in each issue of the *Federal Reserve Bulletin*. This practice on the part of the Federal reserve banks contributed to the animosity of the exchange-charging banks toward the Federal reserve banks. These maps

---

<sup>23</sup>*Sixth Annual Report of the Federal Reserve Board (1919)*, pp. 40-44.



were widely circulated by the Federal reserve banks, particularly in those districts in which the campaign for par collections was being actively carried on, that is to say, in the districts in which there were one or more States that were not all-par.<sup>24</sup>

### The increased opposition to par collection

Despite the opposition, the Federal Reserve Board announced in 1919 its intention to continue its efforts to establish a universal par remittance system until all banks were on the par list, and in answer to the protests of the opposing banks, made a formal reply defining its attitude on the question.<sup>25</sup> It based its contention on the grounds, (1) that the Federal reserve banks have the right to receive on deposit from any of their member banks any checks or drafts upon whomsoever drawn, provided they are payable upon presentation, (2) that the whole purpose of the Act demands that in justice to member banks they should exercise that right, (3) that the Federal reserve banks, according to the opinion of the Attorney-General, cannot legally pay any fee to any member or non-member bank for collection and remittance, (4) if the Federal reserve banks are to give the service required of them under the provisions of Section 13 they must use some other means of collection, no matter how expensive, in cases where banks refuse to remit for their checks at par, and (5) it is the Board's duty to see that the law is administered fairly and without discrimination and that it applies to all sections alike, and the Board, therefore, should take any and all steps necessary to carry out the intent of the law as construed by the highest legal authority of the administrative branch of the government.<sup>26</sup>

During the year 1920, eleven States were added to the number of States in which all banks were on the par lists of the Federal reserve banks. On January 1, 1921, checks on all but 1,755 of the 30,523 banks in the United States could be collected at par, as compared with 3,996 out of 29,557 on January 1, 1920. These 1,755 banks were all located in the following seven States of the Southeast: Tennessee, South Carolina, Louisiana, Mississippi, Alabama, Georgia, and Florida. Consequently every bank in nine of the twelve Federal reserve districts was on the par lists, the three districts in which there remained any non-par banks were

<sup>24</sup>*The Development of Par Collections by Federal Reserve Banks*, Letter No. 6, Federal Reserve Bank of Richmond (May, 1922), p. 3. Hereafter cited as *Letter No. 6*.

<sup>25</sup>*Sixth Annual Report of the Federal Reserve Board* (1919), pp. 40-44.

<sup>26</sup>*Ibid.*

Richmond (No. 5), Atlanta (No. 6), and St. Louis (No. 8). But this development in the check clearing and collection system was accomplished in the face of continuous opposition on the part of some member and non-member banks. While fewer banks were participating in the opposition, they were well organized and the opposition was none the less vigorous. But little or no systematic and concentrated action in opposition appeared until the latter part of 1920.<sup>27</sup>

Beginning with the year 1921, however, the numbers of the opposing non-member banks began to increase rather than decrease. They became better organized and their resistance more effective. The following table will show the situation for the years 1916 to 1924:<sup>28</sup>

TABLE XXV  
GROWTH OF MEMBERSHIP IN THE FEDERAL RESERVE CLEAR-  
ING AND COLLECTION SYSTEM<sup>1</sup>

Date	Number of member banks in the system	Non- member banks on the par list	Non-member banks not on the par list (incorporated banks other than mutual savings banks)
<b>1916</b>			
Aug. 15	7,524	7,032	....
Sept. 15	7,619	7,449	....
Oct. 15	7,618	7,459	....
Nov. 15	7,623	8,059	....
Dec. 15	7,627	8,065	....
<b>1917</b>			
Jan. 15	7,632	8,130	....
Feb. 15	7,630	8,086	....
Mar. 15	7,630	8,007	....
Apr. 15	7,625	8,607	....
May 15	7,634	8,926	....
June 15	7,651	8,789	....
July 15	8,666	8,805	....
Aug. 15	7,683	8,837	....
Sept. 15	7,718	8,934	....
Oct. 15	7,747	9,052	....
Nov. 15	7,826	9,210	....
Dec. 15	7,823	9,321	....
<b>1918<sup>2</sup></b>			
Jan. 15	7,909	9,268	11,336
Feb. 15	7,972	9,319	....
Mar. 15	8,013	9,425	....
Apr. 15	8,059	9,450	....
May 15	8,113	9,475	....
June 15	8,165	9,710	....
July 15	8,212	9,761	....
Aug. 15	8,294	10,206	....
Sept. 15	8,428	10,549	....

<sup>1</sup>*Seventh Annual Report of the Federal Reserve Board (1920)*, pp. 63-69.

<sup>2</sup>For an additional discussion of this subject, see Charles S. Tippetts, "State Bank Withdrawals from the Federal Reserve System," *The American Economic Review*, Vol. XIII, No. 3 (September, 1923), pp. 401-410.

TABLE XXV—(Continued)

Date	Number of member banks in the system	Non- member banks on the par list	Non-member banks not on the par list (incorporated banks other than mutual savings banks)
1918			
Oct. 15	8,510	10,318	.....
Nov. 15	8,584	10,219	10,392
Dec. 15	8,612	10,409	10,198
1919			
Jan. 15	8,692	10,595	9,923
Feb. 15	8,717	10,622	9,726
Mar. 15	8,729 <sup>a</sup>	10,885 <sup>a</sup>	9,543
Apr. 15	8,765	11,060	9,003
May 15	8,788	11,261	8,762
June 15	8,820	11,801	8,309
July 15	8,848	12,071	8,167
Aug. 15	8,894	12,578	7,621
Sept. 15	8,920	12,962	7,178
Oct. 15	8,955	13,852	6,457
Nov. 15	9,008	14,860	5,515
Dec. 15	9,055	15,851	4,609
1920			
Jan. 15	9,089	16,987	3,566
Feb. 15	9,140	17,429	3,148
Mar. 15	9,196	18,308	2,274
Apr. 15	9,246	18,492	2,157
May 15	9,303	18,502	2,180
June 15	9,366	18,614	2,119
July 15	9,421	18,605	2,136
Aug. 15	9,472	18,605	2,138
Sept. 15	9,506	18,620	2,160
Oct. 15	9,544	18,675	2,180
Nov. 15	9,574	19,188	1,727
Dec. 15	9,612	19,172	1,732
1921			
Jan. 15	9,637	19,101	1,705
Feb. 15	9,668	19,023	1,744
Mar. 15	9,696	18,804	1,893
Apr. 15	9,726	18,792	1,932
May 15	9,747	18,781	1,837
June 15	9,775	18,716	1,965
July 15	9,769	18,599	2,040
Aug. 15	9,791	18,551	2,078
Sept. 15	9,794	18,504	2,121
Oct. 15	9,803	18,388	2,200
Nov. 15	9,805	18,319	2,218
Dec. 15	9,827	18,217	2,263
1922			
Jan. 15	9,847	18,066	2,350
Feb. 15	9,853	18,053	2,327
Mar. 31	9,873	17,976	2,301
Apr. 30	9,904	17,943	2,293
May 31	9,909	17,918	2,279
June 30	9,925	17,889	2,275
July 31	9,930	17,884	2,285
Aug. 31	9,919	17,865	2,281
Sept. 30	9,917	17,863	2,276
Oct. 31	9,918	17,851	2,281
Nov. 30	9,916	17,836	2,286
Dec. 31	9,913	17,822	2,288

TABLE XXV—(Continued)

Date	Number of member banks in the system	Non-member banks on the par list	Non-member banks not on the par list (incorporated banks other than mutual savings banks)
1923			
Jan. 31	9,911	17,777	2,289
Feb. 28	9,917	17,724	2,282
Mar. 31	9,922	17,692	2,285
Apr. 30	9,923	17,663	2,280
May 31	9,927	17,643	2,279
June 30	9,933	17,589	2,310
July 31	9,916	17,565	2,324
Aug. 31	9,905	17,381	2,489
Sept. 30	9,906	17,255	2,580
Oct. 31	9,898	17,114	2,679
Nov. 30	9,869	16,919	2,791
Dec. 31	9,896	16,725	2,896
1924			
Jan. 31	9,875	16,484	3,013
Feb. 29	9,857	16,337	3,084
Mar. 31	9,819	16,246	3,142
Apr. 30	9,806	16,119	3,185
May 31	9,785	15,981	3,240 <sup>a</sup>

<sup>a</sup>Compiled from the *Federal Reserve Bulletins*.

<sup>b</sup>The data for the year 1918 as compiled from the *Federal Reserve Bulletins* differ from data given in the *Fifth Annual Report of the Federal Reserve Board* (1918), p. 206.

<sup>c</sup>Given in *Federal Reserve Bulletin*, Vol. V (1919), p. 405, as 8,782 and 10,905 respectively. The above data were given on p. 511 of the same bulletin. There are so many variations similar to those indicated that no further effort will be made to point them out. The writer, in many cases, was compelled to choose arbitrarily; in some instances he was able to choose those figures that appeared most frequently.

<sup>d</sup>With these data for May which are reported in the *Federal Reserve Bulletin* for July, 1924, the Federal Reserve Board discontinued further monthly reports on the membership.

### Common and concrete forms of opposition

The opposition on the part of these opposing State banks has manifested itself in various ways, the chief of which are, (1) dilatory practices in tendering payments, (2) stamping legends on their blank checks, (3) organization of the National and State Bankers' Protective Association, (4) State legislation hostile to the par collection system, (5) petitions to Congress for hearings and amendatory legislation, and (6) injunctions and suits in the courts.

Obstructive and dilatory tactics in tendering payments have seriously embarrassed the Federal reserve banks at times. Since Federal reserve banks cannot pay exchange charges, they have no choice, if they are to collect the checks drawn on these non-member

banks which refuse to remit at par, but to make presentation of such checks at the counters through selected agents. These agents may be employees of the Federal reserve banks or may be banks, express companies, or any other suitable agents located in the town of the drawee bank. The employees and agents of the Federal reserve banks have encountered various obstacles in making presentation of checks, such as tender of payment in a manner calculated to take as much time as possible, the refusal of payment in reliance on the inability of the agent to find a notary public willing to make protest, or by offering in payment drafts rather than legal tender. Payments were sometimes made in silver and other coins which would be difficult to transport, sometimes bills were wadded and mixed up with other currency. Such tactics made it difficult at times for the Federal reserve banks to secure agents willing to act for them. In one instance the American Express Company refused to act as agent, after serving for a short time, because of the trouble involved in making collections. In another instance an agent, within a few days after his appointment, gave notice to the Federal reserve bank that he would no longer act as agent for fear of injury to his business. Local agents were reluctant to incur the disapproval of their own community in attempting to act for the Federal reserve bank against their local bank.

Some opposing banks, including some member banks, resorted to the device of stamping legends on their blank checks to the effect that the check was not valid if presentation were made through the Federal reserve banks. At one time in 1920 over three hundred banks were indulging in this practice in the ninth district.<sup>29</sup> Another legend read, "Payable in cash or exchange draft at the option of.....Bank of....." In cases like the latter, the Federal reserve bank involved frequently would refuse to accept such checks and would return them to the banks from which they came and add to the discomfort of the opposing bank by writing to the payees of the checks stating that it could not accept them, since such checks, by reason of the indorsement, were non-negotiable and as a medium of payment the usefulness of such checks was impaired.<sup>30</sup>

In 1920 the opposing banks organized the National and

<sup>29</sup>*Report of General Secretary*, a pamphlet published by the National and State Bankers' Protective Association (Atlanta, Ga., 1920).

<sup>30</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), p. 1411.

State Bankers' Protective Association<sup>31</sup> in order to secure concerted action in carrying on the fight against the enforced par remittance system. The first steps were taken towards its organization by calling a conference of the affected banks in the sixth district to meet in New Orleans in February, 1920. The invitation was later extended to include the interested banks in other districts. Delegates from eight of the twelve districts were present. Out of this New Orleans meeting grew the National and State Bankers' Protective Association, permanent organization being effected at a conference in Washington, D. C., in May, 1920. The objects of the association have been endorsed by the Bankers' Associations of a number of States at their annual conventions, including Alabama, Arkansas, Florida, Georgia, Idaho, Louisiana, Minnesota, Mississippi, South Carolina, Texas, Wisconsin and others, and by the National Association of State Bank Supervisors in their annual conference at Seattle, Washington, in July, 1920.<sup>32</sup>

It was maintained by this association that most of the banks objected to par remittance, but were forced into the system by the Federal reserve banks because of the absence of organized resistance. The association with headquarters and staff at Atlanta, planned to extend its organization to each State and endeavored to have the State legislatures pass laws protecting the State banks in the right to charge exchange and against the coercive methods of the Federal reserve banks. It planned to carry the fight to Congress, and to persuade members of the association to bring the matter to the attention of their Congressmen and Senators. The association has been effective in its methods, in organizing the opposition and in carrying the fight into the State legislatures, Congress and the courts.

In 1920 the legislatures of various States, chiefly in the South, began to legislate in favor of the exchange-charging State banks. Mississippi passed a law, approved March 6, 1920, with the ex-

---

<sup>31</sup>This organization is virtually an offshoot from the American Bankers' Association representing to a large extent the country bankers, and in their opinion, threatening to split the American Bankers' Association into two factions. In 1920 they claimed a membership of 15,000 of the 21,000 in the American Bankers' Association. A Committee of Five in the American Bankers' Association, appointed under resolutions adopted in Kansas City in 1916 to secure the so-called rights of banks to make exchange charges, was continued by the Association in October, 1921. The State Bank Section of the Association adopted strong resolutions against the position of the Federal Reserve Board on this question and appointed a Committee of Seven to work in favor of exchange charges and to place the matter before Congress.

<sup>32</sup>*Bulletin on Par Clearance*, the National and State Bankers' Protective Association (Atlanta, Ga., September 28, 1920), *passim*.

press purpose of preventing the Federal reserve banks from collecting at par, checks drawn on the banks located in that State.<sup>33</sup> Seven other States followed rapidly in the order mentioned: Louisiana,<sup>34</sup> South Dakota,<sup>35</sup> Georgia,<sup>36</sup> Alabama,<sup>37</sup> North Carolina,<sup>38</sup> Tennessee,<sup>39</sup> and Florida.<sup>40</sup> The Mississippi law, which is an excellent sample of these laws, reads in part as follows: "For the purpose of providing for the solvency, protection and safety, of the banking institutions of Mississippi, the established custom on the part of the banks of this State to charge a service fee (commonly called 'exchange') for collecting and remitting, by exchange or otherwise, the proceeds of checks, drafts, bills, etc. (commonly known among banks as 'cash items'), is hereby declared to be the law of this State, and the banks of this State, both State and national, shall continue to make such charge as fixed by custom when such 'cash items' are presented to the payer bank for payment through or by any bank, banker, trust company, Federal reserve bank, post office, express company, or any collection agency, or by any other agency whatsoever; and the amount of such charge is hereby fixed at one-tenth of one per centum of the total amount of such 'cash items' so presented and paid at any one time, and not less than ten cents on any one such transaction. . . ." <sup>41</sup> This law provides further that banks are not to charge for checks or drafts drawn to settle obligations with the United States government or the government of the State of Mississippi, or for checks on banks in the same city or town. It is optional with banks whether they charge exchange on checks or drafts payable to a person within that State, and drawn on a bank, trust company or person within or without that State. No officer of the State is permitted to protest for non-payment any such "cash items" when such non-payment is solely on account of

<sup>33</sup>*Mississippi Laws, 1920*, Chap. 183. Effective March 6, 1920.

<sup>34</sup>*Acts of the State of Louisiana, 1920*, No. 23. Approved and effective June 25, 1920.

<sup>35</sup>*Laws of South Dakota, 1920*, Chap. 31. Approved and effective July 3, 1920.

<sup>36</sup>*Georgia Laws, 1920*, Part I, Title VI, p. 107. Approved and effective August 14, 1920.

<sup>37</sup>*General and Local Laws of Alabama, 1920*, No. 35. Approved September 30, 1920, effective thirty days later.

<sup>38</sup>*Public Laws of North Carolina, 1921*, Chap. 20, Sec. 2. Ratified and effective February 5, 1921.

<sup>39</sup>*Public Acts of Tennessee, 1921*, Chap. 37. Passed and effective March 17, 1921.

<sup>40</sup>*Laws of Florida, 1921*, Chap. 8532. Approved and effective April 29, 1921.

<sup>41</sup>*Mississippi Laws, 1920*, Chap. 183. Effective March 6, 1920.

the failure or refusal of any of the banks to pay exchange, nor is there any right of action against any bank in the State for refusal to pay such "cash items," when the refusal is based on the ground of the non-payment of such exchange.

The Act finally provides that should any court hold that the national banks in the State are not required to charge and collect exchange, the Act is to remain in force as to all the other banks in the State, and in case of such a decision by the courts or the refusal of any national bank in the State to comply with the Act, then it is to be optional with State banks located in the same municipality with a national bank or State bank which are members of the Federal Reserve System as to whether the charge should be made.

The title of the Tennessee Act reads as follows: "An Act to prevent the Federal Reserve System from forcing the banks of this State into what is known as the passing [*sic*; should read *parring*] of checks, drafts, bills, etc. (commonly known as 'cash items') and for that purpose making it optional on the banks of this State to charge exchange on such 'cash items' and fixing the rate of exchange."<sup>42</sup> The Louisiana law differs sufficiently from the others to require brief mention. The law in that State provides that any bank has the option to claim three days' grace in which to pay in cash or by a draft on correspondent, and presentation of more than three drafts or bills of exchange over five days after their receipt by the bank presenting them shall constitute *prima facie* proof that the checks have been withheld from presentation in order to injure the drawee bank.<sup>43</sup>

Relative to making exchange charges, the laws of Mississippi and Florida are mandatory. The wording of the Alabama law is both mandatory and optional; it provides that a bank *shall* charge exchange, but may remit in money or exchange drawn on reserve agents on which it *may* charge exchange, provided the minimum *may* be ten cents.<sup>44</sup> The laws of Tennessee, South Dakota, Georgia and North Carolina are optional. The following States have included provisions in their laws prohibiting any officer from protesting any check for non-payment, when such non-payment is on account of the refusal of any bank to pay exchange: Florida, Tennessee, South Dakota, Mississippi, Alabama and North Carolina; Louisiana and Georgia have no such provisions. Tennessee

<sup>42</sup>*Public Acts of Tennessee, 1921, Chap. 37.*

<sup>43</sup>*Acts of the State of Louisiana, 1920, No. 23.*

<sup>44</sup>*General and Local Laws of Alabama, 1920, No. 35.* Italics are the author's.



and North Carolina have included provisions also which prohibit legal action against any officer for refusal to protest such items; South Dakota and Mississippi prohibit legal action against the bank; the remaining States have neither provision.

The Federal Reserve Board took the position that these laws were clearly unconstitutional in so far as they purported to require national banks and State banks which had joined the Federal Reserve System to make exchange charges against Federal reserve banks, and the Board, therefore, continued to collect on many of the banks in these States in the usual manner. Prior to the enactment of the South Dakota and Louisiana laws all banks in South Dakota, and in that part of Louisiana which is located in the eleventh Federal reserve district (Dallas), had been placed upon the Federal reserve bank par lists, and the Federal Reserve Banks of Minneapolis and Dallas, after the enactment of those laws continued to receive for collection at par all checks drawn on those banks.<sup>45</sup>

In 1920 petitions and protests were sent to the Federal Reserve Board and to Congress by organizations representing the opposing banks. In February of that year charges were made by State bankers of Nebraska that employees of the Omaha branch of the Federal Reserve Bank of Kansas City had used oppressive methods in the presentation of checks on non-member banks. The Federal Reserve Board held hearings to inquire into these alleged acts and methods with the result that the Federal reserve bank officials and employees involved denied, under oath, the charges in every particular. The hearings were attended by a delegation of Congressmen from Nebraska, and the State bankers making the charges, as well as their witnesses, were also invited to be present. For the convenience of the latter the Board offered to have a committee of its members hold a hearing in Nebraska. No witnesses on behalf of the State bankers were produced, however, and the only evidence submitted in support of the charges consisted of a series of affidavits. In the Board's opinion, there was no instance in which any specific charge of improper conduct on the part of an employee of the Omaha branch was substantiated. In May, 1920, the Congressional Committee on Rules gave a hearing to representatives of the National and State Bankers' Protective Association. This committee had before it the King Resolution No. 476 calling for an investigation of the administration of the Federal Reserve Act. It embodied practi-

---

<sup>45</sup>*Seventh Annual Report of the Federal Reserve Board (1920)*, pp. 65-66.

cally the resolutions adopted by the National and State Bankers' Protective Association at New Orleans on February 6, 1920. At the same time the House Committee on Banking and Currency gave a hearing to representatives of the association. This committee had before it at this time House Bill No. 12,646, known as the McFadden Bill, and House Bill No. 12,376, the Steagall Bill, both bills having for their purpose the amendment of the Federal Reserve Act so as to give both member and non-member banks the right to charge exchange on remittances, not to exceed 10 cents on \$100. Both of these bills were supported by the National and State Bankers' Protective Association. The contentions of the country banks were forcibly impressed upon the Congressional Committees as well as upon the Federal Reserve Board. Governor Harding of the Federal Reserve Board promised the neutrality of the Board in the fight before Congress for an amendment to the Act and freely admitted that par collection was not a necessary function of the system.

In view of all the circumstances, the Board decided to lay the facts before Congress for such action as it might care to take. Accordingly, the Board addressed a letter in May, 1920, to Edmund Platt, Chairman of the House Committee on Banking and Currency, calling attention to the opposition to par collection and to the obstacles which the Federal reserve banks were encountering, and suggested that after a hearing the committee adopt one of two definite courses: "(1) that it report a bill authorizing both member and non-member banks to make charges against the Federal reserve bank as well as against each other for remitting for checks, not to exceed ten cents per one hundred dollars, with the provision that the Federal reserve banks be authorized to charge to sending banks any exchange charges paid in collecting checks for them, or (2) that it report a bill clearly and definitely establishing the universality of the par remittance system by imposing such conditions or penalties as will insure compliance with the law by all banks of deposit, non-member State banks and private bankers as well as member banks."<sup>6</sup>

Congress, however, did nothing in this matter. This inactivity, combined with the fact that the United States Circuit Court of Appeals, in reviewing the case of the *American Bank and Trust Company et al. v. Federal Reserve Bank of Atlanta et*

---

<sup>6</sup>Extract from a letter of Governor W. P. G. Harding to Hon. Edmund Platt, Chairman, Committee on Banking and Currency, House of Representatives, in *Bulletin on Par Clearance*, p. 14.

*al.*,<sup>47</sup> supported the Board in its position, caused it to go forward with its announced policy of attempting to establish universal par collection. From this time on, the opposition manifested itself largely in litigation which will now be reviewed.

### The Atlanta par collection case

The legal battle was started in the sixth district on December 23, 1919, by the Governor of the Federal Reserve Bank of Atlanta mailing a letter to each of the non-member banks of the district, saying the time had come to put universal par remittance into effect in the district and inviting the banks to agree to the procedure. Among other things, the letter stated that "while, as stated, the Federal Reserve Act does not permit us to pay exchange for the remittance of bank checks and drafts payable upon presentation, we can incur any cost that is necessary in order to carry out the purpose of the Act, and we would very much regret to be forced to adopt methods of collection that would prove embarrassing, annoying and expensive to you."<sup>48</sup>

The Georgia banks affected by the proposed action banded together in their own defense through the medium of the Country Bankers' Association of Georgia, raised a fund, employed counsel, and filed a petition to enjoin the officials of the Federal Reserve Bank of Atlanta from carrying the above threat into effect. The grounds on which the opposing banks sought an injunction against the Federal Reserve Bank of Atlanta were set forth at great length in a petition presented to the Superior Court of Fulton County, Georgia, in January, 1920, by counsel for the petitioning banks and may be summarized briefly as follows:<sup>49</sup> (1) That the purpose of the Federal reserve bank was to collect checks in large numbers drawn on them and present them over the counter for payment rather than through the customary channels of correspondent banks or clearing houses and that this course was intended to coerce State banks into becoming members of the Federal Reserve System, (2) that the action of the Federal reserve bank was *ultra vires*, and (3) that they were depriving the petitioning banks and others in like position of the customary

<sup>47</sup>280 Fed. 940 (1922).

<sup>48</sup>*Bulletin on Par Clearance*, p. 2.

<sup>49</sup>From a pamphlet entitled *The American Bank and Trust Company et al. vs. The Federal Reserve Bank of Atlanta et al.*, No. 44,323, Superior Court of Fulton County, Georgia (1920), distributed by the Georgia Country Bankers' Association. This pamphlet does not include the case as its title might suggest; nor is this case reported officially. See also the *Federal Reserve Bulletin*, Vol. VI (1920), p. 496.

compensation for collection and remittance when checks reached them under the present method of doing business. Their principal prayer was to restrain the defendants from the adoption of any method of collecting checks drawn against the petitioners except through the usual and ordinary channel of collecting checks through correspondent banks or clearing houses.

On January 15, 1920, Judge W. D. Ellis in the Fulton County Superior Court issued a temporary order restraining the Federal reserve bank from employing and putting into effect any method of collecting checks drawn against the opposing non-member banks "that would prove embarrassing, annoying or expensive to such banks; and from collecting such checks in any manner except in the usual and orderly way now employed among corresponding banks and clearing houses; and from interfering with any such bank in charging, collecting or retaining the usual customary rate of exchange charges now in effect between corresponding banks and clearing houses."<sup>50</sup>

This temporary restraining order held matters in *status quo* pending a hearing on the merits of the case. The Federal reserve bank filed an application to remove the case to the United States District Court for the Northern District of Georgia, on the ground that the Federal Reserve Bank of Atlanta was a Federal corporation and that the plaintiffs' cause of action arose under the Constitution and laws of the United States. The application was granted and the State banks of Georgia then moved to have the case remanded to the State court while the Federal reserve bank moved to have the case dismissed.

On April 5, 1920, United States District Judge Beverly D. Evans dismissed the case on its merits in favor of the Federal Reserve Bank of Atlanta. He held that Federal reserve banks are not national banking associations within the scope and meaning of the Acts of Congress of July 12, 1882, August 13, 1888, and the Judicial Code, Section 11, which place national banking associations, for the purpose of action by and against them, upon the footing of other citizens, which means that they can sue and be sued in State courts; they are Federal corporations and come under the jurisdiction of the Federal courts. After establishing the jurisdiction of the United States District Court, Judge Evans ruled, in brief, "that this method of collection of checks will deprive the drawee banks of the revenue previously enjoyed where checks

---

<sup>50</sup>*Par Points*, a pamphlet, National and State Bankers' Protective Association (Atlanta, 1920), pp. 5-6.

on them came through the mails from correspondent banks, but does not make the transaction unlawful. It is the duty of the drawee bank to pay a check of the drawer, if it holds sufficient funds of the drawer to pay it. It is no less the duty of the drawee bank to pay several checks than it is to pay a single check, when presented over the counter within banking hours. The policy of the Reserve Bank of Atlanta, as outlined in the petition, is neither *ultra vires* nor unlawful. It is not to be presumed that the agency employed by the Federal reserve bank will act otherwise than may be lawful and proper in the presentation of the checks for payment. The allegations of conspiracy are lacking in essential features to charge an actionable wrong."<sup>51</sup>

On appeal, the United States Circuit Court of Appeals for the Fifth Circuit, in an opinion filed November 19, 1920, upheld the District Court.<sup>52</sup> The Circuit Court held that Federal reserve banks have the right to collect checks, drawn on non-member banks which refuse to remit at par, by having such checks presented at the counters of the drawee banks, and that the case was one in which the United States District Court had jurisdiction. In these lower courts the defendant Federal reserve bank merely demurred to the bill of the plaintiff and no evidence was taken either to establish or to disprove the allegation that the Federal Reserve Bank of Atlanta proposed to use embarrassing and oppressive methods in forcing non-member banks to remit at par, although, as pointed out elsewhere, representations had been made to the Federal Reserve Board and to committees of Congress that improper methods had been and were being used by the Federal reserve banks, particularly in the West and Northwest.

The case then was appealed to the United States Supreme Court and a decision was rendered May 16, 1921, Mr. Justice Holmes delivering the opinion of the Court.<sup>53</sup> The plaintiffs had filed a motion to remand the case to the State court, and the defendants moved to dismiss the complaint for lack of equity. This latter motion was in the nature of a demurrer and the issue before the Supreme Court upon this motion was merely whether, as a matter of pleading, the plaintiffs' bill of complaint stated a cause

---

<sup>51</sup>See *Federal Reserve Bulletin*, Vol. VI (1920), pp. 496-497. Case not reported.

<sup>52</sup>*American Bank and Trust Co. et al. v. Federal Reserve Bank of Atlanta, Ga., et al.*, 269 Fed. 4 (1920). The opinion is given also in the *Seventh Annual Report of the Federal Reserve Board* (1920), pp. 330-334, and the *Federal Reserve Bulletin*, Vol. VI (1920), p. 1303 ff.

<sup>53</sup>*American Bank and Trust Company et al. v. Federal Reserve Bank of Atlanta, Georgia, et al.*, 256 U. S. 350 (1921).

for action. The Supreme Court held, purely as a matter of pleading, that the allegations of the complaint stated a cause for action and, if sustained by the evidence, would entitle the plaintiffs to the injunction sought. The Court said, "On the merits we are of opinion that the courts below went too far. The question at this stage is not what the plaintiffs may be able to prove, or what may be the reasonable interpretation of the defendants' acts, but whether the plaintiffs have shown a ground for relief if they can prove what they allege. We lay on one side as not necessary to our decision the question of the defendants' powers, and assuming that they act within them consider only whether the use that according to the bill they intend to make of them will infringe the plaintiffs' rights."<sup>54</sup>

The Court further stated certain principles which had an ominous sound and which proved to be indicative of what the Court would do once a case reached it on its merits and it was demonstrated that the Federal reserve banks were using oppressive methods in collecting on non-par banks. It said: "If without a word of falsehood but acting from what we have called disinterested malevolence a man by persuasion should organize and carry into effect a run upon a bank and ruin it, we cannot doubt that an action would lie. A similar result even if less complete in its effect is to be expected from the course that the defendants are alleged to intend, and to determine whether they are authorized to follow that course it is not enough to refer to the general right of a holder of checks to present them but it is necessary to consider whether the collection of checks and presenting them in a body for the purpose of breaking down the petitioner's business as now conducted is justified by the ulterior purpose in view.

". . . The policy of the Federal reserve banks is governed by the policy of the United States with regard to them and to these relatively feeble competitors. We do not need aid from the debates upon the statute under which the reserve banks exist to assume that the United States did not intend by that statute to sanction this sort of warfare upon legitimate creations of the States."<sup>55</sup> The Supreme Court, therefore, remanded the case to the District Court of the United States for the Northern District of Georgia for trial upon its merits. This decision, in addition to those of the District and Circuit courts mentioned above, estab-

---

<sup>54</sup>*Loc. cit.*, p. 357.

<sup>55</sup>*Ibid.*, pp. 358-359. See also comments of C. T. Murchison, "Par Clearance of Checks," *The North Carolina Law Review*, Vol. I, No. 3 (January, 1923), pp. 146-147.

lished the jurisdiction of the Federal courts over any suit brought by or against any Federal reserve bank, provided it involved the necessary jurisdictional amount of money, namely, \$3,000.<sup>56</sup>

In the District court Judge Beverly D. Evans, on March 11, 1922, decided that a Federal reserve bank may employ any proper means or agency to collect at par checks drawn on non-par banks. The opinion may be summarized briefly as follows:<sup>57</sup> Under the Federal Reserve Act the Federal reserve banks are empowered to accept any and all checks payable on presentation, when deposited with them for collection, and checks thus received must be collected at par, since the Federal reserve banks are not permitted to accept in payment of checks deposited with them for collection an amount less than the full face value of the checks. In the discharge of its duties with respect to the collection of checks deposited with them, and with respect to performing the functions of a clearing house, the several Federal reserve banks are empowered to adopt any reasonable measure designed to accomplish these purposes. To that end a Federal reserve bank may send checks to the drawee bank directly, for remittance through the mails, without cost of exchange. If the drawee bank refuses to remit without deduction of the cost of exchange, it is in the power of the several Federal reserve banks to employ any proper instrumentality or agency to collect the checks from the drawee bank, and it may legitimately pay the necessary cost of this service. The process of the daily collection of checks, in the exercise of the clearing house functions, is not rendered unlawful because of the fact that of the checks handled two or more of them may be drawn on the same bank. The Federal reserve bank may also publish a par list as a legitimate feature of its clearing house function, and while it should not include on that list the name of any bank that has not agreed to remit at par or has not authorized the use of its name, it may indicate, through the par list, its ability to collect checks upon all banks located in a particular place. The Court also found from the facts that the Federal Reserve Bank of Atlanta had not used or proposed to use improper or illegal methods for the purpose of coercing the non-member banks, but that the plaintiff banks were entitled to the writ of injunction against the inclusion of their names on the

---

<sup>56</sup>See also *Federal Reserve Bulletin*, Vol. VII (1921), pp. 700-701.

<sup>57</sup>*American Bank and Trust Co. et al. v. Federal Reserve Bank of Atlanta et al.*, 280 Fed. 940 (1922).

par list without their consent, but for no other matter complained of against the Federal reserve bank.<sup>58</sup>

Appeal from this decision was taken by the plaintiff banks to the United States Circuit Court of Appeals from which a decision was handed down on November 2, 1922.<sup>59</sup> This court affirmed *in toto* the decision of the District Court, and added, "We are not of opinion that a bank, in receipt for collection of checks on other banks, is guilty of an abuse of its right as such holder when, in due course, with reasonable promptness, without designed delay or accumulation, and in proper manner, it presents, or causes to be presented, those checks to the drawees for payment in cash. In so doing the collecting bank would be exercising its rights as the holder of checks received by it for collection, and would not be guilty of an abuse of that right for an unlawful purpose. If the holder of the checks is guilty of no wrong, the fact that the payee [*sic*; drawee?] is inconvenienced by having to pay in cash would not give the latter a valid ground of complaint. Inconvenience resulting to one party from another's exercise of a right in a lawful way does not give the former a right of action."<sup>60</sup>

When the case finally reached the United States Supreme Court for the second time, the rulings of the lower courts were upheld in an opinion delivered by Mr. Justice Brandeis on June 11, 1923.<sup>61</sup> The Court found no adequate reason for not accepting the concurrent findings of fact made by the two lower courts and considered as the main question whether, on the undisputed facts, the plaintiffs were entitled to additional relief. In deciding this question the Court considered the course of business formerly prevailing and the changes wrought by the attempt to introduce universal par clearance and collection of checks through the Federal reserve banks. As a result of these considerations, the Court found that although there was no intentional accumulation or holding of checks in order to embarrass, the advantages offered by the Federal reserve banks have created a steady flow in increased volume of checks on country banks so routed. It seemed clear that the action contemplated by the Federal reserve banks would subject the country banks to certain losses and "in order to protect them from such losses it would be necessary to prevent the

<sup>58</sup>See also *Federal Reserve Bulletin*, Vol. IX (1922), pp. 258-259.

<sup>59</sup>*American Bank and Trust Co. et al. v. Federal Reserve Bank of Atlanta et al.*, 284 Fed. 424 (1922).

<sup>60</sup>*Loc. cit.*, p. 425; *Federal Reserve Bulletin*, Vol. VIII (1922), pp. 1408-1409.

<sup>61</sup>*American Bank and Trust Company et al. v. Federal Reserve Bank of Atlanta et al.*, 262 U. S. 643 (1923).



Federal reserve banks from accepting the checks for collection. For these banks cannot be compelled to pay exchange charges or to abandon superior facilities.<sup>62</sup>

After reviewing the provisions of the Federal Reserve Act relating to the powers of the Federal reserve banks in collecting checks, the Court held that wherever collection can be made by the Federal reserve bank, without paying exchange, neither the common law nor the Federal Reserve Act precludes their undertaking it, if it can be done consistently with the rights of the country bank already determined in the case of the *American Bank and Trust Company et al. v. Federal Reserve Bank of Atlanta, Georgia, et al.*, 256 U. S. 350 (1921). Federal reserve banks are authorized by Congress to collect for other reserve banks, for members, and for affiliated non-members, checks on any bank within their respective districts, if the check is payable on presentation and can in fact be collected consistently with the legal rights of the drawee without paying an exchange charge, and within these limits Federal reserve banks have ordinarily the same right to present a check to the drawee bank for payment over the counter, as any other bank, State or national, would have. The Court further held that the findings of fact negated the charges of wrongful intent and of coercion. The Federal reserve bank had strengthened its case in this respect since the case has been tried in the United States District Court by filing an amended answer to the charges and disclaiming any intention of demanding payment in cash, when presenting checks at banks, and averred its willingness to accept payment in drafts, either on the drawees' Atlanta correspondents or on any other solvent bank, if collectible at par. "Country banks," the Court said, "are not entitled to protection against legitimate competition. Their loss here shown is of the kind to which business concerns are commonly subjected when improved facilities are introduced by others, or a more efficient competitor enters the field."<sup>63</sup> The Court held that the course of action contemplated by the Federal reserve bank was not *ultra vires*.<sup>64</sup>

This decision thus establishes the principle that Federal reserve banks may collect checks at par on banks which refuse to remit at par by presenting the checks directly over the counter, provided they do not accumulate checks with the intention of embarrassing or coercing such banks and *if the checks in fact can*

<sup>62</sup>*Loc. cit.*, p. 646.

<sup>63</sup>*Ibid.*, p. 648.

<sup>64</sup>*Ibid.* See also the *Federal Reserve Bulletin*, Vol. IX (1923), pp. 788-789.

*be collected consistently with the legal rights of the drawee without paying exchange charges.* To the italicized portion of the paragraph the Court has permitted some vagueness to attach itself.

Before studying another case of equal, if not greater significance, decided by the United States Supreme Court on the same date and adverse to the interests of the Federal reserve banks in their attempt to establish a universal par collection system, a brief review will be made of two other cases which in the meantime attracted attention.

### **The San Francisco par collection case**

In 1921 a case arose in Oregon in which the United States District Court for the District of Oregon ruled that a Federal reserve bank may not use the check collection system to coerce non-member banks to remit at par.<sup>65</sup> The facts may be summarized briefly. The Brookings State Bank, a small corporation in southern Oregon, with correspondents in Portland and San Francisco, refused to remit at par for checks sent it by the Federal Reserve Bank of San Francisco or its branch at Portland. The Federal reserve bank established an agent in Brookings who collected checks over the counter to the extent of \$102,850.33 at an expense of \$1,915.32 during the space of about a year. This method caused the Brookings bank much annoyance and required it to maintain a materially larger reserve than ordinarily would have been necessary in the usual conduct of its business. The agent was finally withdrawn and the Brookings bank notified that thereafter checks would be forwarded for collection by mail direct to the bank, with a request that they be paid at par and the proceeds remitted by exchange on Portland or San Francisco. Checks were then forwarded, indorsed "Pay to Brookings State Bank for collection only and remittance in full without deduction for exchange or collection charges. Portland Branch, Federal Reserve Bank of San Francisco, Frederick Greenwood, Manager." These were returned by the Brookings bank without payment on the ground that the bank was not called upon to act as agent for the Federal reserve bank to make collections under the terms imposed. The Federal reserve bank, upon the return of the checks, returned them to its correspondents, advising them, in

---

<sup>65</sup>*Brookings State Bank v. Federal Reserve Bank of San Francisco*, 277 Fed. 430 (1921); *Ninth Annual Report of the Federal Reserve Board* (1922), pp. 271-274. See also Murchison, *op. cit.*, pp. 148-149.

effect, that the Brookings bank refused to pay and had not protested the paper, and that they must look to the Brookings bank for their protection. Suit was brought September 29, 1921, in the United States District Court for the District of Oregon to enjoin the Federal Reserve Bank of San Francisco from indulging in certain alleged practices supposedly injurious to the plaintiff's business.

Judge Wolverton rendered his decision December 19, 1921. He held, in the first place, that the State bank, if it so desired, had the right to charge a reasonable rate of exchange for its remittances even though there may exist a custom by which banks make remittances without the exaction of exchange. In the second place, he ruled that while the Federal reserve bank was acting within its authority in maintaining an agent at Brookings for the purpose of making collections over the counter of the plaintiff and in paying the expenses entailed thereby, it was at fault in two particulars: "First, in attempting to impose the condition that the plaintiff bank pay without its charge for exchange; and, second, in attempting to hold the plaintiff bank responsible for not having its own paper protested for non-payment."<sup>66</sup> The judge held, further, that the method employed by the Federal reserve bank was extraordinary, extravagant and unbusiness-like and indicated most convincingly that it was for the purpose of coercing the State bank into adopting the policy of remitting at par.

A preliminary injunction was issued restraining the Federal reserve bank from sending letters to its clients, advising them that they must look to the plaintiff bank for their protection through failure to protest such paper. This preliminary injunction was made permanent on June 26, 1922, Judge Wolverton again rendering the decision.<sup>67</sup> At this time he held that two questions were presented: (1) Whether the reserve bank has the authority to make collections from non-member banks; and (2) whether it can coerce such banks to remit at par.

On the first question he ruled that the wording of the Federal Reserve Act in this respect is optional—"that the Federal reserve bank *may* at its option receive paper against such banks for collection. Having that power, it may collect it, if it can find a way of doing so without the payment of exchange which it is prohibited from paying by the act. It is a banking custom, as well

<sup>66</sup>277 Fed. 432 (1921).

<sup>67</sup>*Brookings State Bank v. Federal Reserve Bank of San Francisco*, 281 Fed. 222 (1922).

as a legal right, which a holder of a check has at all times, to present paper at the counter of the drawee bank and demand payment, and, if denied, the paper is subject to dishonor. Paper so presented and paid over the counter is not subject to exchange. It is also a custom among banks, in making collections from other banks, where there is not more than one bank in a place, to send checks to the drawee bank with request for remittance, and the request is honored unless there is some special reason why the bank should not pay. These banking rules are conceded."<sup>88</sup> In answer to the Federal reserve bank's insistence that it was its duty, imposed upon it by the Federal Reserve Act, to collect such checks, Judge Wolverton pointed out that the Federal reserve bank itself had recognized the optional character of its function in this regard, by notifying its correspondents that it would accept no more paper on the Brookings State Bank for collection.

As to the second question, Judge Wolverton ruled that the non-member banks being without the pale of the Federal Reserve Act, have the right, if they see fit, to charge reasonable exchange on remittances; that it is a right the bank may relinquish at its option, but ought not to be coerced into doing so and any strategy which has for its purpose the coercion of such non-member bank to yield its legal right in this respect is unlawful, and will not be approved by the courts; that the testimony impelled him to the conclusion that the Federal reserve bank had gone to the length of endeavoring to coerce the Brookings bank to accede to its demand that the latter bank agree to remit at par. In harmony with the opinion rendered at the preliminary hearing, he held that the return by the Brookings bank without payment of checks sent to it indorsed "Pay to Brookings State Bank, for collection only and remittance in full without deduction for exchange or collection charges" was not tantamount to dishonor; that while the defendant bank, under the prevailing custom, could rightfully remit its checks and drafts against the plaintiff bank direct to the latter for collection and could thereby exact payment of them, it could not impose conditions upon which such payment should be made, much less could it make the plaintiff bank its agent for causing protest to be made for non-payment and that the idea of requiring that a maker or drawer shall have protested his own paper is so inconsistent with the functions of an agent that it can hardly receive the sanction of law.

While the permanent injunction enjoined the Federal reserve

---

<sup>88</sup>*Ibid.*, p. 226. Italics are the author's.

bank from advising its clients that they must look to the Brookings bank for their protection through failure to protest such paper, it did not apply respecting the maintenance of an agent at Brookings as he had been withdrawn practically at the time of the institution of the suit, and there appeared to be no intention upon the part of the Federal reserve bank to replace him. It is unfortunate in the interest of clearness that the agent was not present in order to determine definitely whether the injunction would have been used to exclude him from Brookings. In the light of the Cleveland par collection decision, next to be reviewed, there seems to be but little doubt that the injunction would be extended to the agent also if he uses oppressive methods.<sup>69</sup>

#### The Cleveland par collection case<sup>70</sup>

This case, like the San Francisco case, established the principle that a Federal reserve bank, may not use oppressive or coercive methods in its efforts to collect checks at par. In these two cases the Federal Reserve Banks of San Francisco and Cleveland were guilty of oppressive methods and objectionable motives not proved in the Atlanta case and which, in line with the opinion of the United States Supreme Court delivered by Justice Holmes, were subject to condemnation. The decision in the so-called Cleveland par collection case was rendered by the United States District Court for the Eastern District of Kentucky on October 14, 1922, and was in accordance with the reasoning of the United States Supreme Court in its decision of May 16, 1921, when it remanded the Atlanta case to the lower court for retrial on its merits to determine whether the plaintiff banks had grounds for relief. The facts in the Cleveland par collection case will be summarized briefly.

The plaintiff bank, the Farmers and Merchants Bank of Catlettsburg, Kentucky, was unwilling to remit at par to the Federal Reserve Bank of Cleveland, or more accurately, to the branch at Cincinnati. From January, 1918, to December, 1919, the Federal reserve bank had attempted to persuade the Catlettsburg bank to enter into an agreement to remit at par, but was unsuccessful. Consequently, the Federal reserve bank resorted to other methods for collecting the checks than sending them through the mails. It sent its traveling representative, H. A.

<sup>69</sup>See *Ninth Annual Report of the Federal Reserve Board* (1922), pp. 271-274; Murchison, *op. cit.*, pp. 148-149.

<sup>70</sup>*Farmers and Merchants Bank of Catlettsburg, Ky. v. Federal Reserve Bank of Cleveland, Ohio*, 286 Fed. 610 (1922).

Magee, to Catlettsburg to interview the bank officials. Failing to persuade them, he insisted and demanded that they agree, and finally threatened to use the American Express Company as a collecting agent. He anticipated that this would be very embarrassing to the Farmers and Merchants Bank, and, according to affidavits filed by that bank, he said that the bank “. . . would be mighty glad to sign up before long, as no bank could exist that did not; that the Federal Reserve System was like a mighty battleship coming up as it were from a smooth sea, and all banks that did not affiliate with it could not stand its swells and must get in its wake for safety, and that in the next five years there would be no small banks.”<sup>71</sup> From January 6, 1920, to February 26, 1920, the American Express Company was employed to collect the checks, during which time the local bank countered by furnishing checks to its depositors endorsed with the words: “Payable in cash or exchange draft at the option of the Farmers and Merchants Bank of Catlettsburg, Ky.” When checks so endorsed were presented for payment the bank would offer drafts but no cash. When drafts would not be received, no payments would be made. The express company finally refused to act as collecting agent because of the trouble involved. Local individuals then were employed as agents, although Magee was frequently on the ground doing what he could, according to the affidavits, to bring the bank into line by driving away depositors, creating scenes, and acting in a boisterous, domineering, dictatorial and quarrelsome manner, and doing many other things designed to bring discredit upon the local bank. With few exceptions, the court found little evidence to disprove the charges made in the affidavits.

Suit was brought in the State court on July 15, 1921, by the Farmers and Merchants Bank of Catlettsburg against the Federal Reserve Bank of Cleveland, from which court the case was removed to the United States District Court, Eastern District of Kentucky, upon the joint petition of the two defendants, on the ground that it arose under the Constitution and laws of the United States. A temporary restraining order was granted by the clerk of the State court and continued in force until the case was tried in the District court where a preliminary injunction was granted. In bringing suit, the local bank claimed that the method adopted by the Federal reserve bank, of advertising that it would collect all checks on the local bank free of charge, resulted in a large number of checks being presented through that channel in order

---

<sup>71</sup>*Loc. cit.*, p. 612.

to avoid remittance charges, with the result that they were presented in great numbers at once by the Federal reserve bank with resulting embarrassment to the local bank. The bank insisted that this practice was injurious to it in that it deprived it of such charges, required it to keep a greater reserve in cash than it would have had to do otherwise, scandalized it, affected its credit, and humiliated it.

The United States District Court held that the law in the case had been settled by the Supreme Court in the Atlanta case, and that it all depended on the purpose of the Federal reserve bank in adopting “. . . this unusual and heretofore unheard of procedure of seeking out plaintiff's checks for collection and presenting them in a body for payment over the counter.”<sup>72</sup> If the purpose were to break down the plaintiff's business as then conducted, it was unlawful and subject to be restrained by a court of equity. “It does not follow that because the holder of a check has a right to present it to the bank upon which it is drawn for payment over the counter, one has the right to seek to become the holder of all the checks drawn on a bank as they are drawn and then present them in a body for payment in cash over the counter. If such was the defendant bank's immediate purpose in so doing, it was not justified by the ulterior purpose which it has in view, to wit, of freeing commerce from the burden of such charges. . . . Such a course of procedure is a kind of refined holdup. It is one of the inalienable rights of a person to be unprogressive, selfish and even mean. This is said without intending to so characterize plaintiff's position. No other person has the right to coerce him into being otherwise. . . .

“What then was the defendant bank's purpose in initiating this movement against the plaintiff and keeping it up for over a year and a half—that is, until stopped from further doing so by the temporary restraining order? There is but one answer to this question, and that is that it was to break down plaintiff's business as it was being conducted, not to put it out of business, but to compel it to do business in this particular as it would have it do, and not as plaintiff desired. . . . It desired to impose its will on plaintiff. That such was defendant bank's purpose is the meaning of the course of procedure adopted. It can be accounted for on no other basis. Such a purpose was avowed by those acting on its behalf. . . .”<sup>73</sup>

<sup>72</sup>*Ibid.*, p. 618.

<sup>73</sup>*Ibid.*, pp. 618-619.

The court was somewhat at a loss to know why the plaintiff delayed so long in asserting its rights, but could see in the delay no reason why the defendant Federal reserve bank should be permitted to continue to make collections in this unlawful manner and as a result granted a preliminary injunction restraining the defendants from continuing to make such collections of checks on the plaintiff bank, from advertising that it would collect such checks free of charge, and from doing anything else for the purpose of coercing the plaintiff to remit at par.<sup>74</sup>

### The Richmond par collection case

The case which originated in the district of the Federal Reserve Bank of Richmond is of the utmost importance, since it resulted in the United States Supreme Court upholding the legality of the legislation in North Carolina which was designed to protect State banks in their practice of making charges for remittance. It constitutes a severe set-back to the attempt on the part of the Federal reserve banks to establish a universal par collection system, and may have far-reaching consequences for the clearing and collection system in this country. The United States Supreme Court in its decision on June 11, 1923—the same day on which it rendered its opinion in the Atlanta par collection case—reversed the Supreme Court of North Carolina which had declared the State statute unconstitutional.<sup>75</sup> These two decisions are worthy of careful review because of the different lines of reasoning followed and the important consequences involved. The Atlanta case has been summarized above;<sup>76</sup> we will turn our attention now to the Richmond case.

It will be recalled that North Carolina was one of the States which attempted to preserve exchange charges for its State banks by passing an Act, ratified February 5, 1921.<sup>77</sup> This Act authorized State banks in North Carolina to charge a fee not in excess of  $\frac{1}{8}$  of 1 per cent. on remittances covering checks, or a minimum fee of 10 cents, and provided that in the event a Federal reserve bank, post office or express company should present checks at the counters of the drawee bank and demand payment in cash, such drawee bank should be permitted to pay by means of a draft drawn upon its exchange deposit, excepting, however, checks pay-

<sup>74</sup>See also the *Federal Reserve Bulletin*, Vol. VIII (1922), pp. 1409-1413.

<sup>75</sup>*Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 262 U. S. 649 (1923).

<sup>76</sup>See pp. 261-263 above.

<sup>77</sup>*Public Laws of North Carolina, 1921*, Chap. 20, Sec. 2. See p. 252 above.



able to the State or to the Federal government and checks upon which the drawer had expressly designated to the contrary. The Federal Reserve Bank of Richmond, being advised that the statute was unconstitutional, presented checks at the counter of the drawee bank, demanding the full amount due and returned the checks as dishonored when payment in cash was refused. In returning checks which had been so presented, the Federal Reserve Bank of Richmond was careful to state that the check had been duly presented and that payment in money at its face amount had been demanded, but had been refused, since the drawee bank claimed the right to discharge its obligations by its own draft. The return of the dishonored checks to the depositors created great dissatisfaction among them and the State banks found difficulty in explaining satisfactorily to their customers why the checks were not honored. Some depositors transferred their accounts to member banks, in order to make sure that their checks would circulate at par.

Relying upon the Act of February 5, 1921, the Farmers and Merchants Bank of Monroe and twelve other banks and trust companies in North Carolina brought action in the Superior Court of Union County, North Carolina, against the Federal Reserve Bank of Richmond to enjoin that bank from refusing to accept drafts drawn by plaintiff banks on their reserve deposits in payment of checks presented for collection and from returning such checks to the drawers as dishonored when plaintiffs refused to pay them in cash.

The Superior Court granted a temporary restraining order in February, 1921, which prevented the Federal reserve bank from refusing to accept exchange drafts drawn by the plaintiffs on their reserve deposits in accordance with the Act of February 5, 1921; it was enjoined from returning as dishonored any check, payment for which had been tendered by plaintiff banks in exchange drafts under the provisions of the Act and had been refused by the Federal reserve bank; it was enjoined from protesting such checks for non-payment; and it was also enjoined from publication or authorizing the publication of the name of any of the plaintiff banks, literally or by inclusion, in any list or other publication designed for circulation. The restraining order provided that all such institutions as the original thirteen might become plaintiffs in the action and have the benefit of the restraining order, and as a result, some 265 State banks and trust companies became parties plaintiff.

The suit was removed to the United States District Court for

the Western District of North Carolina at the instance of the Federal reserve bank, but, in turn, was remanded to the Superior Court of Union County for trial on its merits because the jurisdictional amount of \$3,000 was not involved, the minimum that must be involved before a Federal court obtains jurisdiction.

Argument was heard in the State court from February 27 to March 3, 1922. No evidence substantiating the allegations of oppressive and unreasonable methods employed by the Federal reserve bank was offered. On the contrary, it appeared from the evidence that the Federal Reserve Bank of Richmond throughout the whole of the par point campaign in North Carolina had practiced the utmost consideration for the non-member banks that was consistent with what it believed to be the duties imposed upon it by the Federal Reserve Act.<sup>78</sup> Although finding the motive to harm on the part of the Federal reserve bank lacking, Judge James L. Webb, on March 29, 1922, entered the final order making the injunction permanent and sustaining the State statute as constitutional.<sup>79</sup>

The case was appealed then to the Supreme Court of North Carolina, and Mr. Chief Justice Clarke gave the opinion rendered by the court on May 24, 1922, the outstanding features of which may be summarized as follows:<sup>80</sup> The court held that it did not need to consider the allegations of the plaintiff banks as it had found them untrue. These allegations were to the effect that the Federal Reserve Act which prohibited Federal reserve banks from paying exchange would cause all collections to be made through the Federal reserve banks which thus can collect without charge, and also that the Federal Reserve Bank of Richmond was undertaking to coerce the non-member banks to abandon their right to charge by saving up checks until they reached a large amount and then demanding payment for them at the counter, with the probable effect of driving the bank into liquidation. The court added the following significant statement: "It would be unnecessary to notice this proposition but that such conduct was condemned by *Mr. Justice Holmes* in the case of the *American Bank and Trust Company v. Federal Reserve Bank of Atlanta*, opinion filed May 16, 1921. That decision was rendered upon a demurrer on which,

---

<sup>78</sup>Letter No. 6, pp. 8-10.

<sup>79</sup>*Ibid.*

<sup>80</sup>*Farmers and Merchants Bank et al. v. Federal Reserve Bank of Richmond, Va.*, 183 N. C. 546 (1922); 112 S. E. 252 (1922); *Federal Reserve Bulletin*, Vol. VIII (1922), pp. 701-703; *Ninth Annual Report of the Federal Reserve Board* (1922), pp. 261-265.

of course, the court assumed that all the allegations of the bill and all reasonable inferences from them were true. The finding of fact on the trial in the present case eliminated this question entirely from our consideration."<sup>81</sup>

It was held that a Federal reserve bank under the provisions of the Federal Reserve Act has the right to receive for collection a check drawn upon a non-member bank or upon any other person within its district. The real question, then, according to Mr. Chief Justice Clarke, was whether the Legislature of North Carolina, by such an act as the one mentioned above, could interfere ". . . with this provision or regulation of the Federal corporation by a valid act of Congress by providing that a State bank need not pay its obligations in lawful money when checks, which upon their face are unconditional orders for the payment of money, are presented by Federal reserve banks."<sup>82</sup> The statute of North Carolina was intended for the benefit of the State banks ". . . but that policy, however desirable for such banks, is clearly in conflict with the valid constitutional provision of the Federal statute. No act of this State can authorize the drawee bank to pay less than the face amount of the check drawn upon it by its depositor or to remit its check in payment or pay it otherwise than in legal-tender money. Nor can it require that the Federal Reserve Bank shall pay a fee, or that the bank here may remit less than the face value of the check when the Federal statute forbids such charge. It is true that the Federal Reserve Bank, as holder of the check, has no contract rights with the drawee bank until the check is presented, but as holder it can require payment of the face amount on the check in legal tender, and under the act of Congress it cannot pay a deduction from that face value by accepting a remittance to the Reserve Bank of a lesser amount. . . .

"The Federal statute, being a regulation of the Federal Corporation by Congress, the act of this State authorizing the payee bank here to exact exchange is in direct conflict with the duty im-

<sup>81</sup>183 N. C. 551 (1922).

<sup>82</sup>*Ibid.* This decision is in harmony with the legal definition of the check as generally accepted in this country, and with the general literature dealing with the nature of deposit currency evidenced by checks, as a demand liability of the bank. (See pp. 1, 76-77 above). It is to be noted also, that the United States Supreme Court in the case of *Federal Reserve Bank of Richmond v. Malloy et al., Trading as Malloy Brothers*, 44 Sup. Ct. 296 (1924), asserted again and again that a check on a bank or banker is payable in money and in nothing else, and held that acceptance by the collecting agent of anything else rendered it liable to the holder as though it had collected the cash. (See pp. 284-286 below).

posed upon the Federal Reserve Bank by the act of Congress and the Reserve Bank acts within its duty to observe the provision of the Federal act and refuse to receive a check for less than the face amount of the check sent by it for collection. . . .

"The United States Constitution, Article VI (Sec. 2), provides that the Constitution of the United States, and the laws made in pursuance thereof, 'shall be the supreme law of the land; and the judges in every State shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.' In the matter before us the act of Congress which provides that no exchange shall be allowed by the Reserve Bank for remitting for the collection of any check by any bank is in direct conflict with the statute of this State authorizing the payee bank to remit a lesser amount than the face amount of any check paid by it if presented by the Federal Reserve Bank. In this conflict of authority the Federal law is supreme. The injunction, therefore, was improvidently granted and the judgment must be reversed."<sup>83</sup> The court dismissed the injunction issued by the lower court against the Federal Reserve Bank of Richmond.

The plaintiff banks petitioned for a rehearing of the case before the Supreme Court of North Carolina, but the court dismissed the petition on December 13, 1922, reaffirmed its former decision by a mere memorandum decision, and did not modify or supplement its former opinion.<sup>84</sup>

On a writ of *certiorari* the case was taken to the United States Supreme Court, from which an opinion was handed down June 11, 1923, reversing the decision of the Supreme Court of North Carolina and deciding in favor of the non-par State banks.<sup>85</sup> Mr. Justice Brandeis delivered the opinion of the Court which holds that the State statute in question does not obstruct the performance of any duty imposed upon the Federal Reserve Board and the Federal reserve banks, that it does not interfere with the exercise of any power conferred upon either, and that it is consistent with the Federal Reserve Act and with the Federal Constitution. From this opinion Mr. Justice Van Devanter and Mr. Justice Sutherland dissented.

The Court after reviewing the State law bearing upon the question, insisted that the issue was whether this statute conflicted with the Federal Reserve Act or otherwise with the Federal Con-

<sup>83</sup>183 N. C. 552-553 (1922).

<sup>84</sup>*Federal Reserve Bulletin*, Vol. IX (1923), p. 20.

<sup>85</sup>*Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 262 U. S. 649 (1923).

stitution. The Court reviewed the development of the Federal reserve clearing and collection system, and pointed out the circumstances which gave rise to the North Carolina statute, stating that the attempt of the Federal reserve banks to establish universal par collection would cause the exchange-charging State banks to suffer a loss if not render them insolvent, and that the Act was passed to protect the State banks from threatened loss which might disable them. It observed that the Federal reserve banks insisted that no alternative was left open to them, since they had to collect the checks and were forbidden to pay exchange charges, while the State banks, on the other hand, denied that the Federal reserve banks were obliged to accept these checks for collection and insisted that Federal reserve banks should refrain from accepting for collection checks on banks which did not assent to par remittance. Finally, the Court pointed out that the statute merely sought to remove (when the drawer acquiesced) the absolute requirement of the common law that a check presented at the bank's counter must be paid in cash, thus giving the drawee bank the option to pay by exchange only in certain cases, namely, when the check was presented by or through any Federal reserve bank, post office, or express company, or any respective agents thereof.<sup>86</sup>

The Court said that the North Carolina statute "made no attempt to compel the Federal reserve bank to pay an exchange charge. It made no attempt to compel a depositor to accept something other than cash in payment of a check drawn by him. It merely provided that, unless the drawer indicated by a notation on the face of the check that he required payment in cash, the drawee bank was at liberty to pay the check by exchange drawn on its reserve deposits. Thus the statute merely sought to remove (when the drawer acquiesced) the absolute requirement of the common law that a check presented at the bank's counter must be paid in cash." The question, said the Court, was "whether this legislative modification of the common law rule which requires payment in cash violates the Federal Constitution. . . ." That it did was asserted by the Federal reserve bank on five grounds.

The first contention disposed of by the Court was that in authorizing payment of checks by draft on reserve deposits, Section 2 of the State law violates the provision of Article I, Section 10, clause 1, of the Federal Constitution, which prohibits a State from making anything except gold and silver coin a tender in payment of debts. The Court held that this claim was clearly un-

---

<sup>86</sup>*Loc. cit.*, pp. 649-659.

founded, since the debt of the bank is solely to the depositor and the statute does not authorize the bank to discharge its obligation to its depositor by an exchange draft but merely provides that, unless the depositor in drawing the check specifies on its face to the contrary, he shall be deemed to have assented to payment by such draft. Further, the Court held that there is nothing in the Federal Constitution which prohibits a depositor from consenting, when he draws a check, that payment may be made by draft, and, as the statute is prospective in its operation, there is no constitutional obstacle to a State's providing that in the absence of dissent, consent shall be presumed.

The second contention was that Section 2 violates the due process of law clause since it deprives the Federal reserve bank of the right to do business common to all banking institutions, which is a valuable property right, and that to compel it to accept in payment of checks exchange drafts on reserve deposits, whether good or bad, deprives it of liberty of contract, and in effect of an important branch of its business, since that of collecting checks cannot be conducted under such limitations. To this argument the Court replied that it was the purpose of the statute to promote the solvency of State banks and that so construed it is merely an exercise of the police power, by which the banking business is regulated for the purpose of protecting the public, and promoting the general welfare and that the regulation here attempted is not so extreme as inherently to deny rights protected by due process of law.

It was contended, in the third place, that the statute is obnoxious to the equal protection clause since the Federal Reserve Bank of Richmond is obliged to accept payment in exchange drafts, whereas other banks with whom it might conceivably compete may demand cash, except in those cases where they present the check through an express company. Relative to this argument the Court ruled that it is well settled that the legislature of a State, in the absence of controlling provisions, may direct its police regulations against what it deems an existing evil, without covering the whole field of possible abuses; that if the legislature finds that a particular instrument of trade war is being used against a policy which it deems wise to adopt, it may direct its legislation specifically and solely against that instrument; and finally that the facts disclosed ample ground for the classification made by the legislature.

The fourth contention was that Section 2 conflicts with the

Federal Reserve Act because it prevents the Federal reserve banks from collecting checks on such State banks as do not acquiesce in the plan of par collection, the contention resting upon the assumption that the Federal Reserve Act is mandatory in requiring the Federal reserve banks to receive such checks and make such collections. On this point the Court ruled that the law was permissive only, that neither Section 13 nor any other provision of the Federal Reserve Act imposes any obligation to receive checks for collection, and that the word "may" in this connection was used advisedly.<sup>87</sup>

The Court insisted that no duty or right of the Federal reserve bank to collect checks is obstructed by the North Carolina statute, which merely gives to the drawee bank the right to pay in the customary exchange draft, where its depositor has, by the form used in drawing the check, consented that this be done.

The fifth contention was that Section 2 conflicts with the Federal Reserve Act because it interferes with the duty of the Federal Reserve Board to establish in the United States a universal system of par clearance and collection of checks. In reply to this the Court held that Congress did not confer in terms upon the Federal Reserve Board or the Federal reserve banks a duty to establish universal par clearance and collection of checks, and that there is nothing in the original Act or in any amendment from which such duty to compel its adoption may be inferred. In neither Section 13 nor Section 16 is there any suggestion that the Federal Reserve Board and the Federal reserve banks shall become an agency for universal clearance.

It seems apparent that under this decision a State may pass valid laws taking away from the Federal reserve banks the right to collect checks over the counter in cash and at par, which is the only weapon they have had to prevent non-member banks from deducting a remittance charge. It is possible that such action may be forestalled by amending the Federal Reserve Act so as to make par remittance mandatory. Such an amendment, presumably, would nullify the North Carolina law or any similar one and would settle a serious controversy.<sup>88</sup>

---

<sup>87</sup>On this point, see Murchison, *op. cit.*, pp. 149-150, who insists that although the term "may" is used, the content and purpose of the Act makes it mandatory in nature and that any other interpretation weakens the Federal Reserve banks in their attempt to function as they were intended to function.

<sup>88</sup>*Federal Reserve Bulletin*, Vol. IX (1923), pp. 789-793; see also J. T. Holdsworth, *Money and Banking*, 4th ed. (1923), p. 446, who agrees with this point of view.

**The case of the Pascagoula National Bank of Moss Point, Mississippi v. Federal Reserve Bank of Atlanta, et al.<sup>89</sup>**

The first litigation involving the rights of the member banks in the Federal reserve clearing and collection system was started by the Pascagoula National Bank of Moss Point, Mississippi, on August 9, 1924, when it filed suit against the Federal Reserve Bank of Atlanta, its Federal reserve agent, and the Federal Reserve Board to recover alleged damages of \$12,750 suffered for the last six years as a result of the fact that the Federal reserve bank accepted checks for deferred rather than immediate credit. It also sought an injunction to prevent the Federal reserve bank from receiving for collection any check drawn upon and payable by any bank outside the home district of the Federal reserve bank; it sought to compel the Federal reserve bank to give immediate credit at face value on deposit of checks payable within the district; it sought to establish the right of the member banks to charge exchange on checks drawn on them and presented by or through the Federal reserve bank; it sought to enjoin the Federal reserve bank and the Federal Reserve Board from operating a clearing and collection system except within very narrow limits alleged to have been established by the United States Supreme Court, and prayed that they be stopped permanently from seeking to be an universal agency for the clearance of checks. Judge Samuel H. Sibley of the United States Court for the Northern District of Georgia, on October 3, 1924, refused to issue an interlocutory injunction, reassigned the case for hearing on its merits, and ruled that the Federal Reserve Board could not be held liable to the District court.<sup>90</sup>

<sup>89</sup>3 Fed. (2nd Series) 465 (1924); *Federal Reserve Bulletin*, Vol. XI (1925), pp. 100-102.

<sup>90</sup>See *Federal Reserve Bulletin*, Vol. X (1924), p. 866; *Commercial and Financial Chronicle*, Vol. CXIX, No. 3100 (New York, November 22, 1924), p. 2367; *Wall Street Journal*, Vol. LXXXIV, Nos. 84 and 85 (October 8 and 9, 1924).

This suit is in harmony with the *Claiborne-Adams Check Collection Plan*, advocated by the opponents of par remittance. Mr. Charles DeB. Claiborne, Vice-President of the Whitney-Central National Bank of New Orleans, and Chairman of the Committee of Five on Exchange of the American Bankers' Association, and Mr. L. R. Adams, General Secretary of the National and State Bankers' Protective Association, were the sponsors of this plan. It provided that each Federal reserve bank was to receive on deposit at par from member and non-member clearing banks in that district for immediate credit and availability, checks which were payable in that district and which were drawn upon any bank which agreed to remit at par in funds acceptable to the Federal reserve bank. Checks drawn upon non-par banks and upon those outside of the district were to be received by the Federal reserve banks as forwarding agents only and for deferred rather than immediate credit. When such checks were sent to the drawee bank, the bank might remit to the Federal



When the case came to trial before the same court on December 15, Judge Sibley, who rendered his decision on December 29, reviewed the following four contentions of the complainant: First, that by the provisions of Section 16 of the Federal Reserve Act, it is entitled to immediate credit at par for checks drawn on any of the depositors of the Federal Reserve Bank of Atlanta, no matter at what distance from Atlanta the drawee may be. Second, that under the Hardwick Amendment of Section 13, it has the right to make a charge for remitting payment to the Federal Reserve Bank of Atlanta for checks drawn on itself when these are not the property of the Federal reserve bank, but are handled for collection. Third, that under Section 13 the Federal Reserve Bank of Atlanta has no right to have or to collect any checks drawn on the complainant which come to the Federal reserve bank from a source outside the sixth district. Fourth, that if the Act authorizes this deprivation of complainant's right to charge for remittance, it takes its property without due process of law, contrary to the Constitution.

Considering the first contention, Judge Sibley analyzed that provision of Section 16 of the Act which, according to the com-

reserve bank in an exchange draft and make a deduction of not over ten cents for each \$100 of checks, but in no case to be less than ten cents for any one remittance, the avowed purpose being to pass the charges back through the Federal reserve banks to the depositing banks. All member banks were to be permitted to make such deductions on checks returned from a bank in another district, if they so desired.

This plan was rejected on August 1, 1923, by an advisory committee of governors of the Federal reserve banks to which it had been referred by the Federal Reserve Board, on the grounds that a return to the immediate credit principle for a large proportion of the checks would revive one of the worst faults of the old system, would result in the building up of fictitious reserves, a large float, and the imposition of a large amount of exchange charges on the business of the country. The Federal Advisory Council concurred with this report and advised the Federal Reserve Board that it considered the plan unsound. The attitude of the Board is reflected in the provisions of Regulation J, Series of 1924. See *Federal Reserve Bulletin*, Vol. IX (1923), pp. 1089, 1194; *Tenth Annual Report of the Federal Reserve Board* (1923), p. 466; C. S. Tippetts, "The Par Remittance Controversy," *The American Economic Review*, Vol. XIV (December, 1924), pp. 644-646. Dr. Tippetts does not favor forcing the non-par banks to remit at par through legislative compulsion. The writer does not agree with this view. If competition does not force the banks into the system, and it does not seem to do it while the non-par banks can still collect through member banks, then there remains but one effective remedy, and that is to amend the Federal Reserve Act and force the non-par banks to remit at par. This measure would be no more drastic than was the measure taxing State bank notes out of existence in 1865. Our clearing and collection system would then approach the ideal. In a large sense the nation would then be clearing all its checks and drafts, although it is of course true that so long as the deferred credit and debit principle is used, perfect clearing or offsetting cannot take place. The nature of checks, however, makes it unwise to use any but the deferred availability principle, and consequently the perfection of the universal clearing plan would lie in the perfect offsetting which would then take place through the Gold Settlement Fund.

plainant, required the Federal reserve bank to give immediate credit for checks received. It reads: "Every Federal reserve bank shall receive on deposit at par from member banks or from Federal reserve banks, checks and drafts drawn upon any of its depositors." The pertinent question was whether the Federal reserve bank was really receiving items *on deposit at par* when, in conformity with Regulation J, it gave credit only according to the time schedule and acted only as an agent in collection. The court held that "a check so received and handled is really received for collection and not on deposit in the common sense of the word, meaning general deposit in which arises the relation of debtor and creditor, not that of principal and agent. . . . Usually the depositor may check immediately, but this is not of the essence of a general deposit. The parties may agree otherwise; and it is not uncommon in banking practice, where large checks, payable at a distance, are taken at par, to delay availability on the checking account so that the banker may not, by honoring checks in advance of collection, be lending his money without interest. The inclusion of the time schedule only in the terms upon which the reserve bank will receive deposits would be ordinary prudent banking, considering the enormous volume of the aggregate reserve bank 'float,' as the mass of checks in transit is called. It may be noted that, by Section 13, non-member clearing banks are required to protect their deposited checks in transit by maintaining a balance sufficient to offset them, which is another way of saying that the checks are not available credits while in transit. It must be remembered also that these deposit accounts of the member banks in the reserve bank, though subject to check, constitute their reserve required under Section 19. By amendment of this Section this reserve must be an 'actual net balance.' 'Net' means that all proper charges and deductions have been made from the account; 'actual' excludes what is merely fictitious or supposed. Uncollected checks, though *supposed* to be drawn against actual, available deposits, may not be, and if so they may nevertheless be defeated of payment by many circumstances, such as the death or countermand of the drawer, or offset by the banker upon the drawer's insolvency. An immediate credit of them must be largely on the faith of the depositor's indorsement, but the mere obligation of the member bank is not the actual reserve intended by the law. Moreover, the requirement that the reserve bank itself maintain a reserve in gold or lawful currency of 35 per cent. of its deposits is involved if the 'float' is to be counted as present deposits. The time schedule by which credit is deferred until checks would ordi-

narily be collected minimizes the chance of accumulated disappointments in collection, and the amount of merely supposed balance in the reserve of members, and seems a very reasonable reconciliation of the requirement of Section 16, that the checks be received on deposit in the reserve account, with that of Section 19, that the reserves be actual net balances.

“The additional stipulation that the reserve bank will act only *as agent* makes greater difficulty. It probably means that the checks are at first received only for collection; *Ward v. Smith*, 7 Wall. 447. ‘Deposits for collection’ are spoken of in Section 13, but ‘on deposit’ in Section 16 does not mean for mere collection. Since, however, credit is to be given at the expiration of the period fixed by the time schedule, whether returns from the check have actually been received or not, at that time certainly the agency is to cease and the check is to become and does become the property of the reserve bank and the transaction ripens into a general deposit. The check is then ‘received on deposit at par,’ as required by Section 16.”

Considering the second contention of the plaintiff bank, Judge Sibley first reviewed that part of Section 16 which provides that “Nothing herein contained shall be construed as prohibiting a member bank from charging *actual expenses* incurred in collecting and remitting funds or for exchange sold to its patrons. The Federal Reserve Board shall, by rule, fix the *charges* to be collected by the member banks *from its patrons* whose checks are cleared through the Federal reserve bank and the charge which may be imposed for the service of clearing or collection rendered by the Federal reserve bank.”<sup>91</sup> The court held that “whether the right established in the first clause quoted, of a member bank to charge actual expenses for collecting and remitting, would include a remittance in payment of checks drawn on it and presented by the reserve bank; or whether the term ‘its patrons’ in the second sentence refers to those sending checks to the reserve bank and implies that all expense of clearance of their checks is to be charged back to them . . .” were questions that did not require a decision since “. . . the later legislation, known as the ‘Hardwick Amendment’ of Section 13 is directly applicable and controls. It provides that ‘nothing in this or *any other section* of this Act shall be construed as prohibiting a member or non-member bank from making *reasonable charges*, to be determined and regulated by the Federal Reserve Board, but in no case to exceed ten cents

---

<sup>91</sup>Quotation is from the court's decision, not from the Act.

per \$100 or fraction thereof, based on the total of checks and drafts presented at any one time *for collection or payment* and remission therefor by exchange or otherwise; but no such charges shall be made against the Federal reserve banks.' The complainant argues that the last clause is in the nature of a proviso or exception wholly repugnant to the main enactment preceding it, and therefore void, leaving the grant of the right to make reasonable charges unrestrained by the exception. Or, if the last clause is to be treated as a part of the main enactment equally with what precedes, that the two parts are so inconsistent as to render the whole legislation abortive, and leave Section 16 to control."

It was held that there is no such repugnance in the Hardwick Amendment as to cause either consequence, and that the right to make the charge is established as to checks sent for collection or payment by other member banks or non-member banks, but it cannot be made against reserve banks. The court then considered the contention of the plaintiff that the charge is not made *against* a reserve bank unless such bank is the lawful *owner* of the checks dealt with, and that if it is handling them only as the agent of another, for collection, the charge is against the true owner and is to be passed back by the reserve bank to that owner. It was held that the proceedings of Congress in adopting the amendment show that *par* clearance through the reserve banks was the issue dealt with and that the Hardwick Amendment was made with the intent, and has the effect, to firmly establish it and give to the Federal Reserve System and to the public whatever advantage in clearing and collecting checks may flow therefrom, as well as to save the reserve banks from an expense in collecting their own checks. "To forbid remittance charges against reserve banks means no more than that remittances to them shall not be diminished by such charges, without any inquiry, if that would be practicable, into the real ownership of the items remitted for. The reserve banks cannot recognize as proper such charges made against them, and in this sense are forbidden to pay them."

The third contention of the plaintiff that the Federal Reserve Bank of Atlanta cannot handle checks coming to it from sources outside the sixth district was held to be erroneous, since Section 13 of the Act specifically authorizes such procedure.

Considering the contention that if the Act authorizes the deprivation of the complainant's right to charge for remittance, it takes its property without due process of law, contrary to the Constitution, the court ruled that "this takes none of the prop-

erty or property rights of complainant without due process of law. Complainant may refuse to pay otherwise than in cash over its counter, according to the common law, as on the other hand, the reserve bank may insist on that sort of payment. What is lost is the right to *agree* on a compensation for a more convenient payment by draft on more accessible reserves when both parties are *willing* so to agree. That the State, having power over the State banker and his business, may regulate his method of receiving and paying out his deposits, was ruled in *Farmers and Merchants Bank of Monroe v. Reserve Bank of Richmond*, 262 U. S. 649. A similar power must be recognized in the United States to regulate banking in the Federal Reserve System. Complainant being a National bank, chartered to do its business under Federal laws, cannot complain that those laws are not, or do not remain, such as it would prefer. It is not compelled to do anything without compensation. It is simply told that if it does the thing in question it must be done without compensation. *Noble State Bank v. Haskell*, 219 U. S. 575."

Nothing unlawful appearing in any of the acts of the defendants complained of, a decree was taken dismissing the bill.

While this decision is no more than could be expected with confidence, it undoubtedly will go far towards settling some aspects of the par collection controversy concerning which some doubt apparently existed.

#### **Regulation J amended as a result of the United States Supreme Court decisions of June 11, 1923**

In conformity with the United States Supreme Court's decision in the Richmond par collection case the Federal Reserve Board on June 29 amended Regulation J which governs the par collection system of the Federal reserve banks by inserting two new provisions in the regulation.<sup>92</sup> This Regulation J, Series of 1923, was to have been effective August 15, 1923, but on July 25 was postponed until further notice. It was finally suspended indefinitely, Regulation J, Series of 1920, remaining in effect until Regulation J, Series of 1924, became effective on May 9, 1924. The new conditions inserted in Regulation J, Series of 1923, were: "(c) No Federal reserve bank shall receive on deposit for collection any check drawn on a non-member bank which refuses to remit at par in acceptable funds. (d) Whenever a Federal re-

<sup>92</sup>Regulation J, Series of 1923, *Federal Reserve Bulletin*, Vol. 1X (1923), pp. 903-905.

serve bank receives on deposit for collection a check drawn by, indorsed by, or emanating from any non-member bank which refuses to remit at par in acceptable funds, it shall make a charge for the service of collecting such check of 1/10 of 1 per cent., the minimum charge to be 10 cents for each item."

The reasons for this action as made public by the Board were, (1) that even though the recent court decision made the clearing and collection system voluntary so far as non-member banks are concerned, the system has fully justified its operation and is of such value to the banking and commercial interests of the country that its continuance as a voluntary system is of vital importance; (2) that since the system was designed wholly for the benefit of the banking and commercial interests of the country and is now (July, 1923) so comprehensive in scope that it includes about 92 per cent. of all banking institutions and approximately 98 per cent. of the total banking resources of the country, and having shown its merits and inestimable value by its enormous saving to those actively engaged in carrying on the commerce of the country, by having eliminated a very large portion of the time formerly consumed in the collection of checks, and by having cut down the cost of making the country's exchanges to the minimum, it should be supported by all who share in its advantages. The Board pointed out further that the more inclusive a collection system is, the more efficient it will be, and the greater will be the service it can render alike to the business and banking community. Consequently the Board felt that non-member banks which are unwilling to remit without deduction for checks drawn on themselves have no right to share in the advantages of the par collection system.

In November, 1923, the Federal Reserve Board made one other interesting ruling in order to conform to the fullest possible extent to the spirit as well as to the letter of the recent court decisions. The Board directed the Federal reserve banks to discontinue the use of agents other than banks for the purpose of making collections at par of checks upon non-member remitting banks in any district in which such practice still existed.<sup>93</sup>

But as mentioned above, Regulation J, Series of 1923, never became effective. Instead, it was replaced by Regulation J, Series of 1924. The reasons for this can be appreciated more fully only after reviewing briefly the so-called Malloy case.

<sup>93</sup>*Federal Reserve Bulletin*, Vol. IX (1923), pp. 773-774, 1194.

**Federal Reserve Bank of Richmond v. Malloy et al., trading as Malloy Brothers<sup>94</sup>**

The Malloy case is significant, not because of any very direct bearing upon the par collection controversy, but for two other important reasons which have but an indirect bearing upon the controversy. (1) It throws light upon the additional burdens placed upon the Federal reserve banks as a result of the decision in this case; (2) it affords an explanation for some of the recent provisions incorporated in Regulation J, Series of 1924.

The facts in the case are briefly as follows: Malloy Brothers received a check for \$9,000 drawn upon the Bank of Lumber Bridge, North Carolina, which they properly indorsed and deposited with the Perry Banking Company of Perry, Florida, for collection and credit. A credit card was delivered to the Malloys upon which was printed the following: "Checks, drafts, etc., received for collection or deposit, are taken at the risk of the endorser until actual payment is received." This provision was authorized by Florida law. The Perry Banking Company indorsed and transmitted the check through two banks to the Federal Reserve Bank of Richmond, which sent it to the Lumber Bridge bank for collection and return. That bank stamped the check "Paid," charged the account of the drawer, and remitted to the Federal Reserve Bank of Richmond with a draft on the Atlantic Banking and Trust Company, of Greensboro, North Carolina, which returned the draft to the Federal reserve bank because of lack of funds. The Federal reserve bank then tried to collect on the Lumber Bridge bank, but that bank failed and did not pay the draft. The check was then charged back through the proper channels to the Malloys, who brought suit against the Federal Reserve Bank of Richmond for recovery.

The Court deemed it necessary to consider two questions: (1) Could the action be maintained by the plaintiffs against the Federal Reserve Bank of Richmond? and (2) If so, did the failure of the Richmond bank to require payment of the Malloy check in money, and its acceptance of what turned out to be a worthless draft in lieu thereof, create a liability against it in favor of the Malloy Brothers for the amount of the loss?

Regarding the first question the Court found the State decisions in hopeless conflict. A number of States followed the so-called "New York Rule" and held that the initial bank alone is responsible to the owner. An equal number of States, on the

<sup>94</sup>44 Sup. Ct. 296 (1924); 264 U. S. 160 (1924).

other hand, followed the "Massachusetts Rule" which holds that the initial bank is authorized to employ sub-agents who become directly responsible to the payee. The Court held that the Florida statute had the effect of importing the "Massachusetts Rule" and decided that the Federal Reserve Bank of Richmond was liable.

Relative to the second question the Court ruled that "It is settled law *that a collecting agent is without authority to accept for the debt of his principal anything but 'that which the law declares to be legal tender, or which is by common consent considered and treated as money, and passes as such at par'*."<sup>95</sup> *Ward v. Smith*, 7 Wall. 447, 452 (19 L. Ed. 207). The rule applies to a bank receiving commercial paper for collection, and if such bank accepts the check of the party bound to make payment and surrenders the paper, it is responsible to the owner for any resulting loss. . . . It is unnecessary to cite other decisions since they are all practically uniform. *Anderson v. Gill, supra*, [79 Md. 312, 317] presented a situation practically the same as that we are here dealing with, and the Supreme Court of Maryland, in disposing of it, said: 'Now a check on a bank or banker is payable in money, and in nothing else. *Morse Banks & Banking* (2d edition), p. 268. The drawer having funds to his credit with the drawee has a right to assume that the payee will, upon presentation, exact in payment precisely what the check was given for, and that he will not accept, in lieu thereof, something for which it had not been drawn. It is certainly not within his contemplation that the payee should upon presentation, instead of requiring the cash to be paid, accept at the drawer's risk a check of the drawee upon some other banker. . . . When . . . the collecting bank being the agent of the holder . . . did make demand it was only authorized to receive *money* (*Ward v. Smith*, 7 Wall. 451); and the acceptance by the collecting agent of anything else rendered it liable to the holder as though it had collected the cash.'" Following the above reasoning, the Court held that the plaintiffs were entitled to recover from the Federal Reserve Bank of Richmond, and that there was nothing in Regulation J, Series of 1920, which authorized the Federal reserve banks to accept drafts instead of money as required by law. Even though it was customary to use drafts in making remittances, the Court held that a settled rule of law, rather than custom, established the principles to be followed in this case.

<sup>95</sup>Italics are the author's.



This decision placed the Federal reserve banks in a peculiar position. The Richmond par collection case established the principle that drawee banks, under authority of a State statute, may remit to the Federal reserve banks by means of drafts if the depositor does not specifically object, since the bank's liability is to the depositor only and not to the holder of the check. The Malloy decision now holds that the Federal reserve banks cannot accept legally anything but money in remittance without assuming liability to the payee, or unless specifically authorized to do so by the payee. The result of this decision is that the Federal reserve banks may no longer collect on such banks as those in North Carolina, or elsewhere for that matter, without assuming great risk.

### **Regulation J, Series of 1924**

In order to remove the Federal reserve banks from this predicament, the Federal Reserve Board, on May 9, 1924, issued the new Regulation J, Series of 1924, which includes, among other things, the following provisions:

**"Section III. (3) No Federal reserve bank shall receive on deposit or for collection any check drawn on any non-member bank which cannot be collected at par in funds acceptable to the Federal reserve bank of the district in which such non-member bank is located."**

#### **"Section V. *Terms of collection***

**"The Federal Reserve Board hereby authorizes the Federal reserve banks to handle such checks subject to the following terms and conditions; and each member and non-member clearing bank which sends checks to any Federal reserve bank for deposit or collection shall by such action be deemed (a) to authorize the Federal reserve banks to handle such checks subject to the following terms and conditions, (b) to warrant its own authority to give the Federal reserve banks such authority, and (c) to agree to indemnify any Federal reserve bank for any loss resulting from the failure of such sending bank to have such authority.**

**"(1) A Federal reserve bank will act only as agent of the bank from which it receives such checks and will assume no liability except for its own negligence and its guaranty of prior indorsements.**

**"(2) A Federal reserve bank may present such checks for payment or send such checks for collection direct to the bank on which they are drawn or at which they are payable, or in its discretion may forward them to another agent with authority to pre-**

sent them for payment or send them for collection direct to the bank on which they are drawn or at which they are payable.

“(3) A Federal reserve bank may in its discretion and at its option, either directly or through an agent, accept either cash or bank drafts in payment of or in remittance for such checks and shall not be held liable for any loss resulting from the acceptance of bank drafts in lieu of cash, nor for the failure of the drawee bank or any agent to remit for such checks, nor for the non-payment of any bank draft accepted in payment or as a remittance from the drawee bank or any agent.

“(4) Checks received by a Federal reserve bank on its member or non-member clearing banks will ordinarily be forwarded or presented direct to such banks, and such banks will be required to remit or pay therefor at par in cash or bank draft acceptable to the collecting Federal reserve bank, or at the option of such Federal reserve bank to authorize such Federal reserve bank to charge their reserve accounts or clearing accounts; provided, however, that any Federal reserve bank may reserve the right in its check collection circular to charge such items to the reserve account or clearing account of any such bank at any time when in any particular case the Federal reserve bank deems it necessary to do so.

“(5) Checks received by a Federal reserve bank payable in other districts will be forwarded for collection upon the terms and conditions herein provided to the Federal reserve bank of the district in which such checks are payable.

“(6) The amount of any check for which payment in actually and finally collected funds is not received shall be charged back to the forwarding bank, regardless of whether or not the check itself can be returned.”<sup>96</sup>

It should be noticed, however, that the provisions do not protect the banks and trust companies of the country against the possibility of loss under the law established by the Malloy case, for the reason that under the provisions of Regulation J, Series of 1924, each member and non-member clearing bank which sends checks to any Federal reserve bank for collection authorizes the Federal reserve bank to handle such checks according to the provisions of the Regulation, warrants its own power to give such authority to the Federal reserve banks, and agrees to indemnify any Federal reserve bank for any loss resulting from the failure of the sending bank to have such authority. But this leaves the member and non-member clearing banks open to great risk unless

<sup>96</sup>*Federal Reserve Bulletin*, Vol. X (1924), pp. 489-490.

they can enter into agreement with their depositors by which the depositors agree to permit them to make collections according to the terms outlined in Regulation J. The National Bank Division of the American Bankers' Association in June, 1924, recommended a form of contract which appears to cover all these points. Various clearing house associations and many banks individually have adopted other forms of contract which are similar in most respects. Such contracts should be printed upon deposit slips, credit advices and pass books of the bank in order that there may be no question that the depositors are bound by the terms of the contract.<sup>97</sup>

### Conclusion

Certain definite principles may be said to have been established relative to the operation of the Federal reserve clearing and collection system as a result of these court decisions.

1. The Federal Reserve Act so far as it affects the clearing and collection system is not mandatory in nature and does not compel the Federal Reserve Board or Federal reserve banks to make the system universal.

2. Federal reserve banks are not obliged to receive and attempt to collect checks drawn on banks which will not remit at par.

3. Federal reserve banks *may* receive and attempt to collect checks on banks which will not remit at par by presenting the checks directly over the counters of such banks through the use of collecting agents, provided the Federal reserve banks do not use this method to oppress or coerce, by collecting an unusual amount of checks for presentation or by indulging in any other practice not consistent with customary banking methods.<sup>98</sup>

4. So far as the non-member banks are concerned the Federal reserve clearing and collection system is entirely voluntary.

5. Federal reserve banks may not include on their par lists the names of non-member banks which do not agree voluntarily to remit at par and do not sanction the publication of their names. All member banks, obviously, are par banks.

6. Federal reserve banks cannot lawfully demand payment in

<sup>97</sup>For an additional discussion of this subject, see H. F. Strater, "Development and Functions of Federal Reserve Collection System," *Proceedings of Departmental Conferences held at Baltimore Convention of the American Institute of Banking* (July, 1924), pp. 367-369.

<sup>98</sup>It is to be borne in mind, however, that Section III of Regulation J, Series of 1924, provides that no Federal reserve bank shall receive such checks on deposit or for collection.

legal tender if a State law, which supersedes the common law, permits the non-member banks to make arrangements with their depositors to remit in some other form, since the debt of the bank has been held to be solely to the depositor of the bank and not to the holder of the check, and if the depositor and drawer of the check consents to have the bank pay the holders of his checks by some means other than legal tender, the legal tender provisions of the Constitution which prohibit a State from making anything but gold and silver coin a tender in payments, are not violated.

7. If a State statute authorizes the non-member banks to pay by some means other than legal tender, the Federal reserve banks, as collecting agents, become liable to the payee banks for accepting anything other than legal tender unless they have an agreement with the payee banks by which they are relieved of the liability. In the latter case the payee banks become liable to the depositors unless they, too, have a similar agreement with the depositors.<sup>99</sup>

It is, of course, hazardous to guess as to the results which finally will flow from such decisions as those rendered in the Richmond par collection and Malloy cases. There is a rather general feeling among competent judges, however, that the system of par collections can never be a success and be incomplete, and that it must go either forward or backward. Many non-member banks joined the system expecting that the remaining banks would enter in due time. Encouraged by these court decisions, the recalcitrant banks will not only not enter the system but will be the cause, doubtless, of others dropping out and much ground that has been gained so laboriously will be lost. It seems unfortunate that the new Regulation J does not embody a provision similar to that inserted in the Regulation J, Series of 1923, to the effect that a Federal reserve bank may not receive on deposit for collection a check drawn by, indorsed by, or emanating from any non-member bank which refuses to remit at par in acceptable funds. This would prevent the non-par banks from securing the benefits of the Federal reserve clearing and collection system while at the same time exacting charges for making remittances. Depriving them of the gains which result from their parasitic relations with the system, might drive them into the system, which, undoubtedly,

---

<sup>99</sup>It seems that it might have simplified matters if the liabilities of the Federal reserve banks as collecting agents were determined in conformity with the various State laws, that is, that the Federal reserve banks were to incur no liability for accepting in remittance that which a State has decided is legal. Thus, in some States the Federal reserve banks would be required to accept cash only, in others, such as North Carolina, drafts would be acceptable.

would be to their advantage ultimately. If they are shut out of the system in this manner, competition would be more effective in forcing them into the system, since the tendency would be for depositors to move their deposits to par banks. The insistence by these recalcitrant banks upon their so-called right to charge exchange may cost them dearly in the end. They have placed themselves directly across the path of banking progress and are attempting to levy a tribute upon business, while progressive tendencies in business and banking indicate that such charges should be eliminated and that a more equitable method can be found for distributing the burden.

The par collection principle is not an arbitrary plan devised by Congress and imposed upon the banks of the country. It has been developing gradually as the wisdom of it became more evident. Many banks remitted at par prior to the establishment of the Federal Reserve System. Country clearing houses were being established in many parts of the United States for the purpose of reducing or eliminating exchange charges. It is the result of changing and progressive banking methods, based upon sound principles, and it is unfortunate that it is not permitted to develop to its logical conclusion. Consequently, it would seem altogether wise—assuming that such a measure would be constitutional—if the Federal Reserve Act could be amended so as to make par remittances mandatory and thereby nullify the obstructive State laws which are arresting the logical development of an efficient system.

## CHAPTER VIII

### THE GOLD SETTLEMENT FUND

#### **Nature of the Gold Settlement Fund**

At the apex of the clearing and collection system is the Gold Settlement Fund established in May, 1915. It acts, as it were, as the keystone binding together the Federal reserve banks and their branches into an unified inter-district clearing system; these banks, in turn, act as clearing centers for their member and non-member clearing banks. The Fund is one owned by the Federal reserve banks and held by the Treasurer of the United States in the name of the Federal Reserve Board. Closely connected with the Gold Settlement Fund, but to be distinguished from it, is the Federal Reserve Agents' Fund. It is held in the same manner by the Treasurer of the United States to the credit of the Federal Reserve Board, but is controlled by the Federal reserve agents. The Gold Settlement Fund proper is the fund through which the inter-district clearing of checks and drafts is effected and is the fund to be associated primarily with this and other closely allied functions, such as telegraphic transfers, growing out of any inter-district transfer of funds. The Federal Reserve Agents' Fund was designed to facilitate transfers between the Federal reserve banks and their own Federal reserve agents necessitated by the issue of Federal reserve notes.

Ownership in these funds is represented by entries on books maintained by the Federal Reserve Board with corresponding entries on books kept by the Federal reserve banks and Federal reserve agents, respectively. Ownership is transferred by book entries from one bank to another, from an agent to his bank, or from a bank to its agent with a minimum movement of gold or gold certificates. Transfers of claims are effected speedily by telegram with the minimum of friction and expense. The system represents the utmost refinement in clearing.

#### **Inter-district clearing before the creation of the Fund**

Although the Federal reserve banks began to operate in 1914, many of the functions later assumed were developed only grad-

ually. This was the case with the inter-district clearing and collection system. The legal provisions contemplated only in a general way the final organization of the system. Section 16 of the Federal Reserve Act provided for inter-district clearing of undefined extent and authorized the Federal Reserve Board itself to act as a clearing house for the several Federal reserve banks or to designate one of the Federal reserve banks to perform the service.<sup>1</sup>

It has been pointed out elsewhere that the Board believed it the part of wisdom to proceed cautiously in order not to disturb unduly the established practices and consequently permitted the Federal reserve banks to free themselves from any obligations relative to clearing and collections while they devoted themselves to the collection of installments of subscriptions to capital stock and effected a more complete organization in other respects. Member banks were expected and advised to use the old and customary methods for clearings and collections, although some checks were collected through the newly-organized Federal reserve banks. With the payments of capital subscriptions and the required reserves, many checks were received on certain designated cities. It was found expedient to accept such checks in order not to create undue disturbance, although subscriptions to stock were to be made in gold or gold certificates and reserve-deposit payments were to be made in gold or lawful money, except that the Federal reserve banks were authorized to receive from member banks not exceeding one-half of each installment in eligible paper as described in Section 14 of the Act, properly indorsed and acceptable to the Federal reserve banks.

Notwithstanding the restricted nature of the business conducted at that time, balances in excess of the required reserves were created, and checks against these balances found their way into other districts. No special machinery had been set up to effect settlements between the Federal reserve banks other than the fact that they carried reciprocal accounts with each other and it was generally understood that any Federal reserve bank had the right to require a remittance in gold of any other Federal reserve bank if such a payment were needed to settle accounts between the two banks.<sup>2</sup>

---

<sup>1</sup>See *First Annual Report of the Federal Reserve Board* (1914), pp. 19-38.

<sup>2</sup>See *The Collection of Checks by the Federal Reserve Banks*, Letter No. 3, Federal Reserve Bank of Richmond (February, 1922), pp. 1-2, hereafter cited as *Letter No. 3*; and *The Gold Settlement Fund*, Letter No. 7, Federal Reserve Bank of Richmond (September, 1922), p. 2, hereafter cited as *Letter No. 7*. The author of these excellent letters is Mr. Charles A. Peple, senior Deputy Governor of the Federal Reserve Bank of Richmond. The letters

During this time when the Federal reserve banks maintained reciprocal accounts with each other, each bank gave careful attention at all times to the state of the accounts between it and other Federal reserve banks. By shifting debits and credits all balances were kept within reasonable limits. The competent writer of the series of letters on the Federal Reserve System for the Federal Reserve Bank of Richmond gives an example of the equalization of balances by the shifting of credits as follows: "If the Federal Reserve Bank of Richmond owed the Federal Reserve Bank of New York one million dollars and, at the same time, the Federal Reserve Bank of Cleveland owed the Federal Reserve Bank of Richmond a million dollars, the Richmond Bank could send the New York Bank a draft on the Cleveland Bank. The New York Bank would then forward the draft to the Cleveland Bank, charging the account of the Cleveland Bank. If this created an undesirably large balance against Cleveland and in favor of New York, Cleveland could correct the situation by transferring its claim on some other Federal reserve bank."<sup>3</sup> Although the creditor bank had the right to require the debtor bank to ship gold at any time to cover the debt, but few, if any, such shipments were actually made.<sup>4</sup>

### Steps leading to the creation of the Gold Settlement Fund

Prior to the organization of the Federal reserve banks a report was made to the Reserve Bank Organization Committee, provided for by the Act, by the Preliminary Committee on Organization. This committee suggested, among other things, that a Federal Reserve Clearing House be established and that each Federal reserve bank deposit a certain amount of gold with the Federal Reserve Board or with a Federal reserve bank, to be designated by the Board to act as a clearing agent, and to settle balances arising from time to time between Federal reserve banks by means of book balances on books to be kept by the settling agent or by actual certificates of ownership in the special gold fund, the certificates to be issued by the settling agent. It also suggested that settlements be effected weekly.<sup>5</sup>

During the preliminary period of organization the Federal

---

are subjected to the criticism of the various officers of the bank and submitted to the Governor for his approval, after which they are issued in the name of the Federal Reserve Bank.

<sup>3</sup>Letter No. 7, p. 3.

<sup>4</sup>*Ibid.*

<sup>5</sup>*Ibid.*



Reserve Board and officers of the Federal reserve banks were studying a number of plans for effecting settlement between the Federal reserve banks. At the first conference of Governors held in Washington, December 10-12, 1914, a special committee was appointed to study the subject and report to the next conference. At the second conference<sup>6</sup> the report of the committee was received, discussed by the conference, and with several amendments was submitted to the Federal Reserve Board. This plan was substantially that outlined in the report of the Preliminary Committee on Organization, though many details had been considered and conclusions with reference to such details were submitted by the conference. The Board took the matter under advisement, but did not effect final arrangements until April, 1915, when it was announced that the plan had been completed and was expected to become effective about the middle of May of that year.<sup>7</sup>

#### **Provisions for the Gold Settlement Fund**

Tentative suggestions had been made by the Federal Reserve Board in Circular No. 8, issued October 17, 1914, looking forward to the establishment of a central clearing house at Washington in order to make the facilities for the collection of checks nation-wide, yet definite steps towards its creation were not taken until May, 1915. As a result of the conferences, mentioned above, and careful study on the part of the Board, a definite plan was submitted to the Federal reserve banks on May 8, 1915. On that date the Board issued a circular of regulations for the establishment and operation of the Gold Settlement Fund.<sup>8</sup> According to the provisions of this circular each Federal reserve bank was required to forward, not later than May 24, 1915, to the Treasury or the nearest sub-treasury, for credit to the account of the Gold Settlement Fund, \$1,000,000 in gold, gold certificates, or gold order certificates, and, in addition, an amount at least equal to its net indebtedness due to all Federal reserve banks. Upon the receipt of these funds the United States Treasurer was to issue to the Federal Reserve Board gold order certificates in denominations of \$10,000, made payable to the order of the Federal Reserve Board, covering the sum so deposited. Each Federal reserve bank was required to maintain a balance in the Gold Settlement Fund of not less than \$1,000,000, and excess bal-

<sup>6</sup>Held in Washington, January 20-23, 1915.

<sup>7</sup>Letter No. 7, p. 3.

<sup>8</sup>Regulation L, Circular No. 13, Series of 1915. See *Second Annual Report of the Federal Reserve Board* (1915), Exhibit E, pp. 77-79.

ances, at the convenience of each Federal reserve bank might remain deposited with the Gold Settlement Fund or be withdrawn at will. Should the debit balance of any Federal reserve bank be in excess of its credit in the Gold Settlement Fund this deficit was to be covered immediately by the deposit of gold, gold certificates, or gold order certificates in the Treasury or nearest sub-treasury, or by credit operations with other Federal reserve banks which might have an excess balance with the Gold Settlement Fund. At all times each Federal reserve bank was required to have a balance of \$1,000,000, and any delay beyond a week of grace in restoring the balance was to be subject to such charge as the Federal Reserve Board might impose. On the other hand, any excess balance, on request of any Federal reserve bank, would be refunded in any one of three ways: (1) By return to the Federal reserve bank of gold order certificates properly indorsed, (2) by the indorsement and delivery to the United States Treasurer of a like amount of such certificates for which he would give in exchange bearer gold certificates which the Federal Reserve Board would send to the Federal reserve bank by registered mail, or (3) the Treasurer, by wire or mail, might direct that payment be made by a sub-treasury office through the medium of the general account, provided funds were held in such office available for the purpose. Gold order certificates, when presented to the Treasury or any sub-treasury and bearing the signature of the duly authorized officers of the Federal reserve bank, were payable in gold or gold certificates. Any expense incurred by the Treasurer in shipping funds for such settlement purposes from one section of the country to another was to be refunded by the Federal Reserve Board. The Board then apportioned, semi-annually, the expenses of currency shipments as well as the general cost of operation of the Fund among the Federal reserve banks. At least once in each three months an audit was to be made of the Gold Settlement Fund by a representative of the Federal Reserve Board and a representative appointed by the Federal reserve banks. The total amount of the Fund at any one time consisting of gold order certificates was to be kept in a safe in the Treasury vault, set apart for the exclusive use of the Federal Reserve Board, and to be opened only in the presence of two persons designated by the Secretary of the Treasury and two persons designated by the Board. A proper vault memorandum was to be maintained. A settling agent and a deputy settling agent were appointed by the Board to keep all the necessary records and accounts.

To ascertain the amount which each Federal reserve bank

should deposit, a preliminary settlement or clearing was made on Thursday, May 20, 1915, on the basis of figures reported by the Federal reserve banks at the close of business on the preceding day. On the evening of the 19th each Federal reserve bank advised the Federal Reserve Board by wire of the amounts, in even thousands, due by it to every other Federal reserve bank as of that date. On the next day the settling agent telegraphed to each Federal reserve bank the amount of credits to its settling account, giving the name of each bank from which such credits were received, also the net debit or credit balance in the settlement. Confirmations of these telegrams were sent by mail after the receipt of these advices; and not later than May 24, each Federal reserve bank remitted gold or gold certificates to the Board, directly or through the nearest sub-treasury, in an amount sufficient to cover its debit balance, if any, and to establish a credit balance of at least one million dollars. The Federal reserve banks made their deposits with the nearest sub-treasury, after which the assistant treasurers forwarded telegraphic advices of the deposits to the Treasurer of the United States, who, in turn, issued gold order certificates of \$10,000 denominations, payable to the Federal Reserve Board. The total amount remitted at that time was \$18,450,000. The first regular settlement was made on Thursday, May 27, 1915.<sup>9</sup>

Each Federal reserve bank in its relations with other Federal reserve banks was required to keep an account showing balances "due to" other Federal reserve banks representing the proceeds of items which it actually had collected, and payments and transfers which had been made to it for the account of such other Federal reserve banks; and an account showing balances "due from" other Federal reserve banks representing the proceeds of items which it had sent to such other Federal reserve banks, and payments and transfers which had been made to such other Federal reserve banks for its account.

#### The gold in the Fund as part of legal reserve

At the time the announcement of the plan was made, the Board also communicated to the Federal reserve banks an opinion prepared by the counsel of the Board, to the effect that, under the law, gold held in the Gold Settlement Fund for the account of a Federal reserve bank could be counted by that bank as a part of its required reserve.<sup>10</sup>

<sup>9</sup>*Federal Reserve Bulletin*, Vol. I (1915), p. 82.

<sup>10</sup>*Ibid.*, pp. 9-11.

**Provision originally made for weekly settlements**

The original system provided for weekly settlements through the Gold Settlement Fund, a method employed until July 1, 1918, when daily settlements were instituted. At the close of business each Wednesday night, each Federal reserve bank was required to telegraph to the Federal Reserve Board the amounts in even thousands due to each other Federal reserve bank as of that date. The telegram was confirmed by mail. If Wednesday happened to be a holiday, the telegram was to be telegraphed at the close of business on Tuesday. The settling agent, on each Thursday, made the proper debits and credits in the accounts of the Federal reserve banks with the Fund and telegraphed each bank the amount, in even thousands, of credits to its settlement account, giving the name of each Federal reserve bank from which each of its credits was received and also its net debit or credit balance in the weekly statement. Upon receipt of the telegram from the settling agent each Federal reserve bank charged its appropriate deferred credit account and credited the Gold Settlement Fund with the amount reported by it to the settling agent; it also charged its Gold Settlement Fund account by the total amount of the credit received, in accordance with the telegram from the settling agent, and credited this amount to its deferred debit account. The difference between the total debits and credits should equal the net debit or credit to the Gold Settlement Fund as advised in the telegram from the settling agent. The same general principles obtain today except that settlements are made on a daily rather than weekly basis.

**The voluntary intra-district system and the Gold Settlement Fund**

It has been pointed out already that the Federal reserve banks at the request of the Federal Reserve Board introduced the voluntary intra-district clearing and collection system in June, 1915, and that it functioned in a half-hearted manner until July, 1916. While the operation of this plan did not primarily involve relations between Federal reserve banks, such relations were indirectly involved. Clearings under the plan depleted the reserve accounts of some member banks and resulted in excess balances in the reserve accounts of other member banks. Adjustments between such banks had to be made by remitting in the one case or by checking against the excess reserves in the other. Checks on one Federal reserve bank were received for credit by other Federal reserve banks. Also, under a special arrangement, Federal

reserve banks continued to accept exchange on certain designated reserve cities. These transactions, in so far as they affected accounts between Federal reserve banks, tended to increase the volume of the weekly settlements through the Gold Settlement Fund.

In addition, Federal reserve banks had the privilege of making special transfers to other banks of balances in excess of the required million and these transfers were effected by book entries upon telegraphic or mail requests from the Federal reserve bank making the transfer. In such cases the two Federal reserve banks affected by the transfer were allowed to make their respective debits and credits only upon receipt of specific authority to do so, which authority was sent by wire by the settling agent of the Federal Reserve Board. During the week ending June 25, 1915, the Federal Reserve Bank of San Francisco transferred in this way to the Federal Reserve Bank of Boston \$200,000. During the week ending July 1, 1915, this same bank made two transfers, \$450,000 to the Federal Reserve Bank of New York and \$30,000 to the Federal Reserve Bank of Chicago. After that time transfers between Federal reserve banks became more frequent. During the period when settlements were made weekly, a Federal reserve bank had the right to require a remittance or a transfer between settlement dates to cover any large balance due to it by some other Federal reserve bank.<sup>11</sup>

The first withdrawal from the Gold Settlement Fund was made on July 14, 1915, by the Federal Reserve Bank of Chicago. Its telegram requesting the payment was received by the Federal Reserve Board at 10:30 A. M. and at 2 P. M. on the same day the Assistant Treasurer of the United States at Chicago advised the bank of his readiness to make the payment. Although in a number of cases thereafter such withdrawals occurred from time to time, the convenience and usefulness of the Gold Settlement Fund became more and more apparent as time went on, and there developed a tendency to allow credit balances to accumulate, so that the Fund passed the one hundred million dollar mark on November 18, 1915.<sup>12</sup>

### Results for the year 1915

Through the procedure thus provided, the Federal Reserve Board, up to the close of the year 1915, settled through the Gold

---

<sup>11</sup>Letter No. 7, p. 6.

<sup>12</sup>Ibid.

Settlement Fund for the Federal reserve banks an indebtedness aggregating \$1,052,649,000 with a net change of only \$85,697,000 in ownership of the gold held in the Fund, or 8.14 per cent. of the total amount cleared.<sup>13</sup> The total amount of intra-district clearings amounted to \$5,442,123,252.<sup>14</sup> The direct expense incidental to the administration of the Gold Settlement Fund in handling its transactions was approximately \$1,150, principally for equipment and telegraph service. Another feature noteworthy from the very beginning of the operation of the system has been the general avoidance of the necessity for the shipment of funds. The growth of the transactions through the Gold Settlement Fund as well as the changes in ownership, cost of operating, etc., are set forth in the table on page 318 below.

#### **The Federal Reserve Agents' Fund**

It will be recalled that Federal reserve notes were originally secured by 100 per cent. commercial paper and at least 40 per cent. gold and at present are secured by at least 40 per cent. gold combined with at least enough commercial paper to make 100 per cent. security. This means that from the beginning of the issue of Federal reserve notes each Federal reserve agent had the custody of more or less gold held as part security for the notes, since he must hold at least 35 per cent. in gold against the outstanding notes, the remaining 5 per cent. being deposited with the Treasurer of the United States as a redemption fund. As the issues of these notes increased, a considerable amount of gold found its way into the hands of the Federal reserve agents. The transactions involving the issue and retirement of Federal reserve notes necessitated frequent payments in large sums from the bank to the agent and from the agent to the bank. When these payments were made in gold or gold certificates much counting and recounting was necessary on the part of the employees of the bank and representatives of the Federal reserve agents. After the establishment of the Gold Settlement Fund it became obvious that it would be advantageous to apply the same principle to the Federal reserve agents' reserve funds in order to eliminate much of the counting and recounting of gold and gold certificates.

In September, 1915, as a result of a resolution by the Federal Reserve Board, a gold fund called the Federal Reserve Agents' Fund was established, in close co-operation with but not a part of

---

<sup>13</sup>*Second Annual Report of the Federal Reserve Board (1915)*, pp. 79, 80.

<sup>14</sup>*Ibid.*, p. 82.

the Gold Settlement Fund.<sup>15</sup> The settling agent and deputy settling agent of the Federal Reserve Board were authorized and directed to open and maintain on their books and records a distinct and separate account for each Federal reserve agent, and to receive from the Federal reserve agents or from the Federal reserve banks for the accounts of the agents, deposits of gold certificates to be held subject to the order of the Federal reserve agent for whom such deposit had been made. The safe keeping of all deposits so received and the withdrawal or transfer of them to the account of the Federal reserve bank or to the redemption fund account held by the Treasurer of the United States, upon the order of the Federal reserve agent, and all indorsements of gold order certificates incidental to the transfers of such funds, were subject to the same regulations as those which applied to the operation of the Gold Settlement Fund.

The accounts and records of this Fund were to be kept separate at all times from the records and accounts of the Gold Settlement Fund. The gold order certificates, representing the Federal Reserve Agents' Fund, which was held by the Federal Reserve Board, were separated from those representing the Gold Settlement Fund which was held also by the Federal Reserve Board. Consequently when transfers were made from an agent to his bank or from a bank to its agent, it was necessary for the representatives of the Board to make an actual shift of gold order certificates from one safe to another, or from one compartment in a safe to another compartment. This practice involved much counting and handling and proved a great burden. Whenever a transfer was made it was necessary for the two representatives of the Federal Reserve Board and the representatives of the Treasury Department to be present at the opening of the safe. Such payments were made from one fund to the other as well as from either fund to the Treasurer of the United States and with the increase of these transactions the burdens increased until a change in method became imperative.

The Federal Reserve Bank of Atlanta was the first to make such a transfer under this old system. On September 8, 1915, the day on which the books were opened for business, \$2,500,000

---

<sup>15</sup>The balances in the Gold Settlement Fund of the Federal reserve banks and in the Gold Fund of the Federal reserve agents, which are held at present by the United States Treasurer in trust for the Federal reserve banks and agents, are combined and shown as one figure in the daily statement of the United States Treasury, but the two funds are separate and distinct, and are so treated by the Federal Reserve Board and the Federal reserve banks and agents.

were passed from the account of the Gold Settlement Fund to the credit of the Federal reserve agent of the Atlanta bank. Simultaneously, the Federal reserve agent of the Atlanta bank released to that bank the same amount in gold or gold certificates held by him at Atlanta. The second bank to make use of this facility was the Federal Reserve Bank of Richmond, the amount of the transfer being \$2,600,000 from the account of the bank to the account of the agent.<sup>16</sup>

#### **Discontinuance of gold order certificates, June 21, 1917**

On June 21, 1917, Congress, upon the recommendation of the Federal Reserve Board, amended Section 16 of the Federal Reserve Act for the purpose of simplifying the operations of the Fund, which had grown to such proportions as to make the handling of gold certificates evidencing deposits of Federal reserve banks and Federal reserve agents a heavy responsibility.

According to the new plan, the Treasurer of the United States opened an account with the Federal Reserve Board, giving credit to the Board for the sum of the deposits of Federal reserve banks and Federal reserve agents. The accounts of the two funds were kept separate as formerly by the Federal Reserve Board. When a Federal reserve bank or Federal reserve agent desired to make a deposit for credit in the Gold Settlement Fund, the gold was delivered to the nearest sub-treasury. The Assistant Treasurer gave a receipt, the form of which was prescribed, and advised the Treasurer of the United States by wire. The Treasurer then issued a duplicate receipt to the Federal Reserve Board, and credit was given on the books of the Gold Settlement Fund to the Federal reserve bank or Federal reserve agent who had made the deposit. Payment out of the Fund was to be directed by the Federal Reserve Board and was in the form of checks drawn by the Treasurer of the United States and endorsed by officials of the Federal Reserve Board.<sup>17</sup> The Treasurer of the United States who had formerly received the gold and issued gold certificates in denominations of \$10,000 each against it, still received and retained the gold, but instead of issuing certificates in large numbers one receipt was given for the lump sum.

The advantages of the new method soon became manifest. The Federal Reserve Board was not only relieved of a considerable

---

<sup>16</sup>George J. Seay, "The Evolution and Practical Operation of the Gold Settlement Fund," *The Annals of the American Academy of Political and Social Science*, Vol. XCIX (January, 1922), pp. 100-101; *Letter No. 7*, p. 7.

<sup>17</sup>*Fourth Annual Report of the Federal Reserve Board (1917)*, p. 24.



amount of detail, but the necessity for periodic audits of the funds no longer existed. Accounts were kept between the Treasurer of the United States and the Federal Reserve Board; bal-

TABLE XXVI  
OPERATIONS OF THE FEDERAL RESERVE AGENTS' FUND<sup>1</sup>  
SUMMARY OF TRANSACTIONS BY YEARS, 1915-1923  
[In thousands of dollars]

Year	Gold withdrawals	Gold deposits	Transfers to bank	Transfers from bank	Total with- drawals including transfers to bank	Total deposits including transfers from bank	Balance of held gold at close of business Dec. 31	Percentage of balance to total gold held against Federal re- serve notes
1915	.....	4,400	.....	52,460	.....	56,860	56,860	28.8 <sup>a</sup>
(Sept. 8-Dec. 31)								
1916	.....	27,320	21,480	94,520	48,800	.....	102,580	36.3 <sup>a</sup>
1917	.....	.....	411,087	852,881	.....	.....	489,949 <sup>a</sup>	62.7 <sup>a</sup>
1918	.....	.....	1,011,831	1,512,297	.....	.....	960,031 <sup>a</sup>	74.5 <sup>a</sup>
1919	.....	1,011,370	675,440	1,479,640	1,686,810	1,644,640	866,327	71.6
1920	.....	1,060,700	498,585	1,118,300	1,559,285	1,569,650	892,692 <sup>a</sup>	69.9 <sup>a</sup>
1921	.....	1,589,500	487,372	1,651,210	2,176,872	2,675,064	1,381,524 <sup>a</sup>	74.8 <sup>a</sup>
1922	.....	924,000	609,502	1,326,816	1,533,502	1,819,716	1,712,099 <sup>a</sup>	77.8 <sup>a</sup>
1923	.....	755,000	565,704	1,140,000	1,320,704	1,288,500	1,648,894 <sup>a</sup>	78.3 <sup>a</sup>

<sup>1</sup>Compiled from the *Annual Reports of the Federal Reserve Board*.

<sup>a</sup>Percentage of gold held in Federal Reserve Agents' Fund Dec. 31 to total gold held against Federal reserve notes on Dec. 30.

<sup>b</sup>Percentage of gold held in Federal Reserve Agents' Fund to total gold held against Federal reserve notes on Dec. 29.

<sup>c</sup>December 28.

<sup>d</sup>December 29.

<sup>e</sup>December 30.

<sup>f</sup>December 31.

ances could be verified and certified to in detail if necessary. The Federal Reserve Board gives an idea of the size of the two funds at the time the transfer was made in 1917 in the following description of the transaction: "Some idea of the magnitude of the fund may be formed from the fact that a truckload of gold certificates was transferred from the Federal Reserve Board to the Treasury of the United States. It took three men over two days to place a stamped endorsement upon the certificates. Had the amount represented been in the form of gold it would have weighed 963 short tons."<sup>18</sup>

Although the balances of the Federal reserve banks for clearing and collection purposes and of the Federal reserve agents for security against Federal reserve notes were and are kept separately on the books of the settling agent in charge of the funds, common terminology is inclined to include both in the term "Gold Settlement Fund." The two funds should be distinguished clearly in the reader's mind.

#### **The leased wire system, June 4, 1918**

All communications between the Federal reserve banks by means of telegrams prior to June, 1918, were sent over the commercial wires; and practically all communications between the Board and the banks were by telegram. While the service, on the whole, was very prompt and efficient, delays had occurred frequently, and as the number of transactions increased it became apparent that some better arrangement was necessary. After a study of the situation, a plan was perfected by which all the Federal reserve banks and branches and the Federal Reserve Board were put into instant communication with each other by means of a leased wire system to be used exclusively by the Federal Reserve Board, the Federal reserve banks, and the Treasury Department. The system was opened on June 4, 1918. Each bank and branch as well as the Federal Reserve Board has its own telegraph operators.<sup>19</sup> As indicated in Chapter VI, Washington and Chicago were made relay points for the East and West respectively. The Federal Reserve Bank of Chicago was given charge of the operations of the system, and the chief telegraph operator is stationed at the Chicago office, with a supervising operator at Washington as an assistant.<sup>20</sup>

<sup>18</sup>*Federal Reserve Bulletin*, Vol. III (1917), p. 521; *Letter No. 7*, pp. 10-11; George J. Seay, *op. cit.*, p. 102.

<sup>19</sup>*Letter No. 7*, p. 11.

<sup>20</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 558-559.

**The telegraphic transfer system**

It has been pointed out in a previous chapter<sup>21</sup> that while telegraphic transfers of funds for member banks had been made as early as 1915, the Gold Settlement Fund as a central medium through which Federal reserve banks could transfer funds for their member banks did not become of prime importance until 1917 and especially after the introduction of the leased wire system in June, 1918. By June 10, 1918, or shortly thereafter, the Federal reserve banks advised their member banks of their readiness to render them such a service free of charge. The system of telegraphic transfers was designed primarily to effect the speedy transfer of large funds between Federal reserve banks, member banks, or individuals. It virtually eliminates the time element and constitutes the highest achievement in the method of settling distant claims. The table on page 318 will give a condensed idea of the growth of the transfers effected through the Gold Settlement Fund. Such transfers are included in the daily settlements made through the Gold Settlement Fund.

**Relation of the Gold Settlement Fund to rediscounting between Federal reserve banks**

Rediscount transactions carried on between Federal reserve banks are effected through the Gold Settlement Fund, but entirely independent of the settlements made through the Fund as a result of the clearing and collection of checks. A brief account of rediscount transactions by which reserves may be equalized between Federal reserve banks has been given above on pages 216-217. The Federal reserve bank requiring the rediscount wires the Federal Reserve Board, stating the amount needed and the character of the paper offered. The Board assigns the rediscount to some other Federal reserve bank which the Board knows has a surplus reserve. This assignment is in the nature of a request rather than a requisition, although the Board has the power to require one Federal reserve bank to rediscount for another. Upon receipt of this advice, the second Federal reserve bank transfers the gross amount through the Gold Settlement Fund to the credit of the Federal reserve bank requiring the rediscount. This transfer is made at any time and is not included in the regular daily settlements growing out of the clearing and collection of checks. The discount is calculated by the bank requesting the rediscount and later is verified by the other Federal reserve bank,

<sup>21</sup>See Chapter VI, pp. 208-211.

to be handled as an ordinary credit and to be cleared through the Gold Settlement Fund on the next settlement day. Maturing discounts are paid, in like manner, through the Gold Settlement Fund, also independently of the regular settlements.<sup>22</sup>

In their *Annual Report* for 1919 the Federal Reserve Board pointed out that it "has carried out its policy of equalizing as far as practicable the reserve position of the several Federal reserve banks. All rediscount transactions and sales between Federal reserve banks have been arranged by the Board under authority of Section 11 of the Federal Reserve Act, which provides that a Federal reserve bank may be permitted or, upon the affirmative vote of at least five members of the Federal Reserve Board, required to rediscount the discounted paper of another Federal reserve bank at rates of interest fixed by the Federal Reserve Board. There has, however, been such a spontaneous spirit of co-operation between the Federal reserve banks that all transactions suggested by the Federal Reserve Board have been made voluntarily, and in no case has the Board found it necessary to exercise its statutory power to require such operations. By means of the Federal reserve leased-wire system rediscount transactions have been consummated almost instantaneously. All payments have been made on the day the transactions were completed by direct transfers through the Gold Settlement Fund, through book entries at the banks and at the office of the Board, without involving any physical transfer of gold."<sup>23</sup> Rediscount transactions between the Federal reserve banks, as a rule, have not been negotiated by the banks themselves, but through the medium of the Federal Reserve Board, instructions being given by telegraph, and transfers incident to the operations have been effected in the same manner.<sup>24</sup> The statements made by the Board in 1918 and 1919 are equally true today.

### Daily settlements supplant weekly settlements in the Gold Settlement Fund

The next step in the evolution of the gold funds was the institution of daily instead of weekly settlements. The daily settlement plan was put into effect on July 1, 1918. Transactions had

---

<sup>22</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 33-35; *Letter No. 7*, pp. 11-12; *Practical Operation of the Gold Settlement Fund*, *Letter No. 8*, Federal Reserve Bank of Richmond (October, 1922), p. 4, hereafter cited as *Letter No. 8*.

<sup>23</sup>*Sixth Annual Report of the Federal Reserve Board* (1919), pp. 5-6.

<sup>24</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), p. 3.

been increasing at such a rapid rate that the change became imperative. In addition to the weekly settlements, the Federal reserve banks had the privilege of demanding transfers at any time upon the net debit balance as shown in accounts with other Federal reserve banks, and these steadily increased. War financing caused a large increase in the volume of business between the Federal reserve banks. The sale of certificates of indebtedness and Liberty bonds, and subsequent redistribution of these funds among various centers in payment for munitions and supplies for the account of the United States and the allied governments, necessitated a large transfer of funds. Furthermore, the institution of the compulsory clearing and collection system combined with other measures to extend its scope had resulted in a larger use of the clearing, collection and transfer facilities.<sup>25</sup>

It was a part of the plan of July, 1918, that the Board should receive figures from each bank and settling branch as soon as possible after the close of the day's business. Obviously, due to the differences in time between the eastern and western banks the reports received by the Board would be some hours apart. The Board, after receiving all the reports, would make the general settlement and send out wire advices to all the Federal reserve banks as soon as possible on the morning of the next day. Upon receipt of these advices appropriate entries were made by each Federal reserve bank *as of that day*. In other words, charges and payments through the Gold Settlement Fund were always one day late, and more than one day if Sunday or a legal holiday intervened. As a result some Federal reserve banks carried an inter-Federal reserve bank float on account of payments received by the correspondent Federal reserve bank one day in advance of payment through the Gold Settlement Fund. In order to eliminate this float a plan of evening settlements was installed on March 1, 1920. The new arrangement, which is the present one, provided that each Federal reserve bank and direct settling branch should telegraph the Board the gross amount collected for the account of each other Federal reserve bank and direct-settling branch before the final closing of the books for the day. The Board then makes the settlement the same day and dispatches telegrams to each bank and settling branch so as to reach them before the opening for business the following morning, when the necessary entries are made and their books finally closed *as of the close of the preceding day*.<sup>26</sup>

<sup>25</sup>*Ibid.*, pp. 32-35.

<sup>26</sup>*Seventh Annual Report of the Federal Reserve Board* (1920), p. 70.

### **Certain branches of Federal reserve banks clear directly through the Gold Settlement Fund**

Since December 2, 1918, certain branches (Class I)<sup>27</sup> of Federal reserve banks have been authorized to make settlements directly through the Gold Settlement Fund in the same manner as the Federal reserve banks except that the net debit or credit balance of each such branch in the Fund is adjusted through the Gold Settlement Fund account of the parent Federal reserve bank, since the branches do not maintain accounts with the Fund. These branches participate in the Gold Settlement Fund by wiring credit figures to the Board each day in time for the settlement, although settlements with the branches are not made by the Board. After the settlement has been made by the Board, the branches are notified of the amounts credited to them by each other Federal reserve bank and direct-settling branch, although the net debit and credit of each branch is settled through the balance maintained by the parent bank. This method of clearing was made in order to eliminate unnecessary work between the Federal reserve banks and their branches, and other Federal reserve banks, and delays in reconciling differences due to the distances between the parent bank and its branches.<sup>28</sup>

### **Nature of the "cash items" cleared through the Gold Settlement Fund**

The so-called "cash items," composed chiefly of checks and drafts drawn upon banks, which are received by a Federal reserve bank as a collecting agent come from the following sources: (1) From member banks in its own district, (2) from non-member clearing banks in its own district which will remit at par, (3) from the Treasurer of the United States and collectors of internal revenue in its own district. These items may consist of checks drawn upon (a) the Federal reserve bank itself, (b) upon members and non-members on the par list, (c) upon other Federal reserve banks, (d) upon member and non-member par banks in other Federal reserve districts, and (e) upon the Treasurer of the United States. A Federal reserve bank may also receive items (4) from other Federal reserve banks, and (5) from member banks, and non-member clearing banks, in other Federal reserve districts,<sup>29</sup> and these items can consist only of checks drawn upon

<sup>27</sup>See pp. 186 and 216 above, and pp. 547-550 below.

<sup>28</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), p. 33; *Seventh Annual Report of the Federal Reserve Board* (1920), p. 92.

<sup>29</sup>Direct routing items.

the Federal reserve bank itself or upon member and non-member banks which will remit at par, in its own Federal reserve district.<sup>30</sup>

### **The immediate and deferred credit system**

The cash items received by a Federal reserve bank for collection from its own member, non-member clearing banks, or from collectors of internal revenue are received for immediate credit if drawn upon the Federal reserve bank itself, the Treasurer of the United States, or upon member banks and non-member par banks, located in the same city and received in time to be cleared on the day of receipt. Such items do not affect settlements between Federal reserve banks since they neither come from nor go outside of the district. The inter-district clearing and collection system and the Gold Settlement Fund are concerned primarily with those items for which the Federal reserve bank will give only deferred credit.<sup>31</sup>

The items which are subject to deferred credit are those received by a Federal reserve bank from its member or non-member clearing banks or from collectors of internal revenue, drawn upon the member, non-member clearing or par banks in its own or other districts but not drawn upon the Federal reserve bank itself, the Treasurer of the United States, or member and non-member par banks in the same city. Checks received from member or non-member clearing banks, or collectors of internal revenue for the credit of the Treasurer's account, and payable in other districts are received for deferred credit of one or more days. Such items are forwarded immediately to the proper Federal reserve banks or branches and are charged to special deferred debit accounts. They enter into settlements between Federal reserve banks only when collected. Each lot of checks so forwarded is represented

---

<sup>30</sup>*Cf. Letter No. 8*, p. 1. Non-member clearing banks should not be confused with non-member par banks. The former are those non-members which carry sufficient deposits with the Federal reserve banks to off-set the items which they collect through the Federal reserve banks or branches; they use the Federal reserve banks and branches as collecting agents. Non-member par banks merely agree to remit at par for items sent to them by the Federal reserve banks or branches, but do not carry deposits with the Federal reserve banks and may not use them as collecting agents. Consequently, when items are presented by the collecting Federal reserve banks or branches it is necessary for them to remit in acceptable funds, since they cannot authorize the Federal reserve banks or branches to debit their accounts, which may be the practice of many of the non-member clearing banks. See pp. 543-547 below.

<sup>31</sup>A Federal reserve bank will give immediate credit for certain items drawn upon a Federal reserve bank or branch in another district, as, for example, exchange and transfer drafts or telegraphic transfers. See pp. 206-211 above.

by a deferred debit ticket, the maturity of which is noted on the ticket, and the ticket is filed according to the due date, to be cleared out as will be explained below.

Items received from other Federal reserve banks, or from member banks or non-member clearing banks in other Federal reserve districts for the credit of their Federal reserve banks, whether accepted for immediate or deferred credit, are credited, in like manner, to a deferred credit account, in accordance with the published time schedule. Immediate credit items which are placed in the deferred credit account are taken out on the same day. Each batch of items of the same maturity received at any one time is represented by a deferred credit ticket, which ticket shows the date of maturity of the items.<sup>82</sup>

It has been pointed out already in a preceding chapter that out-of-town and inter-district items are placed upon a deferred availability basis until they can reach the bank upon which drawn, or, as in the case of the Federal Reserve Bank of San Francisco, until they can reach the Federal reserve bank or branch of the district upon which drawn. The length of time for which such items are unavailable as reserves to the depositing bank depends upon the time schedules as worked out by each Federal reserve bank.<sup>83</sup>

In the weekly consolidated statements of the Federal reserve banks it will be noticed that under "Resources" there is an item listed as "Uncollected Items."<sup>84</sup> Under "Liabilities" there is an item listed as "Deferred Availability Items." The term "Uncollected Items" includes such items as:

- (1) Due from banks, at present a small item.
- (2) National bank notes which are not lawful money for reserve purposes and consequently will be sent home for collection.
- (3) Federal reserve notes of other Federal reserve banks which cannot be paid out under 10 per cent. penalty.
- (4) Unassorted money.
- (5) Transit items (checks and drafts).

The fifth item is the largest single item in the list of "Uncollected Items" and is the one with which we are concerned primarily.

"Deferred Availability Items" correspond to "Uncollected Items" under Resources. To revert to our previous illustra-

<sup>82</sup>Letter No. 8, pp. 1-2.

<sup>83</sup>See pp. 180-185 above.

<sup>84</sup>For a consolidated statement, see p. 368 below.



tion,<sup>35</sup> if a check drawn on a bank in Rochester, New York, were sent to the Federal Reserve Bank of Richmond by one of its member banks, credit would be given three days after receipt. One of the days would be consumed in sending the item from Richmond to the Federal Reserve Bank of New York, one in forwarding the item from New York to Rochester, and the third day in sending the returns from the Rochester bank to the Federal Reserve Bank of New York. This check will appear once as a "Deferred Availability Item," that is, a deferred liability of the Federal Reserve Bank of Richmond, since, in three days, it will owe that amount to the bank sending in the check. This same check will appear once as an "Uncollected Item," that is, as a deferred asset, because at the end of three days the Federal Reserve Bank of Richmond will have a claim on the Rochester bank. The two deferred items should be *approximately* the same.<sup>36</sup> With these facts in mind it will be practicable at this point to follow a transaction through the Gold Settlement Fund.

#### **Method of making settlements through the Gold Settlement Fund**

At the close of business each day the Federal reserve bank assembles all tickets representing all the items due to other Federal reserve banks or clearing branches on that day. These tickets are assorted according to the banks and branches to which the amounts are due; they are footed up in each case, and from the totals so obtained a telegram is made up and sent to the Federal Reserve Board advising the total amount due by the Federal reserve bank or branch sending the telegram to each other Federal reserve bank or clearing branch named in the telegram, the total of all the amounts being the last item in the telegram. The writer of *Letter No. 8* for the Federal Reserve Bank of Richmond on the *Practical Operation of the Gold Settlement Fund* gives the following skeleton copy of such a telegram as would be sent by the Federal Reserve Bank of Richmond in which the amounts are omitted.<sup>37</sup> It will be observed that the name of each Federal reserve bank is designated by its assigned letter: (A) Boston, (B) New York, (C) Philadelphia, (D) Cleveland, etc.

<sup>35</sup>See pp. 180-184 above.

<sup>36</sup>They are not always the same, since the time for collection does not coincide, necessarily, with the published time schedule. Other items in these accounts are also partly responsible for the inequality. See pp. 181-184 above, and pp. 542-543 below.

<sup>37</sup>*Letter No. 8*, p. 2.

Each clearing branch is designated by the letter of the parent bank together with the letter A, B, C, D, or E, these second letters being assigned in the order in which the branches were opened for business by the parent bank.

Upon receipt of such a telegram from each Federal reserve bank and clearing branch, the settling agent makes up a settling sheet, arranged like a checkerboard, the names of the Federal

---

**OUTGOING GOLD SETTLEMENT FUND CLEARING  
TELEGRAM**

**FEDERAL RESERVE BANK OF RICHMOND**

The Federal Reserve Board,  
Washington, D. C.

Code word (indicating Gold Settlement Fund clearing telegram).

Code word	(City)	(Amount)
A	(Boston)	"
B	(New York)	"
C	(Philadelphia)	"
D	(Cleveland)	"
EA	(Baltimore)	"
F	(Atlanta)	"
FA	(New Orleans)	"
G	(Chicago)	"
GA	(Detroit)	"
H	(St. Louis)	"
HA	(Little Rock)	"
HB	(Louisville)	"
HC	(Memphis)	"
I	(Minneapolis)	"
IA	(Helena)	"
J	(Kansas City)	"
JA	(Denver)	"
JB	(Omaha)	"
K	(Dallas)	"
KA	(El Paso)	"
KB	(Houston)	"
L	(San Francisco)	"
LA	(Seattle)	"
LB	(Spokane)	"
LC	(Portland)	"
LD	(Salt Lake)	"
LE	(Los Angeles)	"

Total

---

reserve banks and settling branches appearing in regular order at the head of the vertical columns and in the same order at the left-hand side of the horizontal columns. For example, the amounts reported as due by the Federal Reserve Bank of Boston are entered in the first horizontal column, each respective amount being placed in the column headed with the name of the Federal reserve bank to which the reported amount is due, and in the last column to the right the total amount due by the Federal Reserve

Bank of Boston is entered. The amounts reported by each Federal reserve bank and settling branch are entered in like manner on the line opposite the name of that Federal reserve bank. The totals obtained by adding each column vertically will indicate the total amount due to the Federal reserve bank or branch whose name appears at the head of the column. Adding this total line across will give the same grand total as by adding the last column

**INCOMING GOLD SETTLEMENT FUND CLEARING  
TELEGRAM  
TO THE FEDERAL RESERVE BANK OF RICHMOND**

Code word (indicating "your balance in fund at close of operations of previous day").

Code word (indicating "Incoming Clearing Telegram").

	(Amount)
A .....	(Boston) " "
B .....	(New York) " "
C .....	(Philadelphia) " "
D .....	(Cleveland) " "
EA .....	(Baltimore) " "
F .....	(Atlanta) " "
FA .....	(New Orleans) " "
G .....	(Chicago) " "
GA .....	(Detroit) " "
H .....	(St. Louis) " "
HA .....	(Little Rock) " "
HB .....	(Louisville) " "
HC .....	(Memphis) " "
I .....	(Minneapolis) " "
IA .....	(Helena) " "
J .....	(Kansas City) " "
JA .....	(Denver) " "
JB .....	(Omaha) " "
K .....	(Dallas) " "
KA .....	(El Paso) " "
KB .....	(Houston) " "
L .....	(San Francisco) " "
LA .....	(Seattle) " "
LB .....	(Spokane) " "
LC .....	(Portland) " "
LD .....	(Salt Lake) " "
LE .....	(Los Angeles) " "
Total Gain or Loss	

vertically. The total payments taken from the last vertical column on the right are then entered on a horizontal line directly under the total amounts due each Federal reserve bank, and in the two horizontal lines below this line the gain or loss for each Federal reserve bank is calculated. The total gain for all banks, of course, balances the total loss for all banks.<sup>38</sup>

Upon completing the settlement, the settling agent dispatches

<sup>38</sup>*Ibid.*, pp. 2-3.

to each Federal reserve bank and settling branch a telegram advising the Federal reserve bank or branch of the result of the settlement. In these telegrams, as in the telegrams already described, the name of the paying Federal reserve bank or branch is indicated by one letter in the case of a Federal reserve bank or by two letters in the case of a branch. The incoming telegram from the settling agent is shown on the opposite page.<sup>39</sup>

It has been pointed out already that in the books of the Federal Reserve Board covering the operation of the Gold Settlement Fund, there is an account kept for each Federal reserve bank, but no accounts are kept for the settling branches. The amounts reported by the branches as due to other Federal reserve banks and branches are charged to the Gold Settlement Fund account of the parent bank, and the amounts due to the settling branches are, in like manner, credited to the account of the parent bank.

Upon receipt of the telegram showing the result of the day's clearings, the Federal reserve bank charges its appropriate deferred credit account and credits the Gold Settlement Fund with the amounts reported by it to the Board in the telegram of the previous day, and takes out of the current file the credit tickets from which the figures in the telegram dispatched by it have been made up. It also charges its Gold Settlement Fund account by the total amount of credit received, in accordance with the telegram from the Board, and credits this amount to its deferred debit account. The tickets representing the indicated debits cleared are not removed from the current file, however, until mail advices are received from the other Federal reserve banks and clearing branches, giving in each case a complete list of the items covered by the day's payments reported by these banks and branches to the Federal reserve bank by wire. Such advices are forwarded by each Federal reserve bank and settling branch to every other Federal reserve bank and settling branch at the time the telegram is made up and dispatched to the Federal Reserve Board, for the purpose of effecting settlement.

The books of the Federal reserve bank, which have been completed in all other respects at the close of the day, are kept open for the closing entries involved in the daily settlement. Upon receipt of advice from the Federal Reserve Board early the following morning, the necessary entries, as just explained above, are made as of the day before and the books are promptly closed. This

---

<sup>39</sup>*Ibid.*

practice tends to eliminate the necessity for the creditor banks carrying a float.<sup>40</sup>

It will be observed, also, that settlements are not made between Federal reserve banks and settling branches upon net balances due by one Federal reserve bank or settling branch to another, but upon the basis of all matured credits. Therefore, if there has been a delay in the mails affecting any particular letter sent by one Federal reserve bank to another, it will mean that the sending bank will get payment later than it expected, but no confusion will result in the actual settlement. In like manner, while each Federal reserve bank receives payment each day for all items due to it on that day by other Federal reserve banks or settling branches, it is frequently necessary for the bank receiving the credit to wait several days for the detailed list of the items making up the credit and dispatched by a Federal reserve bank or branch making the payment before it is able to match up the credit received against the exact items held by it in its deferred debit account. However, so far as actual collections are concerned and so far as its own reserve position is concerned, it is just as well off as though it had received full information by wire.<sup>41</sup>

In making payments through the Gold Settlement Fund of all amounts due to other Federal reserve banks, it has been the uniform practice to make certain deductions. For example, the Federal Reserve Bank of New York in reporting the amount due by it to the Federal Reserve Bank of Richmond will ascertain the amount by adding together all immediate credit items received that day and all deferred credit items that have matured that day, and then will deduct the amount of Federal reserve exchange drafts drawn by member banks in the Fifth District on the Federal Reserve Bank of Richmond and presented to and paid by the Federal Reserve Bank of New York. It will also deduct returned items,<sup>42</sup> officers' checks drawn by the Federal Reserve Bank of Richmond, or transfer drafts, if any, drawn on the Federal Reserve Bank of New York by the Federal Reserve Bank of Richmond, thus obtaining, in effect, immediate payment for these items. The report dispatched by mail by the Federal Reserve Bank of New York will indicate all items so deducted, the items themselves being sent with the report or mailed separately at the same time.

---

<sup>40</sup>See pp. 215-216 above.

<sup>41</sup>Letter No. 8, pp. 3-4.

<sup>42</sup>For an account of the procedure followed in returning items, see pp. 553 and 559 below.

**Transactions which are not included in the daily settlements**

Since the inauguration of daily settlements on July 1, 1918, and particularly since the adoption of the plan by which the result of the daily settlement is included by each Federal reserve bank in the statement of the same day, all transactions between Federal reserve banks are included in the settlement except the following: (1) Rediscount transactions between Federal reserve banks, (2) special transfers by one Federal reserve bank to another for the account of the Treasury Department, (3) settlements between Federal reserve banks for Federal reserve notes paid by one bank and forwarded to the Federal reserve bank through which such notes were originally issued, if fit for circulation, or to the Treasury Department for redemption if unfit, (4) transfers from the Gold Settlement Fund to the Federal Reserve Agents' Fund and vice versa, and (5) transfers to the redemption funds.

An account of the rediscount operations between Federal reserve banks has been given above and will not be repeated here except to recall to the reader's mind that settlements between Federal reserve banks growing out of these transactions are made as quickly as possible and entirely independent of the daily settlements resulting from the clearing and collection of checks. The discount, however, exacted as the price for rediscounting, is settled through the Gold Settlement Fund on the following settlement day. Maturing discounts are also paid through the Gold Settlement Fund independently of the regular settlements.<sup>43</sup>

Special transfers by one Federal reserve bank to another for the account of the Treasurer of the United States are effected by special telegrams between Federal reserve banks and between the banks and the Federal Reserve Board. No Federal reserve bank can make an entry on its books affecting the Gold Settlement Fund without receiving directions to do so from the settling agent acting for the Federal Reserve Board, a regulation quite necessary, since the accounts on the books of the Federal reserve banks must be always in exact agreement with the accounts kept by the Federal Reserve Board on the Gold Settlement Fund books in Washington.<sup>44</sup>

The present method of making adjustments between Federal reserve banks as a result of Federal reserve note transactions has

---

<sup>43</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 33-35; *Letter No. 7*, pp. 11-12; *Letter No. 8*, p. 4.

<sup>44</sup>*Fifth Annual Report of the Federal Reserve Board* (1918), pp. 33-35; *Letter No. 8*, pp. 4-5.

changed somewhat from the original. The Federal Reserve Act requires the Federal reserve banks to redeem upon presentation, not only the Federal reserve notes issued through them, but all other Federal reserve notes issued through the other Federal reserve banks, and no Federal reserve bank is permitted to pay out the Federal reserve notes issued by another Federal reserve bank except under a 10 per cent. tax penalty. The Federal reserve notes issued by a Federal reserve bank sometimes would drift into other Federal reserve districts, and finally into other Federal reserve banks, since no member bank has ever been required in shipping Federal reserve notes to its Federal reserve bank to assort the notes with reference to Federal reserve districts. Federal reserve notes so received were forwarded originally by the receiving Federal reserve bank to the various Federal reserve banks through which they were issued, and at first no distinction was made between notes fit for further circulation and unfit notes. When such a shipment was made by one Federal reserve bank to another, the notes comprising the shipment remained the property of the shipping bank until they were received by the bank to which they were shipped. Upon receipt, immediate credit was given by the receiving bank to the shipping bank, which credit was advised in some cases by wire and in other cases by mail. Settlements for these shipments were made in whatever manner settlements for other items were made at the time.

With the increase in note transactions, arrangements were made in 1921 by which Federal reserve notes were separated into two classes, (a) those fit for circulation, and (b) those unfit for further circulation.<sup>45</sup> Those fit for circulation were forwarded direct to the bank of issue and credited by that bank to the sending bank upon receipt; those unfit for circulation were forwarded to the Treasurer of the United States for redemption, not for the account of the sending bank, but for the account of the bank through which the notes originally had been issued. At the same time, the sending bank dispatched advices of the shipments to the other Federal reserve bank, and received credit upon receipt of the fit notes, or upon receipt of advice of shipment of the unfit notes to the Treasurer of the United States. Under this arrangement, notes in transit remained the property of the shipping bank until they reached their destination.

Under present arrangements each Federal reserve bank or branch daily ships directly to the Federal reserve banks through

---

<sup>45</sup>*Ninth Annual Report of the Federal Reserve Board* (1922), p. 28.

which they were originally issued all fit notes which have been received by it, assorted and properly packed for shipment. At the same time, each Federal reserve bank or branch ships to the Treasurer of the United States for the account of the Federal reserve banks through which they were originally issued, all unfit Federal reserve notes which it has received, assorted and properly packed for shipment. Instead of advising, as before, the Federal reserve banks to which shipments of fit notes have been made, or for which shipments of unfit notes have been made to the Treasurer of the United States, each Federal reserve bank or branch advises the Federal Reserve Board by wire of all such shipments, using forms similar to those already described in connection with the regular Gold Settlement Fund, describing separately each shipment to each Federal reserve bank and each shipment to the Treasurer of the United States for each Federal reserve bank.

As some of the Federal reserve banks and branches are located in the far West, it is quite late in the day before all such telegrams are received. On the morning of the following business day, therefore, the settling agent of the Federal Reserve Board makes up a special settlement of Federal reserve notes in transit, and advises each Federal reserve bank by wire of the amounts of fit Federal reserve notes shipped to it by other Federal reserve banks and branches, and the amount of unfit notes shipped by them to the Treasurer of the United States for its account. Advice by wire is always given of the receipt of the previous day's telegrams. Each Federal reserve bank is then charged with the total of all Federal reserve notes shipped to it by other Federal reserve banks and branches, or shipped for it to the Treasurer of the United States; and, at the same time, each Federal reserve bank is credited in its Gold Settlement Fund account by the total of all shipments made by it or its branches as advised in the telegram of the afternoon before. It is obvious that the total of all the debits in this settlement equals all the credits, but no entries, either debit or credit, are made by the recipient banks until the morning telegram authorizing these entries is received from the settling agent. This settlement is made independently of the regular daily settlement resulting from the clearing and collection of checks. The plan for the separate daily settlement for Federal reserve notes was inaugurated February 1, 1922.<sup>46</sup> Both settlements, however, although arranged independently are handled simultaneously by the settling agent of the Federal Reserve

---

<sup>46</sup>*Ibid.*



Board, and each Federal reserve bank makes the proper entries on its books as of the close of business of the previous day, upon the figures advised or confirmed by the settling agent of the Federal Reserve Board with respect to both settlements.<sup>47</sup>

TABLE XXVII  
OPERATIONS OF THE GOLD SETTLEMENT FUND<sup>a</sup>  
SUMMARY OF TRANSACTIONS BY YEARS, 1915-1923  
[In thousands of dollars]

Year	Total clearings	Total transfers	Total clearings and transfers	Net changes in ownership of gold through transfers and clearings	Per-centage of change to tot. clear-ings and transfers	Gold with-drawals
1915 (May 19- Dec. 31) ..	1,028,173	35,476	1,052,649	85,697	8.14	78,040
1916 .....	5,383,966	150,045	5,533,966	223,870	4.03	136,550
1917 .....	24,319,060	2,643,846	26,962,906	272,033	1.01	482,858
1918 .....	45,439,487	4,812,105	50,251,592	238,314	0.47	102,433
1919 .....	66,053,393	7,930,859	73,984,252	281,385	0.38	392,293
1920 .....	85,074,220	7,551,585	92,625,805	471,555	0.51	539,684
1921 .....	64,934,801	3,289,081	68,223,882	391,922	0.57	652,011
1922 .....	75,335,987	1,153,975	76,489,962	312,258	0.41	466,218
1923 .....	89,614,733	1,039,150	90,653,883	173,899	0.19	624,344

Year	Gold deposits	Transfers to Agents' Fund	Transfers from Agents' Fund	Balance in Gold Settlement Fund at close of business Dec. 31	Cost of operation (Actual; not in thousands)	Cost per \$1,000
1915 (May 19- Dec. 31) ..	155,800	52,460	.....	.....	1,150.00	\$0.0011
1916 ....	301,570	94,520	21,480	77,760	1,343.37	0.0009
1917 ....	966,556	852,881	411,087	169,740	3,539.79	0.0001
1918 ....	693,181	1,512,297	1,011,831	311,643	6,023.82	0.0001
1919 ....	1,124,304	2,479,640	675,440	401,926	250,000.00	0.0034
1920 ...	1,186,940	1,118,300	498,585	329,737	370,000.00	0.0039
1921 ....	1,880,634	1,651,210	587,372	357,278	485,000.00	0.0071
1922 ....	1,215,832	1,326,816	609,502	522,063	500,000.00	0.0065
1923 ....	1,215,366	1,140,000	565,362	554,363	.....	.....

<sup>a</sup>Compiled from the *Annual Reports of the Federal Reserve Board and the Federal Reserve Bulletins*.

Transfers from the Gold Settlement Fund of a Federal reserve bank to the gold fund of its Federal reserve agent, and vice versa, also are settled independently of the daily settlements which result from the clearing and collection of checks. Such transfers

<sup>47</sup>Letter No. 8, pp. 5-6.

are effected by the Board upon advice wired by the bank or the agent, as the case may be, and the entries are made by the bank on its books and by the Federal reserve agent on his books upon receipt of wired advice from the Board. Such transfers do not affect the gold fund of any other bank or agent and, therefore, are made independently and not as a part of the regular daily Gold Fund Settlement participated in by all Federal reserve banks.<sup>48</sup>

Prior to June 1, 1922, Federal reserve banks made payments through the Gold Settlement Fund to the Treasurer of the United States for the account of member national banks for credit to their 5 per cent. redemption fund against national bank notes.

---

TABLE XXVIII  
AVERAGE WEEKLY VOLUME OF CLEARINGS AND TRANSFERS  
COMBINED FOR EACH YEAR SINCE THE ESTABLISH-  
MENT OF THE GOLD SETTLEMENT FUND<sup>a</sup>

1915 .....	\$31,896,000	1919 .....	\$1,422,744,000
1916 .....	106,422,000	1920 .....	1,781,265,000
1917 .....	522,206,000	1921 .....	1,311,998,000
1918 .....	966,377,000	1922 .....	1,470,960,000

<sup>a</sup>*Ninth Annual Report of the Federal Reserve Board (1922)*, p. 28.

---

These were also independent of regular settlements. Until April 10, 1920, such transfers were made in even dollars; after that date they were made in any amount.<sup>49</sup> On June 1, 1922, the method of handling transfers for national banks to their 5 per cent. redemption funds against national bank notes was simplified by the adoption of the plan of making such transfers from the gold redemption funds of the Federal reserve banks against Federal reserve notes, instead of from the Gold Settlement Fund, thereby reducing these transactions to simple transfers by the Treasury between these two funds in its custody.<sup>50</sup>

### Inter-district gold movements

The analysis of inter-district gold movements is so involved and detailed in nature that only a general and summarized view will be attempted here. A detailed study of inter-district movements would carry the subject beyond the space that can be allotted to it in this book.

It must be observed at the outset that the net changes in own-

---

<sup>48</sup>*Ibid.*, p. 6.

<sup>49</sup>*Seventh Annual Report of the Federal Reserve Board (1921)*, p. 70.

<sup>50</sup>*Ninth Annual Report of the Federal Reserve Board (1922)*, p. 28.

ership in the Gold Settlement Fund through transfers and clearings as shown in the table on page 318 refers only to a shifting of claims between the Federal reserve banks and does not refer to actual gold shipments among the Federal reserve banks in the settlement of obligations. It is quite customary to make general and sweeping statements to the effect that with the concentration of reserves and the organization of the Gold Settlement Fund the shipment of gold has been entirely eliminated.<sup>51</sup> Although the Gold Settlement Fund has reduced the shifting of funds, that is, the claims to the funds, to a very small percentage of the total transactions settled through the Fund, as is shown by the percentage of net transfers given in Table XXVII on page 318, and has reduced the physical shipments of gold to a minimum, presumably, it must be observed that physical shipments do take place. The *Annual Reports of the Federal Reserve Board* give evidence of that fact in listing the expense that is incurred by the Board in paying for gold shipments under authority of Section 16 of the Act. Consequently, the question of the physical movement of gold from one geographical district to another must not be confused with the transfer of net balances through the Gold Settlement Fund. On this subject Mr. W. W. Stewart says: "The extent to which specie or gold is shipped at present about this country to meet adverse balances is extremely small; inter-bank settlements being made normally through the Gold Settlement Fund of the Federal Reserve Board. Figures showing expense of coin and currency shipments refer to shipments between the Federal Reserve Board and the Federal reserve banks, and to shipments between the latter and their branches, and between Federal reserve banks or branches and their member banks."<sup>52</sup>

In another letter to the writer, he says "that the shipment of gold in settlement of inter-district balances has practically ceased as the result of the operation of the Gold Settlement

---

<sup>51</sup>See *Federal Reserve Bulletin*, Vol. VIII (1922), p. 400; Ivan Wright, *Bank Credit and Agriculture* (New York, 1922), pp. 206-207. As an example, Wright says, in speaking of the advantages of the Gold Settlement Fund: "The savings on clearings and transfers, while large, is, perhaps, the smallest advantage derived from this service. The fundamental benefits are: the elimination of the risks of the actual transfers of gold, and the time saved by wire transfers and clearings, as against the physical exchange of gold. Under the old national banking system, currency was transferred from one section of the country to another, and from one bank to another, and exchange rates registered the relative demand for moneyed capital in the various sections of the country. Under the Federal Reserve System this is all consummated by wire transfers and moneyed capital flows freely to the section where needed, almost without any cost of transfer."

<sup>52</sup>W. W. Stewart, Director of the Division of Research and Statistics, Federal Reserve Board, in a letter to the writer, March 5, 1924.

Fund. Gold coin and certificates, particularly the latter, are shipped between the Treasury and the Federal reserve banks, also between Federal reserve banks and member and non-member banks. The expense of gold shipments between Treasury offices and Federal reserve banks, under the provisions of Section 16 of the Federal Reserve Act, amounted in 1922 to \$6,231.60, and in 1923 to \$3,254.11.

“Upon the abolishment of the sub-treasuries in 1920 and 1921, the Federal reserve banks took over the work formerly done by the sub-treasuries in connection with the receipt of gold, silver and minor coin for exchange and redemption. During the calendar year 1923 the Federal reserve banks received and counted 2,076,000,000 pieces of coin of all classes and denominations having an aggregate face value of \$308,000,000. Relatively little of this coin consisted of gold. Shipping charges (postage, expressage and insurance) paid by the Federal reserve banks on coin shipped to member banks and received from member and non-member banks during 1923 amounted to approximately \$177,000.”<sup>53</sup>

### Gold distribution in the United States

The Federal Reserve Board estimated that on January 1, 1922, the total gold stock in the United States was \$3,657,000,000. Of this amount, \$380,000,000 were held in the Treasury as assets of the United States government, \$2,641,000,000 were held by the Federal Reserve System,<sup>54</sup> and \$636,000,000 were held outside. Most of the gold held outside of the Treasury and the Federal Reserve System—conceded to be a rough estimate—is in small hoards in the hands of the general public, although some gold is in the vaults of member and non-member banks. Thus the gold in actual circulation is negligible. With nearly all the gold of the country held in central reservoirs and practically no gold in actual circulation, the Board points out<sup>55</sup> that changes in the gold reserves of the different Federal reserve banks can occur only in one of three ways: (1) Through imports from or exports to foreign countries, (2) through transfer from or to other reserve banks, or (3) through transfer from or to the United States government. Imports of gold are made chiefly through the port of New York, the gold being turned over to

<sup>53</sup>Letter to the author, March 17, 1924.

<sup>54</sup>Exclusive of redemption funds with the Treasurer of the United States.

<sup>55</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), p. 400.

the Federal Reserve Bank of New York. Changes in the gold reserves of other banks are traceable almost entirely to the operations of the Gold Settlement Fund, through which gold payments between reserve banks and between these banks and the government are effected.

#### **Factors affecting inter-district gold movements**

Some of the most important factors affecting the gold movement between reserve districts have been classed by the Federal Reserve Board under the following heads: (1) Settlement of inter-district balances on account of checks and drafts cleared or collected through the Federal Reserve System, also transfers between Federal reserve banks for account of member and non-member banks; (2) government obligations and transferring funds in connection with tax collections, payments on contracts, etc.; (3) inter-district accommodation; and (4) inter-district movement of reserve notes.<sup>56</sup>

#### **How clearings and transfers affect inter-district gold movements**

The principal element in the origin of inter-district balances are checks drawn in one district and sent in payment for goods purchased in another district. Another important factor affecting the balances has been the large importation of gold during the recent period, the title to which has been shifted to the interior banks to pay for the exported goods which originated there. One way in which the imported gold is transferred to the interior banks is through the repayment by member banks of their borrowings from reserve banks by draft on New York correspondents. A member bank may have borrowed from a reserve bank in order to finance a customer's exports. When the exports are paid for in gold it is received in New York and credited by the New York correspondent to the member's account. In paying off its debt this bank draws on its New York balance and thus adds to its reserve bank's credit in the Settlement Fund.

The seasonal movement of funds from financial districts to country districts and vice versa is another important element in the movement of gold through the Gold Settlement Fund. During periods of heavy demand for funds in agricultural districts, balances of the country banks with their eastern correspondents, especially their New York correspondents, are greatly reduced by the country banks in order to meet local requirements. After

<sup>56</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), p. 400.

these obligations have been met, the opposite condition soon presents itself. There is little demand for the funds of the country bank and they tend to transfer them to eastern centers for deposit and investment. The large banks in New York, Boston, and Chicago also make loans to these country banks. In 1920 and 1921, when the demand for funds in country districts was very heavy, these large banks extended large loans to country correspondents. When the contraction of credit got under way in 1921 and a large portion of the funds loaned by the city banks was returned, a movement of gold—not necessarily a physical movement—to the financial centers resulted. Each year has been marked by certain distinguishing characteristics in business conditions which would be reflected in the gold movements and a fuller treatment of the subject would show these variations. Space precludes any such survey here.<sup>57</sup>

#### **Effect of the fiscal operations of the government on inter-district gold movements**

The principal fiscal operations of the United States government which resulted in inter-district gold movements are the issue and redemption of Treasury certificates and notes, the payment of interest on outstanding obligations, the collection of income and excess profits taxes, and the payment on government contracts.

As a result of a study of the allotments of tax certificates, of their redemptions, and of income tax deposits at each quarterly income tax date in 1921 at each Federal reserve bank, the Federal Reserve Board learned that in New York redemptions far exceed allotments, especially since conditions in the money market have favored active trading in Treasury certificates. The Board goes on to say: "Certificates issued in other districts drift to New

---

<sup>57</sup>Professor Ivan Wright, *op. cit.*, Chapters VII, VIII, and XVI, has made such a study. His analysis in Chapters VII and VIII is based upon currency movements between geographical districts for the years 1905-1908, the data being based upon the currency receipts and shipments for those years as gathered by the National Monetary Commission through the sending of circular inquiries to the managers of the clearing houses through the office of the Comptroller of the Currency. His Chapter XVI is a brief survey of seasonal variation in transactions through the Gold Settlement Fund. He sees a remarkable correlation between the total transfers through the funds and the seasonal demands of agriculture, although in another place (p. 214), he points out that the seasonal variations have almost been submerged due to two facts: (1) that the Gold Settlement Fund has been steadily increasing due to its popularity and convenience of service, and the increase in the number of member banks, and (2) the enormous fiscal operations of the government in connection with war finance, and the taking over of the work of the sub-treasuries by the Federal reserve banks.

York, the financial center of the country, and must be redeemed there at maturity. None of the other districts show a material excess of redemptions over allotments and most of them show larger allotments than redemptions. Tax collections in New York fall relatively far below the proportion of certificate allotments and redemptions. This is due chiefly to the fact that New York possesses a much larger proportion of the country's banking resources, which form the basis of certificate allotments, than of its income. Nearly half of the tax certificates maturing in 1921 were redeemed in New York, but only about 27 per cent. of income and excess profits taxes were collected in that district. On the other hand, in the Boston, Richmond, and Atlanta districts tax receipts constitute materially larger proportions of the total for the country than do certificate redemptions. In the other districts the differences are less pronounced. As a consequence, on income-tax dates and for a few days following, the government has not sufficient funds in New York to pay for maturing certificates and consequently issues to the Federal Reserve Bank of New York special certificates of large amounts. As income tax funds are collected in New York and in other districts the government finds itself with excess funds in other districts and transfers them to New York, where they are used to retire the special certificates. Transfers of gold to New York on government account during the ten days following income-tax dates are exceedingly heavy and come from nearly every other district. On the other hand, it is in New York that most of the payments on government contracts are made, and the funds thus made available in New York become distributed throughout the country, when the headquarters of corporations send out dividend and interest checks or supply working funds for plants and branches in other parts of the country. This is reflected statistically in the fact that New York gains through transfers and loses through clearings. In 1921, for instance, the New York bank had a net credit through transfers of \$745,000,000, and a net debit through clearings of \$1,043,000,000.<sup>58</sup>

#### Effect of rediscount operations among Federal reserve banks on inter-district gold movements

Inter-district accommodation in the form of rediscounting by one Federal reserve bank for another is reflected in the movement of gold reserves. The accommodated bank receives the proceeds

<sup>58</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), p. 401.

as a credit in the Gold Settlement Fund and when the rediscount is liquidated the reserves move in the opposite direction.

Gold reserves of the Federal reserve banks on October 29, 1920, for instance, were affected by the fact that there was a total of inter-district accomodation amounting to \$260,440,000.

TABLE XXIX

GOLD RESERVES OF EACH FEDERAL RESERVE BANK ON  
OCTOBER 29, 1920, and ON MARCH 22, 1922<sup>a</sup>

[Amounts in thousands of dollars]

Federal Reserve Bank of—	Amount		Per cent. of total		In-crease	De-crease
	Oct. 29, 1920	Mar. 22, 1922	Oct. 29, 1920	Mar. 22, 1922		
Boston .....	194,571	178,278	9.7	6.0	.....	16,293
New York .....	476,694	1,083,872	23.8	36.4	607,178	.....
Philadelphia .....	190,427	212,900	9.5	7.1	22,473	.....
Cleveland .....	252,340	256,451	12.6	8.6	4,111	.....
Richmond .....	88,296	72,961	4.4	2.5	.....	15,335
Atlanta .....	88,103	115,458	4.4	3.9	27,355	.....
Chicago .....	308,067	476,549	15.4	16.0	168,482	.....
St. Louis .....	73,053	97,202	3.6	3.3	24,149	.....
Minneapolis .....	49,350	71,864	2.5	2.4	22,514	.....
Kansas City .....	72,317	80,340	3.6	2.7	8,023	.....
Dallas .....	46,557	43,019	2.3	1.4	.....	3,538
San Francisco ...	163,545	287,809	8.2	9.7	124,264	.....
	2,003,320	2,976,703	100.0	100.0	973,383	35,166

<sup>a</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), p. 400.

The total inter-district accommodation of \$260,440,000 was distributed on October 29, 1920, as shown in the following table:

TABLE XXX<sup>1</sup>

Grantor Banks	Grantee Banks
Boston .....	New York .....
Philadelphia .....	Richmond .....
Cleveland .....	Atlanta .....
San Francisco .....	Chicago .....
	St. Louis .....
	Minneapolis .....
	Kansas City .....
	Dallas .....
Total .....	Total .....

<sup>1</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), p. 400.

On March 22, 1922, there was no inter-district accommodation outstanding, so that the changes in gold reserve shown in Table XXIX above reflect in part the transfer of \$260,440,000 of gold from the eight banks accommodated to the four banks which had extended the accommodation. Thus, Cleveland gained \$139,000,000 from this source, and the fact that this total gain is much smaller indicates that gold moved from Cleveland as



the result of other transactions, mainly in connection with the inter-district movement of reserve notes discussed below. On the other hand, New York shows a gain in gold reserves, largely through imports from abroad, of \$607,000,000 over and above the liquidation of \$61,000,000 of rediscounts with other Federal reserve banks.<sup>59</sup>

#### **Effect of inter-district movements of Federal reserve notes**

The inter-district movement of Federal reserve notes is another important factor responsible for the inter-district movement of reserves. The Federal reserve notes of one district will find themselves in other districts, although some districts are affected quite differently from others. For example, the New York district is characterized by the fact that the notes of other districts seem to float towards New York. Many people who come to New York for business or pleasure spend money chiefly in the form of Federal reserve notes of their home districts. These notes are deposited by the store or hotel keepers in their banks which, in turn, deposit them with the Federal Reserve Bank of New York. The Federal Reserve Bank of New York sends these notes to the parent bank if fit for further circulation, or to the Treasury if unfit. On the other hand, the notes of the Federal Reserve Bank of New York do not go out of District No. 2 to the same extent as the notes of other banks, and consequently the Federal Reserve Bank of New York continuously returns more notes to other districts than it receives from them. Notes finding their way to Cuba and other islands in the West Indies, to Canada, Mexico, and to other foreign countries are also a factor. These notes originate in various parts of the United States, but when deposited with banks in foreign countries they are likely to be brought back by returning tourists or to be shipped to New York correspondents, thus increasing the amount of "foreign" reserve notes in the hands of the Federal Reserve Bank of New York.

During the War another element entered into the inter-district movement of notes. The United States Treasury had to pay the soldiers, and for this purpose used whatever Federal reserve notes it happened to have on hand in Washington. These notes which found their way to the various camps throughout the country were returned in most cases to New York correspondents, which turned them into the Federal Reserve Bank of New York,

---

<sup>59</sup>*Ibid.*, p. 402.

which, in turn, sent them either to the issuing banks or to Washington. The Boston bank, for example, as a result of these notes paid to soldiers, had a constant excess of notes received from New York.

During the two or three years preceding March, 1922, the Federal Reserve Board reports that the Boston and Cleveland banks had been losing gold as a result of excess receipts over shipments of Federal reserve notes. The reason for this development appears to be that these banks had a supply of new notes on

TABLE XXXI  
INTER-DISTRICT MOVEMENT OF FEDERAL RESERVE NOTES  
[Excess of Notes received is indicated by a plus (+) sign; excess of notes returned by a minus (—) sign]<sup>1</sup>

Federal Reserve Bank of—	1917	1918	1919	1920	1921	1922	1923
Boston .....	-7,734	-16,272	-27,572	+8,708	+40,941	+1,971	+14,339
New York ..	+5,197	-579	-46,675	-126,713	-223,370	-79,731	-77,454
Philadelphia ..	-6,894	-22,824	-16,225	+6,767	+42,872	+25,872	+36,728
Cleveland ...	+2,642	+19,117	+32,111	+58,387	+36,295	+10,563	+18,020
Richmond ...	+4,370	+4,511	-2,105	+1,459	+27,040	+12,656	-3,528
Atlanta .....	+1,561	+669	+3,776	+6,378	+19,174	+3,296	-11,260
Chicago .....	-10,139	-1,748	+20,372	+58,340	+86,175	+49,564	+43,141
St. Louis ....	-4,653	-22,538	-25,089	-36,076	-17,902	-16,468	-21,756
Minneapolis ..	+4,187	+5,181	+9,903	+13,511	+44	-863	-34
Kansas City ...	+6,664	+27,283	+11,805	+5,178	+6,372	-4,057	-1,915
Dallas .....	+2,258	-771	+6,651	+11,422	+1,974	-5,996	-7,975
San Francisco.	+2,513	+10,488	+7,124	-6,965	+3,992	+5,773	+1,705

<sup>1</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), p. 403; *Ninth Annual Report of the Federal Reserve Board* (1922), pp. 110-111; *Tenth Annual Report of the Federal Reserve Board* (1923), pp. 129-130.

hand when other Federal reserve banks were short of fresh currency, and many banks in other districts applied to their correspondents in the Boston or Cleveland districts for currency. When prices began to fall and currency needs of the people declined, the notes of the Cleveland or the Boston bank were deposited with the member banks in other districts; these banks sent them to their Federal reserve banks, which returned them to the Boston or Cleveland bank and thereby gained gold from these banks.<sup>60</sup>

The Cleveland bank reported for a number of years excess receipts of Federal reserve notes over shipments, but this excess became very much more pronounced in the two years preceding March, 1922. In the case of Boston the movement was in the opposite direction during the years 1917-1919, inclusively. This

<sup>60</sup>*Ibid.*

is accounted for by the Federal Reserve Board on the ground that residents of the Boston district traveling in the much larger districts of the West spent Boston Federal reserve notes there. These notes would stay out in circulation for a considerable period of time, while notes of other banks spent in the much more compact Boston district would find their way into the Federal reserve bank more promptly. As a result of this and the fact that more notes are brought to New England by residents of other districts than are spent by New Englanders outside of their own district, the Boston bank had more notes to return to other districts than it received from them. Table XXXI shows the excess of Federal reserve notes received over those returned to other districts or vice versa for the years 1917-1923.

The table below shows gold and total reserves, Federal reserve note circulation, total discounts, and inter-district accommodation for each Federal reserve bank for four selected dates: May 29, 1919, just before the gold embargo was removed; March 26, 1920, about which time the outward movement of gold from the United States came to an end; October 29, 1920, after the peak of credit expansion was reached and the recent gold movement into the United States started; and March 1, 1922:

TABLE XXXII  
RESERVES, NOTE CIRCULATION, AND DISCOUNTS OF FEDERAL RESERVE BANKS ON SELECTED DATES<sup>1</sup>

	Gold reserves	Total reserves	Federal reserve note circulation	Total discounts for own member banks	Inter-district accommodation (net)	
					Ex- tended	Re- ceived
All F. R. Banks:						
May 29, 1919	2,187,743	2,255,106	2,519,292	1,989,392	139,294	139,294
Mar. 26, 1920	1,934,755	2,057,155	3,048,039	2,149,230	96,480	96,480
Oct. 29, 1920	2,003,320	2,168,038	3,351,303	2,801,297	260,440	260,440
Mar. 1, 1922	2,951,434	3,080,793	2,196,983	707,551	.....	.....
Boston:						
May 29, 1919	122,771	130,127	172,171	151,679	.....	858
Mar. 26, 1920	165,752	168,044	261,697	172,466	20,414	.....
Oct. 29, 1920	194,571	203,175	296,168	109,918	84,396	.....
Mar. 1, 1922	170,359	192,682	155,898	47,749	.....	.....
New York:						
May 29, 1919	751,488	802,172	742,390	729,929	.....	25,571
Mar. 26, 1920	504,689	611,462	834,188	847,649	.....	34,096
Oct. 29, 1920	476,694	606,610	876,706	985,223	.....	61,362
Mar. 1, 1922	1,087,314	1,122,445	626,673	90,323	.....	.....
Philadelphia:						
May 29, 1919	127,340	127,643	205,734	232,122	.....	35,533
Mar. 26, 1920	140,539	141,295	244,579	242,255	.....	35,555
Oct. 29, 1920	190,427	191,144	273,266	148,560	37,201	.....
Mar. 1, 1922	210,637	219,224	188,463	74,958	.....	.....

TABLE XXXII—(Continued)

	Gold reserves	Total reserves	Federal reserve note circulation	Total discounts for own member banks	Inter-district accommodation (net)	
					Ex-tended	Re-ceived
<b>Cleveland:</b>						
May 29, 1919	204,821	205,826	223,599	102,656	35,533	.....
Mar. 26, 1920	194,015	195,055	296,044	143,328	38,304	.....
Oct. 29, 1920	252,340	254,320	352,123	82,433	138,750	.....
Mar. 1, 1922	246,729	254,758	195,931	66,308	.....	.....
<b>Richmond:</b>						
May 29, 1919	68,914	69,313	115,484	139,097	.....	45,000
Mar. 26, 1920	75,990	76,442	126,342	116,813	.....	15,000
Oct. 29, 1920	88,296	88,793	146,116	126,810	.....	14,275
Mar. 1, 1922	74,897	80,988	94,544	73,679	.....	.....
<b>Atlanta:</b>						
May 29, 1919	73,158	74,861	113,350	85,209	.....	.....
Mar. 26, 1920	94,816	96,641	145,779	95,526	3,351	.....
Oct. 29, 1920	308,067	316,442	554,186	470,887	.....	7,050
Mar. 1, 1922	107,331	111,915	109,277	51,490	.....	.....
<b>Chicago:</b>						
May 29, 1919	404,006	404,934	422,327	194,412	52,332	.....
Mar. 26, 1920	314,510	316,835	520,065	396,545	7,605	.....
Oct. 29, 1920	308,067	316,442	554,186	470,887	.....	7,050
Mar. 1, 1922	466,489	479,536	369,180	99,833	.....	.....
<b>St. Louis:</b>						
May 29, 1919	93,173	95,482	104,180	59,973	10,000	.....
Mar. 26, 1920	71,907	76,882	136,004	119,686	.....	11,829
Oct. 29, 1920	73,053	80,362	137,898	157,959	.....	37,305
Mar. 1, 1922	102,673	116,825	85,180	33,300	.....	.....
<b>Minneapolis:</b>						
May 29, 1919	75,632	75,738	83,894	35,545	15,000	.....
Mar. 26, 1920	62,274	62,314	81,906	55,353	10,029	.....
Oct. 29, 1920	49,350	49,438	82,714	111,273	.....	26,603
Mar. 1, 1922	69,272	69,842	52,134	34,078	.....	.....
<b>Kansas City:</b>						
May 29, 1919	81,827	82,019	95,585	89,340	.....	.....
Mar. 26, 1920	82,670	83,532	101,613	104,542	1,871	.....
Oct. 29, 1920	72,317	74,235	111,575	160,672	.....	44,895
Mar. 1, 1922	86,106	91,763	61,881	37,748	.....	.....
<b>Dallas:</b>						
May 29, 1919	33,055	35,191	46,268	85,146	.....	32,332
Mar. 26, 1920	61,013	61,669	77,367	48,189	7,825	.....
Oct. 29, 1920	46,557	49,734	91,071	110,466	.....	32,828
Mar. 1, 1922	38,190	44,235	29,387	37,945	.....	.....
<b>San Francisco:</b>						
May 29, 1919	151,558	151,800	194,310	84,284	26,429	.....
Mar. 26, 1920	166,380	166,954	222,435	106,878	7,081	.....
Oct. 29, 1920	163,545	164,066	251,746	160,301	93	.....
Mar. 1, 1922	291,437	296,580	228,435	60,140	.....	.....

<sup>1</sup>Federal Reserve Bulletin, Vol. VIII (1922), p. 403.

## CHAPTER IX

### THE COMPUTATION OF RESERVES

An important question inseparable from the problem of clearing and collection of checks, is that of computing reserves. Items in the process of being collected will become demand deposits in time, against which lawful reserves must be held. As a result, the banks have found it necessary to devise a definite system for the computation of reserves. This computation involves, not only the question of computing reserves against items in the process of collection, but against many other types of demand and time obligations, and in order to secure clarity and completeness of treatment, it is necessary to extend the scope of the subject to cover other aspects of the question of reserve computation than simply that of computing reserves against obligations resulting from the clearing and collection of checks.

#### **Reserve requirements of member banks of the Federal Reserve System**

Section 19 of the Federal Reserve Act provides that the three classes of member banks in the Federal Reserve System shall maintain the following reserves in lawful money against demand deposits: Country banks, 7 per cent.; reserve city banks, 10 per cent.; and central reserve city banks, 13 per cent. Against time deposits, each class of banks is required to maintain 3 per cent. and all of the reserves are to be held in the Federal reserve banks. According to Section 19 demand deposits comprise all those payable within thirty days, while time deposits comprise all deposits payable after thirty days, all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment, and all postal savings deposits.

If a reserve city bank is located in the outlying districts of a reserve city or in territory added to such a city by the extension of its corporate charter, it may maintain, upon the affirmative vote of five members of the Federal Reserve Board, the reserve balances required of country banks. Central reserve city banks

similarly situated, in like manner may be reduced to the status of reserve city banks so far as reserve requirements are concerned. The required balance carried by a member bank with a Federal reserve bank, under regulations and subject to penalties prescribed by the Federal Reserve Board, may be checked against and withdrawn by the member bank for the purpose of meeting existing liabilities provided the bank does not make any new loans or pay any dividends until the total balance required by law is restored fully.

Against national bank notes, national banks are required to maintain in the United States Treasury a 5 per cent. redemption fund in lawful money, in addition to the 100 per cent. bond security. This redemption fund is not a part of a national bank's legal reserve as was the case prior to the passage of the Federal Reserve Act.<sup>1</sup> Penalties for reserve deficiencies are prescribed by Regulation J, Series of 1924, given below, pp. 366-367.

#### **Reserve requirements of the Federal reserve banks**

Against demand deposits, each Federal reserve bank is required, according to Section 16 of the Federal Reserve Act, to maintain reserves in gold or lawful money of not less than 35 per cent. Federal reserve banks have no time deposits. Government deposits are not exempt from the reserve requirements. Authority is given the Federal Reserve Board to suspend for a period of thirty days, and to renew the suspension for fifteen-day periods, any reserve requirement specified in the Act, provided that it establishes a graduated tax upon the deficiency in the reserves.<sup>2</sup> Gold deposits standing to the credit of any Federal reserve bank with the Federal Reserve Board shall be counted, at the option of the bank, as part of the lawful reserve which it is required to maintain against outstanding Federal reserve notes, or as part of the reserve it is required to maintain against deposits.

Federal reserve banks are required to keep against Federal reserve notes in actual circulation a reserve in gold of not less than forty per cent., in addition to the other collateral required to make up the 100 per cent. security. When the Federal reserve agent holds gold or gold certificates as collateral for Federal reserve notes issued to the bank, such gold or gold certificates are counted as part of the gold reserve. The Act also requires that

<sup>1</sup>See *Federal Reserve Act*, Section 20.

<sup>2</sup>*Federal Reserve Act*, Section 11, paragraph (C). In 1920, eight of the Federal reserve banks paid penalties for deficient reserves. See *Seventh Annual Report of the Federal Reserve Board* (1920), pp. 46-47.

each Federal reserve bank maintain a redemption fund in the Treasury for the purpose of redeeming the notes. This fund is a sum in gold sufficient in the judgment of the Secretary of the Treasury for the redemption of the notes issued to each Federal reserve bank, but in no event less than five per cent. of the total amount of notes issued, from which is deducted the amount of gold or gold certificates held by the Federal reserve agent as collateral security in order to determine the net liability against which the fund must be held. This redemption fund of gold is counted as part of the forty per cent. reserve that must be held against the Federal reserve notes. Should the gold reserve held against Federal reserve notes fall below the forty per cent. requirement, the Federal Reserve Board, according to the requirements of the Federal Reserve Act, is required to levy a graduated tax. This tax is paid by the reserve bank, but it adds an amount equal to the tax to the rates of interest and discount fixed by the Federal Reserve Board.<sup>3</sup>

Against Federal reserve bank notes which are issued up to the par value of the underlying bonds, the Federal reserve banks must also maintain in the Treasury a redemption fund in lawful money to the extent of five per cent. As in the case of national banks, this does not count as part of the legal reserve.

#### **Reserve requirements of Federal reserve bank branches**

It will be unnecessary to consider the branches of the Federal reserve banks separately from the parent banks in this discussion, because no branch of a Federal reserve bank has a separate corporate entity distinct from that of the parent bank. Its operations are in effect the operations of the parent bank. It is pointed out elsewhere that there are two classes of branches in the United States. One type, designated as Class I for convenience of treatment, renders practically the same services and has the same direct relations with the member banks as does the parent bank. Such a branch has certain territory and capital assigned to it; it carries the reserves of the member and non-member banks assigned to it by the parent bank; the correspondence of the member banks is with this branch rather than with the parent bank; and it rediscounts for the member banks of its assigned district, although it may not engage in open market transactions except under orders from and for the account of the head office. Thus everything

---

<sup>3</sup>*Federal Reserve Act*, Section 11, paragraph (C). Penalties for reserve deficiencies are discussed below, pp. 371-374.

that may be said relative to the computation of reserves in Federal reserve banks is applicable, in general, to these branches, and need not be repeated in a separate treatment. Reserve deposits carried by member banks upon the books of the branch are technically actual reserve carried with the parent bank, and where deposits are made in a branch by an agent of the government and are charged to that branch on the books of the Treasurer of the United States, the Board understands that this is done merely as a matter of bookkeeping convenience. The deposit liability rests with the parent bank.<sup>4</sup> This type of branch clears and collects checks and other items for its member and non-member clearing banks in the same manner as does the parent bank, and participates in the daily clearings through the Gold Settlement Fund, although the final settlements are made on the books of the parent bank, as no branch carries separate deposits in the Gold Settlement Fund.

The second type of branch, designated as Class II, is really a branch office maintained by the parent bank for the convenience of such member and non-member clearing banks as may desire to use it. Consequently, none of its functions can be considered in any sense as separate from those of the parent bank. No distinct capital or reserves are assigned to it, no member bank in any specific territory is required to deal with it, and no specific territory is assigned to it except for collection purposes. The principal operations of this type of branch are confined to the clearing and collection of checks, and to supplying currency, both paper and coin, to member banks within the collection zone assigned to it. The balance appearing to the credit of a member bank on the books of the head office constitutes its reserve, but member banks depositing with the branch may charge the parent bank with all items on the day of deposit unless drawn against banks for which allowance is provided in the time schedules, in which case such banks may obtain credit only at the expiration of the time indicated.

This type of branch makes daily reports to the head office showing the amounts received on deposit for credit with the head office, checks paid for the head office, discounts recommended (as this type of branch may not rediscount for member banks), and items received for collection and forwarded, and for which credit should be given by the head office at the expiration of the time

---

<sup>4</sup>*Federal Reserve Bulletin*, Vol. IV (1918), p. 256; *Eighth Annual Report of the Federal Reserve Board*, (1921) p. 80. See also pp. 547-550 below.



stipulated in the time schedule. This type of branch does not clear through the Gold Settlement Fund, but reports directly to the parent bank each day the credits resulting from the items received for collection within its collection zone.<sup>5</sup>

#### Reserve requirements of State banks, trust companies, and private banks

State banks, trust companies, and private banks keep the reserves required by the various State laws or clearing house associations in case the requirements of the clearing houses are higher than those of the State laws.<sup>6</sup> In the State of New York, for example, the law requires that State commercial banks shall maintain reserves against aggregate demand deposits as follows:<sup>7</sup>

(1) If the bank has an office in a borough having a population of two millions or more, 18 per cent., and at least 12 per cent., must be maintained as reserves on hand.

(2) In a borough with a population of one million and less than two millions, 15 per cent., and at least 10 per cent. must be maintained as reserves on hand.

(3) When located elsewhere in the State, 12 per cent., and at least 4 per cent. must be maintained as reserves on hand.

Any part of the reserves on hand in excess of 4 per cent. of such deposits may be deposited, subject to call, with a Federal reserve bank in the district in which such bank is located, and the reserves on hand not so deposited shall consist of gold, gold bullion, gold coin, United States gold certificates, United States notes, or any form of currency authorized by the laws of the United States. Any bank which is a member of the Federal Reserve System of course maintains the reserves required by the Federal Reserve Act.<sup>8</sup>

Every trust company in the State of New York is required to maintain reserves against aggregate demand deposits as follows:

(1) If the trust company has an office in a borough having

<sup>5</sup>The by-laws of this type of branch may be consulted in the *Federal Reserve Bulletin*, Vol. III (1917), pp. 935-936. See p. 923 in the same bulletin for a discussion of this type of branch. A further description is given in pp. 547-550 below.

<sup>6</sup>See the accompanying list of reserve requirements for State banks. From a pamphlet with the unusual title—*of service to banks and business*—Federal Reserve System, exhibit at annual convention of American Bankers' Association (Atlantic City, Sept. 24-27, 1923), pp. 24-27.

<sup>7</sup>It will be observed that there are no reserve requirements for time deposits in New York.

<sup>8</sup>*State Banking Law*, Section 112, amended by Chap. 579, Law of 1917; Chap. 92, Law of 1918; and Chap. 35, Law of 1919.

RESERVE REQUIREMENTS UNDER STATE LAWS

States marked (\*) do not permit State member banks to substitute reserve requirements of Federal Reserve Act

Figures in parentheses refer to footnotes

	Population Restrictions	Reserves Aggregate deposits	required Demand deposits	to be held Time deposits	upon Savings deposits	Distribution of reserves	
						Cash in vault	Balances with depositaries
<b>ALABAMA:</b>							
All banks	None	—	15%	—	—	2/5	3/5
<b>ARIZONA:</b>							
Savings banks	None	10%	—	—	—	1/4	3/4
Other banks	50,000 or over	20%	—	—	—	1/3	2/3
"	under 50,000	15%	—	—	—	1/3	2/3
<b>ARKANSAS:</b>							
Reserve agents (35)	None	20%	—	—	—	2/5	3/5
Other banks	None	15%	—	—	—	(38)	(38)
<b>CALIFORNIA:</b>							
Savings banks	None	—	—	—	5%	1/2	1/2 (1)
Commercial banks	100,000 or over	18%	—	—	—	1/2	1/2
"	50,000-99,999	15%	—	—	—	1/2	1/2
"	Under 50,000	12%	—	—	—	1/2	1/2
<b>COLORADO:</b>							
Savings banks	None	20% (2)	—	—	15%	1/5	4/5 (3)
Reserve agents (35)	None	25%	—	—	—	1/5	4/5 (4)
Other banks	None	20%	—	—	—	1/5	4/5 (3)
<b>*CONNECTICUT:</b>							
State banks and trust companies	None	—	12%	5%	—	1/3	2/3 (5)
<b>DELAWARE:</b>							
Banks and trust companies	None	—	10%	5% (38)	5% (38)	1/3	2/3 (39)
Savings banks	None	5%	—	—	—	(38)	(39)
<b>*FLORIDA:</b>							
All banking companies	None	20%	—	—	—	2/5	3/5 (6)
<b>GEORGIA:</b>							
All banks	None	—	15%	5% (7)	5% (7)	(38)	(38)
<b>IDAHO:</b>							
State banks	None	15%	—	—	—	1/5	4/5
Trust companies	None	15%	—	—	(8)	1/5	4/5
<b>*ILLINOIS:</b>							
Banks and trust companies	Chicago	25% (9)	—	—	—	(38)	(38)
" " "	Elsewhere	15% (9)	—	—	—	(38)	(38)
<b>*INDIANA:</b>							
All banks and banking companies	None	—	12 1/2% (10)	—	—	(38)	(38)
<b>IOWA:</b>							
State banks, trust companies, and savings banks doing commercial business	3,000 or over	—	20%	8%	8%	3/20	17/20
"	Under 3,000	—	15%	8%	8%	3/20	17/20
Other savings banks	None	—	—	—	8%	3/20	17/20
<b>*KANSAS:</b>							
State banks	50,000 or over	—	10%	3%	—	1/3	2/3
" " (11)	Under 50,000	—	10%	3%	—	1/3	2/3
" " (12)	Under 50,000	—	7%	3%	—	1/3	2/3
" " (12)	Under 1,000	—	7%	3%	—	1/3	2/3 (13)
Trust companies	None	—	25%	10%	—	1/3 (14)	2/3 (14)
<b>*KENTUCKY:</b>							
State banks and trust companies	Central reserve cities (15)	—	13%	3%	—	1/3	2/3
" " " "	Reserve cities (15)	—	10%	3%	—	1/3	2/3
" " " "	Elsewhere	—	7%	3%	—	1/3	2/3
<b>*LOUISIANA:</b>							
State banks	None	—	20%	—	—	1/5 (16)	4/5

## RESERVE REQUIREMENTS UNDER STATE LAWS—(Continued)

	Population Restrictions	Reserves required to be held upon				Distribution of reserves		
		Aggregate deposits	Demand deposits	Time deposits	Savings deposits	Cash in vault	Balances with depositaries	
<b>MAINE:</b>								
Trust and banking companies	None	—	15% (17)	—	—	—	All (18)	
<b>MARYLAND:</b>								
State banks	None	—	15%	—	—	1/3	2/3	
Trust companies	None	—	15%	—	—	—	All (19)	
<b>MASSACHUSETTS:</b>								
Trust companies	In Boston within 3 miles of State House	}	—	20%	—	—	2/5 (20)	3/5 (20)
" "	Elsewhere		—	15%	—	—	2/5 (20)	3/5 (20)
<b>MICHIGAN:</b>								
Commercial banks	100,000 or over	20%	—	—	—	(38)	(38)	
" "	Under 100,000	12%	—	—	—	(38)	(38)	
Savings banks	None	12%	—	—	—	(38)	(38)	
<b>*MINNESOTA:</b>								
State banks	Res. cities (35)	—	15%	5%	—	1/4	3/4	
" "	Elsewhere	—	12%	5%	—	1/4	3/4	
<b>MISSISSIPPI:</b>								
State banks	Over 50,000	—	25%	10%	10%	(38)	(38)	
" "	Elsewhere	—	15%	7%	7%	(38)	(38)	
<b>MISSOURI:</b>								
State banks and trust companies	200,000 or over	—	18%	—	—	7/18	11/18	
" " " "	25,000 to 199,999	—	15%	—	—	2/5	3/5	
" " " "	Under 25,000	—	15%	—	—	(38)	(38)	
<b>MONTANA:</b>								
State banks	Res. cities (35)	15%	—	—	—	(21)	(21)	
" "	Elsewhere	10%	—	—	—	(21)	(21)	
<b>*NEBRASKA:</b>								
State banks	Over 25,000	20%	—	—	—	2/5	3/5	
" "	Elsewhere	15%	—	—	—	1/3	2/3	
Savings banks	None	—	—	—	5%	(38)	(38)	
<b>NEVADA:</b>								
Reserve agents (35)	None	25%	—	—	—	1/3	2/3	
Other banks	None	15%	—	—	—	1/3	2/3	
Savings banks and trust companies not doing general banking business	None	10%	—	—	—	1/2	1/2	
<b>NEW HAMPSHIRE:</b>								
All banks	None	15% (37)	—	—	—	1/3	2/3	
<b>NEW JERSEY:</b>								
State banks	None	—	15% (22)	—	—	2/5	3/5	
Trust companies	None	—	15%	—	—	1/5	4/5	
<b>NEW MEXICO:</b>								
All banks	None	12%	—	—	—	(25)	All	
<b>NEW YORK:</b>								
State banks	Boroughs of 2,000,000 or over	—	18%	—	—	2/3 (24)	1/3	
" "	Boroughs of 1,000,000 to 1,999,999 (23)	—	15%	—	—	2/3 (24)	1/3	
" "	Elsewhere	—	12%	—	—	1/3 (24)	2/3	
Trust companies	Boroughs of 2,000,000 or over	—	15%	—	—	2/3 (24)	1/3	
" "	Boroughs of 1,000,000 to 1,999,999 (23)	—	13%	—	—	8/13 (24)	5/13	
" "	1st and 2nd class cities under 1,000,000	—	10%	—	—	2/5 (24)	3/5	
" "	Elsewhere	—	10%	—	—	3/10 (24)	7/10	

THE COMPUTATION OF RESERVES

887

RESERVE REQUIREMENTS UNDER STATE LAWS—(Continued)

	Population Restrictions	Reserves required upon Aggregate deposits	Demand deposits	to be held upon Time deposits	upon Savings deposits	Distribution of reserves	
						Cash in vault	Balances with depositaries
<b>NEW YORK—(Continued)</b>							
Private bankers	Cities of 1st class Elsewhere	—	15% 10%	—	—	1/10 1/10	9/10 9/10
<b>NORTH CAROLINA:</b>							
Banks and trust companies	None	—	15%	—	5%	(25)	(38)
<b>*NORTH DAKOTA:</b>							
Savings banks	None	—	20%	8% (26)	5% (27)	2/5	3/5
State banks	None	—	10%	7%	—	2/5	3/5
<b>OHIO:</b>							
Commercial banks	None	15%	—	—	—	4/15 demand 2/15 time	11/15 demand 13/15 time
Savings banks and trust companies	None	—	15%	10%	—	4/15 demand 2/10 time	11/15 demand 8/10 time
<b>*OKLAHOMA: (28)</b>							
State banks	Over 2,500	20%	—	—	—	1/3	2/3
"	Under 2,500	15%	—	—	—	1/3	2/3
Reserve banks	None	30%	—	—	—	1/3	2/3
Savings banks not doing general business	None	20%	—	—	—	1/2	1/2 (6)
<b>OREGON:</b>							
State banks and trust companies	None	—	15%	10%	10%	1/4	3/4
<b>PENNSYLVANIA:</b>							
All banks	None	—	15% (22)	7½%	—	1/3 de- time (30)	2/3 de- mand (29) time (30)
<b>*RHODE ISLAND:</b>							
State banks and trust companies	None	15%	—	—	—	2/5	3/5
<b>SOUTH CAROLINA:</b>							
All banks	None	—	7%	3%	—	(38)	(38)
<b>*SOUTH DAKOTA:</b>							
Reserve banks (35)	None	20%	—	—	—	(38)	(38)
Other banks	None	17½%	—	—	—	(38)	(38)
<b>TENNESSEE:</b>							
State banks and trust companies	None	—	10%	—	—	(38)	(38)
<b>TEXAS:</b>							
Banks — capital \$25,000 or over	None	—	15%	—	—	(38)	(38)
Other banks	None	—	20%	—	—	(38)	(38)
<b>UTAH:</b>							
Commercial banks	50,000 or over	20%	—	—	—	1/8	7/8
"	Under 50,000	15%	—	—	—	1/8	7/8
Savings banks	None	10%	—	—	—	1/4	3/4
<b>VERMONT:</b>							
All banks	None	—	15% (10)	—	3%	1/5 (31)	4/5 (29)
<b>*VIRGINIA:</b>							
State banks (32)	None	—	10%	3%	—	(38)	(38)
<b>WASHINGTON:</b>							
State banks and trust companies	None	15% (33)	—	—	—	(38)	(38)
<b>WEST VIRGINIA:</b>							
State banks and trust companies	None	—	15%	—	—	2/5	3/5
Savings banks	None	—	—	—	5% (34)	All (34)	—

## RESERVE REQUIREMENTS UNDER STATE LAWS—(Continued)

	Population Restrictions	Reserves required to be held upon				Distribution of reserves	
		Aggregate deposits	Demand deposits	Time deposits	Savings deposits	Cash in vault	Balances with depositaries
<b>*WISCONSIN:</b>							
Reserve banks	None	20%	—	—	—	(38)	(38)
Other state banks and trust companies	None	12%	—	—	—	(38)	(38)
Mutual savings banks	None	—	—	—	5%	(38)	(38)
<b>*WYOMING:</b>							
Commercial banks and trust companies	None	20% (38)	—	—	10%	(38)	(38)
Savings banks	None	—	—	—	10%	(38)	(38)

- (1) Or in U. S. bonds.
- (2) Deposits other than savings.
- (3) 6% deposits may be in Liberty bonds.
- (4) 7½% deposits may be in Liberty bonds.
- (5) 1/4 of balances may be in approved bonds.
- (6) Or approved bonds.
- (7) Reserve against time and savings deposits may be in unpledged U. S. or Georgia bonds.
- (8) Not less than 5% as cash in vault.
- (9) Ruling of auditor—not state law.
- (10) Commercial deposits payable on demand and subject to check.
- (11) Banks having 20% or more of deposits due to banks.
- (12) Banks having less than 20% of deposits due to banks.
- (13) 1/4 of reserves as cash with approval of banking commissioner.
- (14) U. S. bonds and demand loans secured by U. S. or municipal bonds accepted as reserve.
- (15) As designated by Federal Reserve Act.
- (16) Member banks' balances with Federal reserve bank accepted as cash in vault.
- (17) Including deposits subject to notice within 10 days.
- (18) 1/3 may be in U. S. or Maine bonds.
- (19) 1/3 may be in bonds.
- (20) 1/2 of cash and 1/3 of balances, or in all 2/5 of total reserve, may be in approved bonds.
- (21) Such portion of reserve as directors may determine may be on deposit with approved reserve agents, balance in cash.
- (22) All items or claims payable on demand.
- (23) If bank does not have office in borough of preceding class.
- (24) Prescribed percentage may be on deposit with Federal reserve bank.
- (25) No requirements as to cash in vault; all may be carried with reserve agents.
- (26) Total deposits on time certificates.
- (27) Deposits subject to notice as provided by law.
- (28) No specific law exists permitting state member banks to substitute Federal reserve in lieu of state requirements, but state authorities do not criticize such substitution.
- (29) 1/2 of balances may be in approved bonds.
- (30) 1/3 in approved bonds, 2/3 in cash or balances.
- (31) 1/2 of cash may be deposited in bank in same town or county.
- (32) State law by implication permits state member banks to comply with reserve requirements of Federal Reserve Act.
- (33) Reserve of 100% required against uninvested trust funds.
- (34) Set aside from profits and held as cash.
- (35) As defined by state law.
- (36) Liability to depositors other than savings.
- (37) Deposits in banking or commercial department.
- (38) Reserves consist of cash in vault and balance with approved reserve agents, no provision being made for definite distribution between the two.
- (39) Upon approval of banking commissioner one-half of reserves may be in bonds or other obligations of the United States.

a population of two millions or more, 15 per cent., and at least 10 per cent. must be maintained as reserves on hand.

(2) In a borough with a population of one million and less than two millions, 13 per cent., and at least 8 per cent. must be maintained as reserves on hand.

(3) When located elsewhere in the State, 10 per cent. Trust companies located in cities of the first and second class, but not falling within Sections (1) and (2) above, must maintain at least 4 per cent. of such deposits as reserves on hand; trust companies located in cities of the third class and in incorporated and unincorporated villages, must maintain at least 3 per cent. of such deposits as reserves on hand.

Any part of the reserves on hand in excess of 3 per cent. of such deposits may be deposited, subject to call, with a Federal reserve bank in the district in which the trust company is located and the reserves on hand not so deposited must consist of gold, gold bullion, gold coin, United States gold certificates, United States notes, or any form of currency authorized by the laws of the United States. If the trust company is a member of the Federal Reserve System, it maintains the reserves required by that system.<sup>9</sup>

Every private banker is required to maintain total reserves against his aggregate demand deposits as follows:

(1) If in a city of the first class, 15 per cent. (2) If in any other city, 10 per cent. At least one-tenth of such reserves must be kept on hand and the remainder may be redeposited subject to call in any State bank, national bank, or trust company.<sup>10</sup>

### **Reserve requirements of banks outside continental United States**

National banks, or banks organized under local laws, located in Alaska or in a dependency or insular possession or any part of the United States outside the continental United States may remain non-member banks, and in that event, shall maintain reserves and comply with all the conditions now provided by law regulating them; or such banks, with the consent of the Federal Reserve Board, may become member banks of any one of the Federal reserve districts, and in that event shall take stock, maintain reserves, and be subject to all the other provisions of the National Bank Act as amended.<sup>11</sup>

<sup>9</sup>*State Banking Law*, Section 197, amended by Chap. 579, Law of 1917; Chap. 92, Law of 1918; and Chap. 35, Law of 1919.

<sup>10</sup>*State Banking Law*, Section 166.

<sup>11</sup>*Federal Reserve Act*, Section 19.

**Reserve requirements of foreign branches of member banks**

Where national banks have established foreign branches the reserve requirements are regulated by the Federal Reserve Board. The Federal Act, itself, merely provides that every national banking association which establishes such branches shall conduct the accounts of the foreign branch independently of the accounts of other foreign branches established by it and of its home office, and shall at the end of each fiscal period transfer to its general ledger the profit or loss accrued at each branch as a separate item.<sup>12</sup> Power is given to the Federal Reserve Board to prescribe the reserve requirements of foreign branches, but the Board has never stipulated definite requirements for such banks. As a result these branches maintain reserves in accordance with the general banking policy or needs of the country in which they are located, the parent bank not being required to carry any lawful reserve against such deposit liability. For example, in Cuba the branches of the National City Bank of New York are required, according to local regulations, to carry a reserve of 25 per cent.; in Spain the branches generally carried reserves varying from 30 to 50 per cent., due to unsettled political conditions. It has been held by counsel for the Federal Reserve Board that Section 19 of the Federal Reserve Act, which prescribes the reserve requirements of member banks, does not apply to their foreign branches.<sup>13</sup>

**Reserve requirements of banking corporations authorized to do foreign banking business (so-called Edge Corporations)<sup>14</sup>**

Banking corporations organized under authority of Section 25 (a) of the Federal Reserve Act for the purpose of engaging in international or foreign banking and financial operations are required by the Act to carry such reserves as the Federal Reserve Board may prescribe, but in no event to be less than 10 per cent. per annum, against deposits received in the United States. Such banking institutions, commonly known as Federal foreign banking associations, may receive only such deposits within the United States as may be incidental to or for the purpose of carrying out

<sup>12</sup>*Federal Reserve Act*, Section 25; *Federal Reserve Bulletin*, Vol. IV (1918), pp. 1123-1124.

<sup>13</sup>*Federal Reserve Bulletin*, Vol. IV (1918), pp. 1123-1124. Cf. F. H. Curtis, "Bank Reserves under the Federal Reserve System," *Harvard Business Review*, Vol. I (October, 1922), p. 46.

<sup>14</sup>In April, 1924 (date of writing), there were but two such corporations, one at New York City and one at New Orleans. In the middle of April the New York Corporation, known as the First Federal Banking Association, was absorbed by the Bank of Manhattan Company.

transactions in foreign countries or dependencies or insular possessions of the United States.

The Federal Reserve Board has ruled that "Against all deposits received in the United States a reserve of not less than 13 per cent. must be maintained. This reserve may consist of cash in vault, a balance with the Federal reserve bank of the district in which the head office of the corporation is located, or a balance with any member bank. Against all deposits received abroad the corporation shall maintain such reserves as may be required by local laws and by the dictates of sound business judgment and banking principles."<sup>15</sup>

The Board has also ruled that against all acceptances outstanding which mature in thirty days or less, a reserve of at least 15 per cent. shall be maintained, and against all acceptances outstanding which mature in more than thirty days a reserve of at least 3 per cent. shall be maintained. Reserves against acceptances must be in liquid assets of any or all of the following kinds: (1) Cash; (2) balances with other banks; (3) bankers' acceptances; and (4) such securities as the Federal Reserve Board, from time to time, may permit.<sup>16</sup>

#### What constitutes reserves

So far as member banks in the Federal Reserve System are concerned, reserves are composed of lawful money deposited with the Federal reserve banks. Lawful money consists of gold and silver, gold certificates, silver certificates, and United States notes. Clearing house certificates of any clearing house association, representing specie or lawful money specially deposited for the purpose, are also deemed to be lawful money in the possession of any association belonging to such clearing house, holding or owning such certificate.

Since the legal reserves of member banks are in the Federal reserve banks the lawful money has assumed the form of reserve deposits—balances due from approved Federal reserve agents. To keep lawful money in its own vaults to meet demands made at the bank is expensive, and, as a result, bank notes or Federal reserve notes should be used whenever possible as till money. The balances with the Federal reserve banks are available to meet those liabilities which can be discharged by checks or drafts drawn

<sup>15</sup>Regulation K, Series of 1923, *Federal Reserve Bulletin*, Vol. IX (1923), pp. 907-908.

<sup>16</sup>Regulation K, *loc. cit.*



against them. Although clearing house deposits, usually in gold, are available to meet demands presented through the clearing house, and the 5 per cent. redemption fund, in lawful money, is available to redeem national bank notes, neither fund counts as part of the legal reserve. It means that in actual practice, the member banks are carrying as reserve much more than the legal reserve required.

The reserves of member banks in the Federal reserve banks may be built up by the presentation of checks and drafts on other banks for collection and credit to these reserve deposits. But such items cannot be counted as part of the reserve until sufficient time has elapsed for the collection of the items. A violation of this regulation subjects the member bank to certain penalties.<sup>17</sup>

The reserves of the Federal reserve banks against deposits are composed of gold or lawful money. The 40 per cent. reserve required against Federal reserve notes is composed of gold and includes the five per cent. redemption fund held at Washington. The five per cent. redemption fund held against Federal reserve bank notes is composed of lawful money and is not counted as part of the required reserve. This fund is also held at Washington, although the law does not require it. The reserves are computed against deposits and Federal reserve notes combined, and, as listed in the weekly consolidated statements of the Federal reserve banks, include the following items: (1) Gold and gold certificates, (2) Gold Settlement Fund, with the Federal Reserve Board, (3) gold with foreign agencies, (4) gold with Federal reserve agents, (5) gold redemption fund against Federal reserve notes, and (6) United States notes, silver, etc. The Federal Reserve Act does not state except by implication, where these reserves are to be carried. With the approval of its counsel the Federal Reserve Board has permitted or required the Federal reserve banks to keep portions of their reserves in various places.

The gold coin, gold certificates, United States notes, silver, etc., are the till money held in the vaults of the Federal reserve banks; the Gold Settlement Fund is held at Washington; gold with foreign agencies is held by agencies abroad, such as the Bank of England; gold with the Federal reserve agents is held by the Federal reserve agents as security against Federal reserve notes partly at Washington and partly in the vaults of the Federal reserve banks; the gold redemption fund against the Federal re-

---

<sup>17</sup>See Regulation J, Series of 1924, *Federal Reserve Bulletin*, Vol. X (1924), pp. 489-491.

serve notes is held at Washington. According to Westerfield<sup>18</sup> this allocation of parts of the reserve to different places and uses does not mean that it is any less a reserve, but rather that it is a more efficient reserve, for it is placed where payments are most conveniently and frequently made:

The nature of the reserves of the State banks, trust companies, and private banks in the State of New York, as well as the requirements as to where they shall be carried, have been pointed out at sufficient length above.<sup>19</sup> Banks outside the continental United States, such as national banks or banks organized under local laws such as those in Alaska or Hawaii maintain reserves in lawful money as defined above. Edge corporations are required to maintain reserves in cash against deposits. The reserves against acceptances may be in cash, balances with other banks, bankers' acceptances, or such securities as the Federal Reserve Board may permit.

#### **Nature of the deposits against which reserves are carried**

Before becoming involved in the more technical subject of computing reserves, it may simplify the problem to examine first of all the nature of the deposits against which the reserves are held.

##### **1. In member banks**

Member banks may receive, as indicated above, demand or time deposits. Demand deposits comprise all cash deposits and deposits resulting from loans (derivative deposits) payable within thirty days. Cash (primary) deposits include deposits of specie, bank notes, government paper money, and checks and drafts payable upon presentation. The checks and drafts may be deferred liabilities, however, depending upon the time required to convert them into cash. This will be true unless the bank indulges in the common practice of giving immediate credit for such deposit items even though some time must elapse before the bank can convert them into cash. Maturing notes and bills become effective deposits only when actually collected. Certified and cashier's checks are treated as demand deposits. Certificates of deposit may be either time or demand; if demand, the full reserve must be carried against them.

<sup>18</sup>R. B. Westerfield, *Banking Principles and Practice*, Vol. II (New York, 1921), p. 277.

<sup>19</sup>See pp. 334-339.

Demand deposits, in turn, may be composed of individual or ordinary deposits, bank deposits, or government deposits. Government deposits other than postal savings deposits, which are time deposits, are exempt, with certain exceptions, from reserve requirements, but are usually secured by the deposit of government securities. Government deposits include the general and current funds of the government. Other funds that may be deposited with member banks are reserve funds of the War Finance Corporation; securities and current funds, subject to check and for interest payments, of the Federal land banks; current funds, subject to check, of national agricultural credit corporations. In addition, member banks may receive deposits from virtually any other type of bank, such as private, State bank or trust company, Edge corporations, foreign banks, and other member banks. These deposits appear in the item "Due to banks". It will be unnecessary to enter into a discussion of bank note liabilities beyond that given above.

(1) *Government deposits in member banks against which reserves must be held.* In addition to the fact that reserves must be held against postal savings deposits, the Federal Reserve Board, in May, 1923, ruled that certain other government deposits are not exempt from the reserve requirements set forth in Section 19 of the Federal Reserve Act. These deposits are classed as follows:

(a) Deposits of Philippine funds made by the Philippine government and carried under the title "Treasurer of the Philippine Islands currency reserve fund account."

(b) Deposits of Porto Rican funds made by the Porto Rican government.

(c) Deposits of Indian funds under the control of the Department of the Interior.

(d) Deposits of States, counties or municipalities.

(e) Deposits of the United States Shipping Board and deposits of the Emergency Fleet Corporation.

In the same connection, however, it should be noted that the Board has held that deposits made by United States postmasters of government funds, other than postal savings deposits, collected by them or which have come into their possession by virtue of their official position, should be deemed to constitute "deposits of public moneys by the United States," and, when made in desig-

nated depositaries, such deposits are exempt from the reserve requirements specified in Section 19 of the Federal Reserve Act.<sup>20</sup>

(2) *Time deposits.* The Federal Reserve Act defines time deposits as all those payable after 30 days, all savings accounts and certificates of deposit which are subject to not less than 30 days' notice before payment, and all postal savings deposits.

The term "time deposits, open accounts," is held to include all accounts, not evidenced by certificates of deposit or savings pass books, in respect to which a written contract is entered into with the depositor at the time the deposit is made that neither the whole nor any part of such deposit may be withdrawn by check or otherwise, except on a given date or on written notice which must be given by the depositor a certain specified number of days in advance, in no case less than 30 days.

The term "savings accounts" is held to include those accounts of the bank in respect to which, by its printed regulations, accepted by the depositor at the time the account is opened, (a) the pass book, certificate, or other similar form of receipt must be presented to the bank whenever a deposit or withdrawal is made, and (b) the depositor may at any time be required by the bank to give notice of an intended withdrawal not less than 30 days before a withdrawal is made.

A "time certificate of deposit" is defined as an instrument evidencing the deposit with a bank, either with or without interest, of a certain sum specified on the face of the certificate payable in whole or in part to the depositor or on his order—

(a) On a certain date, specified on the certificate, not less than 30 days after the date of the deposit, or

(b) After the lapse of a certain specified time subsequent to the date of the certificate, in no case less than 30 days, or

(c) Upon written notice, which the bank may at its option require to be given a certain specified number of days, not less than 30 days, before the date of repayment, and

(d) In all cases only upon presentation of the certificate at each withdrawal for proper indorsement or surrender.<sup>21</sup>

(3) *Reserves against trust funds.* A national bank or other member bank exercising fiduciary powers need not carry reserves against trust funds, which it keeps segregated and apart from its general assets. This is true, also, if the trust funds are deposited with another bank to the credit of its trust department. When,

<sup>20</sup>*Federal Reserve Bulletin*, Vol. V (1919), p. 1054; Vol. IX (1923), p. 559.

<sup>21</sup>Regulation D, Series of 1923, *Federal Reserve Bulletin*, Vol. IX (1923), pp. 896-897.

however, a national bank deposits trust funds in its commercial department or mingles them with its general funds, a deposit liability is created against which reserves must be carried in the Federal reserve bank. But trust funds cannot be deposited in the bank's commercial department unless the bank deposits proper collateral in its trust department as security to the trust estate for the funds thus used. This security must consist of United States bonds or other readily marketable securities owned by the bank, and which shall at all times be equal in market value to the amount of the funds so deposited.

If the national bank receiving funds in its fiduciary capacity deposits those funds in another institution, the liability of that other institution is a deposit liability against which it must carry a reserve balance with its Federal reserve bank, if it is a member bank. Such a deposit should be designated in some way as a deposit for account of the national bank as fiduciary and the depository bank must treat it as an individual deposit rather than a bank deposit; that is, in computing its required reserve, the depository bank may not include its liability to the national bank as fiduciary among the amounts due to other banks from which the amounts due from other banks may be deducted. This necessarily results from the fact that the transfer of trust funds to the depository bank constitutes a deposit by the national bank as fiduciary and not a deposit by such bank in its own right, and consequently the deposit is not an item due to banks generally, but is an item due to the national bank as fiduciary and so analogous to an individual deposit.

Whether or not funds deposited by a corporate debtor to meet maturing obligations are trust funds depends upon the terms of the agreement, expressed or implied. If the bank is acting as trustee under a deed of trust for the holders of the obligations which are to be paid, the presumption would be, in the absence of evidence to the contrary, that it was the intention of the parties that the funds received should be held as trust funds subject to the terms of the deed of trust. On the other hand, if the bank has no duty to the holders of the obligations, and there is no special agreement setting forth the bank's duties in regard to handling the funds, the bank being authorized merely to pay the obligations when and as presented, the presumption would be that the transaction was intended to give rise to an ordinary deposit liability, the bank having authority to mingle the funds with its gen-

eral assets and acting merely as the agent of the corporate debtor in paying the obligations.<sup>22</sup>

## 2. Nature of deposits in Federal reserve banks

The usual distinction between demand and time deposits loses its importance when one considers the nature of deposits in the Federal reserve banks. The weekly Federal reserve statements list but three kinds of deposits under the general term "Deposits": (1) Government, (2) member banks—Reserve account, and (3) all other.

(1) *Government deposits.* Section 15 of the Federal Reserve Act provides for the deposit, subject to the discretion of the Secretary of the Treasury, in Federal reserve banks of the general and current funds of the government, except the funds for the redemption of national bank notes and Federal reserve notes. The revenues of the government, or any part of them, may be deposited in the Federal reserve banks, and disbursements may be made by checks drawn against such deposits. Against government deposits the Federal reserve banks are required to keep the usual reserves of 35 per cent.<sup>23</sup> If any moneys or bullion, constituting trust funds or other special funds required by law prior to 1920 to be kept in Treasury offices are deposited in any Federal reserve bank, such funds must be kept separate from the assets, funds and securities of the Federal reserve bank and held in the joint custody of the Federal reserve agent and the Federal reserve bank.<sup>24</sup>

The general and current funds of the government are carried in an account called "Treasurer United States General Account," which is built up chiefly through deposits of tax collections by collectors of internal revenue and other revenue collecting bureaus, deposits resulting from the sale of government securities, and transfers of funds from other depositaries. It represents a credit available for the general purposes of the government. The principal charges to this account are for the redemption of government securities, the payment of interest on the public debt, transfers to other depositaries, and the payment of checks and warrants of the United States Treasurer. This account is under

<sup>22</sup>*Federal Reserve Bulletin*, Vol. VIII (1922), pp. 572-573.

<sup>23</sup>Federal land banks and joint stock land banks, when serving as government depositaries, are required to deposit the proper collateral security in the form of United States bonds or otherwise. Section 6 of the *Farm Loan Act*, approved July 17, 1916.

<sup>24</sup>*Appropriation Act*, approved May 29, 1920.

the control of the Treasurer of the United States and entries may be made only after authorization by the Treasury Department.

(2) *Reserve deposits of member banks.* The reserve of a member bank consists of the deposit rights against the Federal reserve bank. This reserve balance of a member bank is divided into "account current" and "reserve account", and transfers from one account to the other can be made at the member's direction. In addition to their reserves, member banks may deposit current funds in lawful money, national bank notes, Federal reserve notes, checks and drafts payable upon presentation, and for collection, maturing notes and bills. Collection items become demand deposits against which reserve must be kept only when actually collected. Checks and drafts, likewise, are available as reserve deposits according to the time schedules.

(3) *All other deposits.* In addition to government and member bank deposits, a Federal reserve bank may receive deposits from various sources. Section 13 of the Act provides that a Federal reserve bank, "solely for purposes of exchange or of collection," may receive from other Federal reserve banks deposits of current funds in lawful money, national bank notes, or checks upon other Federal reserve banks, checks and drafts, payable upon presentation within its district, and maturing notes and bills payable within its district. Because of the operation of daily settlements through the Gold Settlement Fund the necessity of an account for exchange purposes no longer exists, and for the same reason the credits created in the name of another reserve bank for collections made for its account are paid to it at the close of business each day in gold, so that in actual practice a reserve bank does not carry the deposits of another reserve bank, although it does maintain on its books two very active accounts with each of the other reserve banks: (1) The debit or *Due from account*, and (2) the credit or *Due to account*. These items do not appear in the statements issued by the Federal reserve banks.

A non-member bank or trust company may carry with the Federal reserve bank of its district a balance sufficient to offset items sent to the Federal reserve bank for collection and may make deposits, "solely for the purpose of exchange or of collection," of such items as those enumerated for member banks. It is entirely optional with a Federal reserve bank whether it will or will not receive deposits from non-member banks. The Act, itself, mentions but one condition to such deposits, and that is that a non-member bank shall maintain a balance sufficient to offset the

items in transit. The Federal reserve bank accepting such deposits may make such conditions as may be desirable concerning the balance to be maintained, the service to be rendered, etc.

Funds of the Philippine Islands and a certain part of the net earnings of the War Finance Corporation, which are accumulated as a reserve fund may be deposited in Federal reserve banks. The latter is deposited in the Federal reserve banks upon the direction of the Board of Directors of the War Finance Corporation and with the approval of the Secretary of the Treasury. Federal reserve banks act as depositaries for and fiscal agents of national agricultural credit corporations and Federal intermediate credit banks. Banking corporations doing foreign banking business<sup>25</sup> may carry their reserves with the Federal reserve banks. The Federal Reserve Act does not state specifically that the farm loan banks either may or shall deposit in the Federal reserve banks. The deposits of the farm loan banks, therefore, are received under a special arrangement and for a single purpose, which is the payment of interest on the farm loan bonds. The Federal Reserve Bank of New York pays all this interest and in 1921 was the only reserve bank having any account with the farm loan banks.<sup>26</sup> The accounts with a few of the foreign governments and with foreign banks are all carried under special arrangements for mutual convenience in the transaction of business.

### 3. Nature of deposits in non-member State banks, trust companies, and private banks

State banks, not members of the Federal Reserve System, receive all deposits authorized by the State law; in general, those common to all commercial banks. According to the provisions of the Federal Reserve Act, no bank not a member of the Federal Reserve System may act as a government depository. Nor may any member bank keep on deposit with any State bank or trust company which is not a member bank a sum in excess of ten per cent. of its own paid-up capital and surplus. During the early years of the War, however, public funds were deposited in non-member banks. This was due partly to steps taken by the Secretary of the Treasury in his effort to keep government funds widely scattered and partly to a series of war acts more or less

<sup>25</sup>Edge Corporations.

<sup>26</sup>L. R. Rounds, "Deposits and Reserves of the Federal Reserve Banks," Lecture No. 6, Federal Reserve Act Course, *Federal Reserve Club Magazine* (February, 1921), p. 666.



amendatory in nature. Under authority of acts passed in 1917 and 1918, the proceeds of the sale of Liberty bonds of the first, second, and third issues could be deposited in non-member banks.<sup>27</sup> The Act of May 18, 1916, amending the Postal Savings Act, authorized the deposit of postal savings funds in non-member banks.<sup>28</sup>

What has been observed relative to non-member State banks is applicable in general to non-member trust companies. Wide variations in the types of private banks make generalization more difficult. They may be classified as either investment banks or small country banks. Both types are too diversified in nature to make any sort of generalization safe. Data on the latter type are very incomplete. Some are entirely outside corporation law.

#### **4. The nature of deposits in Federal foreign banking associations**

Federal foreign banking associations receive only such deposits within the United States as may be incidental to or for the purpose of carrying on their foreign business; that is, they do not have ordinary deposit accounts. Their liabilities take the form, rather, of acceptances. They make advances on export drafts through acceptance credits, accept drafts drawn on themselves by responsible exporters, and sell them to banks throughout the country. It is primarily against acceptances that their reserve is held.

#### **The computation of reserves. 1. Of member banks**

The fundamental purpose underlying the present plan of computing reserves is to compel member banks to compute real reserves against real deposits. It eliminates the practice indulged in prior to the establishment of the Federal Reserve System and the organization of the present clearing and collection system, of counting as reserve, checks in the mail before they reach the drawee bank. The statute provisions regulating the computation of reserves are brief. First of all, demand deposits are distinguished from time deposits. Section 19 of the Federal Reserve Act provides, in part: "Demand deposits within

---

<sup>27</sup>Section 7 of the *First Liberty Bond Act*, approved April 24, 1917; Section 8 of the *Second Liberty Bond Act*, approved September 24, 1917, and amending Section 15 of the *Federal Reserve Act* relating to government deposits, and Section 19 which prescribes reserve requirements of member banks; and Section 8 of the *Third Liberty Bond Act*, approved April 4, 1918; and also amending Sections 15 and 19 of the *Federal Reserve Act*.

<sup>28</sup>Section 2 of the *Postal Savings Act*, approved June 25, 1910, as amended by the Act approved May 18, 1916.

the meaning of this act shall comprise all deposits payable within 30 days, and time deposits shall comprise all deposits payable after 30 days, all savings accounts and certificates of deposit which are subject to not less than 30 days' notice before payment,

**FORM PREPARED BY THE FEDERAL RESERVE BOARD  
FOR THE COMPUTATION OF RESERVES TO BE  
CARRIED BY MEMBER BANKS WITH  
FEDERAL RESERVE BANKS**

Date .....

**NET DEMAND DEPOSITS**

1. Deposits payable within thirty days not including U. S. Government Deposits and Items 2, 3, 4 and 5 . . . . . \$ .....
2. Balance due to Banks other than Federal Reserve Bank (include Foreign Banks) \$ .....
3. Amount due to Federal Reserve Bank Deferred Credits . . . . . \$ .....
4. Cashier's checks outstanding . . . . . \$ .....
5. Certified checks outstanding . . . . . \$ .....

Total due to banks (Items 2, 3, 4 and 5) . . . . . \$ .....

Less

Deductions of the following items are permitted only from the total of Items 2, 3, 4 and 5. Should the total of Items 6, 7, 8 and 9 exceed the total of Items 2, 3, 4 and 5, both groups must be omitted from the calculation

6. Balances due from banks other than Federal Reserve Bank and Foreign banks . . . . . \$ .....
7. Items with Federal Reserve Bank in process of collection . . . . . \$ .....
8. Exchanges for Clearing House . . . . . \$ .....
9. Checks on other banks in the same place . . . . . \$ .....

Total deduction (Items 6, 7, 8 and 9) . . . . . \$ .....

10. Net Balance due to banks . . . . . \$ .....
11. Total Net Demand Deposits (Items 1 and 10) . . . . . \$ .....

**TIME DEPOSITS**

12. Savings accounts (subject to not less than thirty days' notice before payment) . . . . . \$ .....
13. Certificates of deposit (subject to not less than thirty days' notice before payment) . . . . . \$ .....
14. Other deposits payable only after thirty days . . . . . \$ .....
15. Postal Savings Deposits . . . . . \$ .....
16. Total Time Deposits (Items 12, 13, 14 and 15) . . . . . \$ .....

FORM 1

and all postal savings deposits.” It further provides that “In estimating the balances required by this Act, the net difference of amounts due to and from banks shall be taken as the basis for ascertaining the deposits against which required balances with the Federal reserve bank shall be determined.”

Demand deposits for reserve calculations consist of: (1) Deposits (including dividends unpaid) other than United States

government deposits, payable within thirty days (Item 1),<sup>29</sup> and (2) the net balances due to banks. The reserve required against these demand deposits is 7, 10, or 13 per cent. of the sum of these two items, according to the location of the bank. The net balance due to banks is ascertained in the following manner: First, are added together these items: (a) The balances due to all banks (including foreign banks) other than the Federal reserve bank (Item 2), (b) amount due to Federal reserve bank deferred credits (Item 3), (c) outstanding cashier's, secretary's or treasurer's checks on own bank (Item 4), and (d) certified checks outstanding (Item 5). From the total of these items is deducted the following: (a) Balances due from banks other than Federal reserve bank and foreign banks (Item 6), (b) items with the Federal reserve bank in process of collection (Item 7), (c) exchanges for the clearing house (Item 8), and (d) checks on other banks in the same place (Item 9).

Member banks are permitted to treat checks on other banks in the same place and exchanges for clearing houses as balances *due from* other banks, and to deduct the aggregate of such items from the aggregate balance *due to* other banks in order that items payable in the same city in which the member bank is located may be placed on a parity with items payable elsewhere.<sup>30</sup> However, in the same year, the Board ruled that member banks cannot deduct cash on hand from liabilities against which reserves must be held. The Board took the position that since cash in the vaults of member banks cannot be counted as reserve there were no grounds on which it could be deducted. To permit such a deduction would amount to a reduction of the reserve requirements. These can be suspended only upon the affirmative vote of five members of the Board, in which case a tax must be imposed upon any impairment.<sup>31</sup>

If the aggregate "Due from Banks" exceeds the aggregate "Due to Banks," both amounts are omitted from the calculation. Member banks are not permitted to deduct checks on the same place, or exchanges for the clearing house *directly* from gross demand deposits, but in deducting balances "Due from Banks" from "Due to Banks," these items may be included in "Due from Banks." This procedure does not permit reductions to the ex-

<sup>29</sup>See Form I.

<sup>30</sup>From a ruling of the Federal Reserve Board, rendered July 19, 1917. See *Federal Reserve Bulletin*, Vol. III (1917), pp. 692-693.

<sup>31</sup>*Federal Reserve Bulletin*, Vol. III (1917), p. 614.

tent that would be possible if member banks were permitted to deduct checks and exchanges for the clearing house from gross demand deposits. Adding such items to "Due from Banks" may cause the total of "Due from Banks" to equal or exceed "Due to Banks" in which case both items are ignored. If checks and exchanges for the clearing house on other banks in the same place were deducted from gross demand deposits, there would be no instance in which they would be ignored. Thus, under this method of computation, a higher percentage of reserve is required. See Form 1 on page 351.

The account "Due to Federal Reserve Bank Deferred Credits" (Item 3) is the one to which items received from the Federal reserve bank are credited on the day of receipt if they are to be paid by a charge against the bank's reserve account; and the account, "Due to Federal Reserve Bank Deferred Credits," will be debited, and the account, "Due from the Federal Reserve Bank, Reserve Account," will be credited on the day when these items become a charge against the bank's reserve account on the books of the Federal reserve bank.

As to the wisdom of deducting items with the Federal reserve bank in process of collection some question arises. On this subject Mr. F. H. Curtis says:

"Recent court decision have tended to establish the right of a depositor to draw against checks credited to his account, even though uncollected, thus raising a question of the bank's liability for uncollected funds, and therefore it would appear that if a bank does create a deposit liability through such a credit, reserves should be carried on the aggregate deposit liability and there should be no deductions as at present."<sup>32</sup>

The process of computing reserves against time deposits is simple. It has been pointed out elsewhere that time deposits, for purposes of reserve calculations, consist of the sum of the following items: (1) Savings accounts subject to not less than thirty days' notice before payment, (2) certificates of deposit subject to not less than thirty days' notice before payment, (3) other deposits payable only after thirty days, and (4) postal savings deposits. The reserve required against the time deposits is 3 per cent. for all member banks regardless of their location. See Form 1, p. 351.

---

<sup>32</sup>F. H. Curtis, "Bank Reserves under the Federal Reserve System," *Harvard Business Review*, Vol. I (October, 1922), p. 46.

The analysis of reserve account by member banks

It is important for a member bank to know not only each week or each two weeks how its reserve account stands, but on each day. To accomplish this end the Federal reserve banks provide their member banks with forms in accordance with which they analyze their reserve accounts. The Form 2 below, which

ANALYSIS OF ACCOUNT WITH FEDERAL RESERVE BANK OF NEW YORK SHOWING AMOUNT AVAILABLE AS LEGAL RESERVE													
ITEMS AVAILABLE July 16 and before				ITEMS AVAILABLE July 17				ITEMS AVAILABLE July 18					
DATE SENT	DEBIT	DATE SENT	CREDIT	DATE SENT	DEBIT	DATE SENT	CREDIT	DATE SENT	DEBIT	DATE SENT	CREDIT	DATE SENT	CREDIT
14	11 000	14	5 000	14	2 300	16	800	15	6 000	17	1 000		
14	20 000	14	600	14	1 400	16	1 500	16	5 000	17	12 500		
14	8 000	14	16 500	15	2 100	16	11 500	17	9 500				
15	16 000	14	10 000	16	12 500	16	25 000	17	400				
15	3 000	15	6 000	16	2 000								
15	3 000	15	200	17	6 000								
16	25 000	15	1 000										
		16	12 000										
		16	9 000										
		16	15 000										
<b>TOTAL</b>	<b>83 350</b>	<b>TOTAL</b>	<b>75 300</b>	<b>TOTAL</b>	<b>25 300</b>	<b>TOTAL</b>	<b>38 800</b>	<b>TOTAL</b>		<b>TOTAL</b>		<b>TOTAL</b>	
<b>RESERVE POSITION</b>				<b>RESERVE POSITION</b>				<b>RESERVE POSITION</b>					
Add yesterday's Available Res.	84 315	Average Required To date	84 250	Add yesterday's Available Res.	92 365	Average Required To date	84 396	Add yesterday's Available Res.		Average Required To date			
Deduct Today's Credits	167 665	Available To date	92 365	Deduct Today's Credits	118 665	Average Available To date	86 115	Deduct Today's Credits		Available To date			
Available Reserve Today	75 300			Available Reserve Today	38 800			Available Reserve Today					
Net Demand Deposits	986 000	Required Reserve at 7%	68 950	Net Demand Deposits	987 000	Required Reserve at 7%	69 000	Net Demand Deposits		Required Reserve at 7%			
Time Deposits	510 000	Required Reserve at 3%	15 300	Time Deposits	515 000	Required Reserve at 3%	15 450	Time Deposits		Required Reserve at 3%			
		Total Required Reserve	84 250			Total Required Reserve	84 540			Total Required Reserve			

In the illustration above it is assumed that the analysis was started on July 16 and that the debit balance as shown by the statement on July 15 was all available by July 16. It is possible to trace readily the entire make-up of the analysis shown on the account. It will be noted that all items available on or before July 16 have been entered under that date while those available later have been entered under the proper subsequent date. By the use of this analysis the available reserve balance for each day can be determined by adding to the previous day's available balance the debit items of the current day and deducting from the total the credit items of the current day. Member banks maintaining a collection account with the Federal Reserve Bank will find this form of use as an analysis of the collection account and as the basis of making transfers from the collection to the reserve account. The form also provides for showing the actual required reserve each day which figure should be arrived at from the form on which net demand and time deposits are calculated daily (Form R. B. 14). It will be found desirable also to show the average required reserve to date for either the weekly or semi-monthly period, as the case may be, and the average available reserve for the same period.

FORM 2

is prescribed by the Federal Reserve Bank of New York for member banks, will repay careful study. Items sent by a member bank to its Federal reserve bank for collection and credit will become available at certain dates according to the time schedule provided by its Federal reserve bank. For example, it will be noticed that on July 14 items amounting to \$11,000 were sent to the Federal reserve bank which were available in one day as reserve, although on the accompanying form, all items available as reserve on the 14th and 15th are listed on the 16th. A more

simple illustration is to be found in the one-day items amounting to \$12,500 which were sent to the Federal reserve bank on July 16. This item will be found under the day July 17 as available reserve. In like manner, the two-day items amounting to \$5,000 are found available under the date July 18. All items are listed in this manner when sent out for collection, and a bank, at all

**ANALYSIS OF RESERVE ACCOUNT**

It is of value and importance to a member bank to know each day the amount of its available reserves. By the use of a form, similar to that shown on the lower half of this sheet, it is a very easy matter to analyze the account DUE FROM FEDERAL RESERVE BANK and arrive at the amount of available reserve.

To use this form it will not be necessary for the member bank to make any change whatever in its present method of keeping its account with the Federal Reserve Bank. It will only be necessary to enter each item whether debit or credit going into the account under the date on which it is figured the corresponding entry will be made on the books of the Federal Reserve Bank.

Member banks maintaining hot one account with the Federal Reserve Bank can readily prove this analysis to their ledger account by adding to the current day's available reserve all of the debit items and subtracting all credit items appearing under the two-part date.

The figures shown in the analysis are taken from the specimen statement of account appearing immediately below.

**MONTHLY STATEMENT OF RESERVE ACCOUNT**

ACCOUNT OF THE  
X NATIONAL BANK  
DUE FROM FEDERAL RESERVE BANK

MONTH OF  
July 1919

DATE		DEBITS	AMOUNT	DATE	AMOUNT	CREDITS	DATE	DEBIT BALANCE
						BALANCE		
14	CL	1 D *	11,000	14	5,000 †	Dft	18	84,315
		3 D	2,300		600 †	"		
		8 D	1,400		16,500 †	" For C L		
	Re Disc		20,000 †		10,000 †	Wire Transfer		
	Currency		8,000 †					
15	CL	1 D	16,000	15	6,000 †	Note	14	94,915
		2 D	2,100		200	Dft		
		8 D	6,000		1,000	"		
	Cpn Letter		350		12,000	" For C L		
	Currency		8,000					
16	CL	1 D	12,500	16	9,000	Note	15	103,165
		2 D	5,000		800	Dft		
	Re Disc		25,000		1,500	"		
	Currency		2,600		11,500	" For C L		
					15,000	Wire Transfer		
					25,000	Dft	16	84,965
17	CL	1 D	9,500	17	1,000	"		
	Cpn Letter		400		12,500	" For C L	17	87,265
	Re Disc		6,000					

\* 1 D etc., indicate the number of days that elapse between the date items are forwarded and the date it is expected they will be available on the books of the Federal Reserve Bank. This information can be easily determined by referring to the time schedule issued by the Federal Reserve Bank.

† Debits and credits entering into analysis on July 14 and July 15 are in this illustration all entered under date of July 16.

FORM 2—(Continued)

times, is able to determine the size of its reserve with its Federal reserve bank.

**The method of computing semi-monthly and daily reserve requirements in a country national bank**

Since approximately 9,000 of the 9,928 banks which were members of the Federal Reserve System at the close of June, 1922,

constitute country banks, it seems quite proper to show the method of computing reserves in one of these banks.<sup>33</sup>

Accounting procedure in country banks, as a rule, is not carried to the extent found in the reserve city, and central reserve city banks, and as a result Mr. Smelser undertakes to point out how, with two very simple forms, country banks may obtain a daily proof of their individual ledgers, obtain the necessary information with which to compute their reserve requirements, and at the same time provide a record which, from day to day, is invaluable in determining the average daily excess or deficiency in reserve.

The first form to be described is the *Auditor's Proof of Individual Ledgers*, Form 3. This form is executed daily by the individual books department after the control figures for individual deposits have been assembled and the customers' accounts in each ledger are listed and balanced. According to this form the twenty-five ledger divisions are divided among ten bookkeepers. Each bookkeeper is required to sign his name opposite his division of accounts and certify that the balance appearing on this report is correct as reflected by the trial balance taken off the ledgers.<sup>34</sup> As soon as each bookkeeper has listed all accounts in his division and balanced the total amount to the daily control figures, the total amount of the net balances together with the amount of all overdrafts, is entered in the space provided. The five bookkeepers who handle public funds and government deposit accounts are required to enter in the lower left space, "Deductions from deposits," the balance appearing on the accounts as designated. When this form is completed by the bookkeepers, the manager of the department enters the total balance of "Inactive" accounts, verifies the balances of public funds and government deposit accounts with the ledger accounts, as entered on the form, initials the report and sends it to the auditing department. Mr. Smelser points out parenthetically that all individual ledgers are posted each day before the bookkeepers leave the bank. No checks or deposit tickets are ever held over for posting the following morning. The work of the statement clerks and the pro-

---

<sup>33</sup>The method outlined here is that followed by the First-Second National Bank of Akron, Ohio. This method was described by Mr. C. R. Smelser, the auditor of this bank, in *The Burroughs Clearing House* (November, 1922), pp. 8-9, 48-49. Of the 9,000 country member banks, over 7,000 are national; consequently this method as described here should serve as a typical example, although methods vary from bank to bank. *The Burroughs Clearing House* and Mr. Smelser have kindly permitted the writer to use this material.

<sup>34</sup>The signatures of the bookkeepers have been omitted purposely in the accompanying form.

THE COMPUTATION OF RESERVES

cedure necessary in checking the statement and account balances is performed the morning following the day's postings.

When this form, the Auditor's Proof of Individual Ledgers, is received in the auditing department the figures are supplied with which to complete the report. The total general ledger balance of

AUDITORS PROOF OF INDIVIDUAL LEDGERS									
						Date		8/7 1922	
Ldger Division	Net Balances			Overdrafts		Signature of Bookkeeper			
1	838	054	47	807	34				
2	497	744	29	588	56				
3	326	560	82	249	05				
4	343	619	68	64	36				
5	410	753	66	3	80				
6	803	808	02	244	14				
7	997	535	16	947	76				
8	815	780	55	60	79				
9	464	108	54	79	14				
Inactive	33	212	64						
Totals	7 054	896	48	3 269	58	Remarks			
Gen. Led. Balance	7 054	896	48						
Overdrafts		3 269	58						
	7 058	166	06						
Deductions from Deposits					This Space for Use of Auditing Department				
Board Education Akron	12	006	58	Demand					
Board Education Macedonia	10	749	39	Individuals	6	320	935	--	
Board Education Suffield	10	302	94	State, County-Municipal		686	545	--	
City Depository	150	000	--	Dividends Unpaid			5	415	--
Trustees of Sinking Fund	503	486	72	Total Demand (Subject to reserve)	7	012	898	--	
Total	686	545	--	Time					
Postmaster's Acct.	20	000	--	Certificates of Deposit	1	586	487	--	
Money Order Acct.	10	000	--	Postal Savings			20	686	--
Postal Savings	20	686	--	Savings	9	825	430	--	
Total Deductions from Demand Deposits	737	231	--	Total Time (Subject to reserve)	11	532	603	--	
				Reserve Required					
				7% Total Net Demand		490	902	--	
				3% Total Net Time		345	978	--	
				Total Reserve to be Maintained with Federal Reserve Bank		836	880	--	

FORM 3

individual deposits amounted to \$7,054,896.48 on August 7, 1922, the date of this report, and agrees with the total amount reflected by the control department, the figures of which, shown opposite the word "Totals," is \$7,054,896.48. Overdrafts amounted to \$3,269.58, making the total demand deposits \$7,058,166.06.



State, county, and other municipal deposits amounted to \$686,545.00 and United States deposits amounted to \$50,686.00, making a total of \$737,231.00, which is deducted from demand deposits of \$7,058,166.00, and leaving \$6,320,935.00 as "Individual deposits," which is entered in the lower right-hand section under "Demand". Next is entered the amount of State, county, and other municipal deposits, being brought over on the amount of \$686,545.00. The amount of dividends unpaid, which is entered next, is obtained from the general ledger account and is shown to be \$5,415.00. Adding the individual, State, county, and other municipal deposits and dividends unpaid, the amount of demand deposits subject to reserve is found to be \$7,012,895.00, which is entered opposite "Total demand (Subject to reserve)."

In the "Time deposits" section of this report is entered the amount of certificates of deposit, \$1,586,487.00; postal savings deposits, as shown by the opposite total, \$20,686.00; and savings deposits amounting to \$9,925,430.00, making a total of \$11,532,603.00, which is subject to 3 per cent. reserve. The section "Reserve required" is too obvious to require explanation.

It will be noticed that the items "Due to" and "Due from" banks are omitted. Banks having bank deposits would change the form to include that form of the reserve computation which deals with such items. With the average country banks the amount "Due from the banks" greatly exceeds, at all times, the amount "Due to banks" and as a result both items would be omitted from the computation. In like manner, this form is adaptable to the peculiar needs of different types of banks. If demand certificates of deposit are issued, or if by the wording on time certificates, thirty days before maturity they become demand certificates, this form may be so changed as to take care of the situation.

The chief value of this form seems to be due to the fact that along with the outline for computing the required reserve, the auditor or other supervising officer has a definite report each day on what is accomplished in the individual books department in the way of keeping the accounts in balance, reporting overdrafts, etc.

The second form to be described is the *Daily Statement of Required Reserve*, Form 4, and is used only in the auditing department. The reserve requirements for each day of each period are entered in Column A and are those amounts which were computed daily according to Form 3. In Form 4 it will be ob-

THE COMPUTATION OF RESERVES

served that the total reserve required for August 7, as shown by Form 3 (\$836,880), is entered on Form 4 (Column A) opposite August 7. Column B provides for accumulating the total requirements from the first day of the period to its close, so that on any given date the average for the period may be determined. In averaging the reserve over the semi-monthly period the calculation becomes very simple. On each day the excess or

DAILY STATEMENT OF REQUIRED RESERVE										
Period Ending <u>Aug. 15</u> 192 <u>2</u>										
Month Aug.	Requirements				C		D		E	
	A		B		Daily Balance		Adjustments		Totals	
Date	Daily		Totals							
7-31-					614	000				
8-1	713	221	713	221	713	350			713	350
2	786	082	1499	303	683	800			1500	150
3	771	961	2271	264	772	300	103	000	2272	450
4	764	042	3035	306	764	890			3037	340
5	764	520	3799	826	614	700			3802	040
6	764	520	4564	346	614	700	150	000	4566	740
7	836	880	5401	226	524	260	150	000	5404	000
8	779	744	6180	970	780	600	313	000	6184	600
9	782	061	6963	031	782	225			6966	825
10	785	050	7748	081	785	175			7752	000
11	782	703	8530	784	782	900			8534	900
12	793	787	9324	571	794	010			9328	910
13	793	787	10118	358	794	010			10122	920
14	802	789	10921	147	802	870			10925	790
15	798	848	11719	995	798	910			11724	700
Average Daily Reserve					Average Daily R'Q'M'TS			Average Daily Excess		
<u>\$781,64600</u>					<u>\$781,33300</u>			<u>\$31300</u>		

FORM 4

deficiency of the reserve to date can be determined almost immediately. In Column C is entered the amount of reserve with the Federal reserve bank as shown by the daily transcript of the Akron bank's account which is received each day from the Federal Reserve Bank of Cleveland. Column D takes care of any adjustments to be made between the reserve balance of the Akron bank and the balance shown on the books of the Federal reserve bank. These result from mail delays and correction entries covering items charged or credited in error to the account of the Akron bank. Column E shows the accumulating totals of the

reserves; its purpose corresponds to that of Column B. From this form the bank is in a position to determine at any time the amount required as reserve at the Federal reserve bank.

### **The transit account of a country national bank**

Of prime importance in the subject of clearing and collection of checks is the question of handling the transit account, otherwise known as "Items with Federal reserve bank in process of collection—not available as reserve" and the "Deferred credits" account. Mr. Smelser gives an informing although concise explanation of how the transit account is handled in his bank.

In arriving at the general cash balance each day, the transit department of the Akron bank furnishes the general bookkeeper with copies of all cash letters to the Federal Reserve Bank of Cleveland, to its branches, and to other Federal reserve banks and their branches. Cash letters to the Federal Reserve Bank of Cleveland and its branches contain only items drawn on the various Cleveland, Cincinnati, and Pittsburgh banks. Letters sent to any other Federal reserve bank or branch are sent out on letter forms for two, three, four, five, six, or eight-day points. All such letters are charged first through the transit account. Later as the letters become available as reserve the transit account is credited and the account "Federal Reserve Bank of Cleveland—Reserve Account" is charged. In other words, a cash letter sent to the Federal Reserve Bank of Cleveland on the night of September 1 would be available as reserve September 2 and accordingly the transit account would be charged with the amount of the letter and on the morning of September 2 the entry would be reversed with a charge to the reserve account.

When the Akron bank has cash letters for other Federal reserve banks or branches, they are prepared in strict accordance with the direct sending advices furnished for the purpose. In making up these advices the transit department uses the current month's "Schedule of availability dates for cash letters sent direct to other Federal reserve banks and branches" which are furnished by the Federal Reserve Bank of Cleveland. For example, on September 2, the Akron bank sent out the following letters direct to other Federal reserve banks and branches: A three-day country, a four-day city, a five-day city, a five-day country, and an eight-day country. According to the schedule of availability dates, these letters would become available as reserve, in the order named above, on September 7, 6, 7, 8, and 11.

On September 2 the general bookkeeper would post the five letters separately to the transit account and at the same time *journalize them on the dates of availability* by crediting the transit account and charging the reserve account. In this way the necessary and proper entries to take care of these reserve credits automatically appear on the proper dates and are taken into the respective accounts.

The account "Federal Reserve Bank—Deferred Credits" operates so that all cash letters from the Federal reserve bank are credited to this account on the day received. On the day following, this account is charged and the reserve account of the Akron bank is credited. This brings the credit of the Akron bank to its reserve account on to the account the same day it appears on its account of the books of the Federal Reserve Bank in Cleveland.

Collections sent to the Federal reserve bank, when paid, are charged on the books of the Akron bank to its reserve account on the date the advice of payment is received by the Akron bank. Such items have not proved of sufficient amount in the experience of the Akron bank to make any appreciable difference in its reserve account. Should unusually large items be sent out for collection telegraphic advice of payment would be requested so that the proper charge could be made by the Akron bank to its reserve account which would be made on the same date it was credited by the Federal reserve bank.

The Akron bank finds it the exceptional procedure to have drafts drawn against the reserve balance. When such remittances of an unusual amount are made, they are handled through the deferred credits account of the Akron bank. Ordinary drafts are credited to its reserve account on its own books on the day issued, inasmuch as the balance of the Akron bank would exceed the balance shown by its own reserve account until the drafts are paid.

The auditor of the Akron bank insists that the system of operating their Reserve Transit and Deferred Credits accounts, as just outlined, is highly successful. He says: "It does not require, at the most, over thirty minutes' time each day, to make the entries necessary, compute the requirements and determine the average daily excess or deficiency to date, and in addition we are always assured that our periodical reports of reserve required are rendered correctly, and all danger of being penalized for deficiency in reserve is eliminated."<sup>35</sup>

<sup>35</sup>*Loc. cit.*, p. 49.

### **Distinction between individual and bank deposits in computing reserves of member banks**

For many years the Comptroller of the Currency without any express provision of law had made a distinction between (a) individual or ordinary deposits and (b) bank deposits. In the case of the latter, depository banks were permitted to deduct "Due from Banks" from "Due to Banks" and were required to maintain a reserve only against the difference. This was not the case, however, with ordinary deposits. If a concern had a deposit of \$10,000 with a bank and this bank at the same time held a \$5,000 demand note of this corporation, the bank was never permitted to deduct the demand note from the deposit liability in computing its reserve. This practice and this distinction between the two types of deposits was incorporated in the Federal Reserve Act. The language of the statute is as follows: "In estimating the balances required by this act the net difference of amounts due to and from *other banks* shall be taken as the basis for ascertaining the deposits against which required balances with the Federal reserve banks shall be determined."<sup>36</sup>

### **Computation of reserves against balances held in foreign banks by member banks**

The Federal Reserve Board has ruled that balances due from foreign banks cannot be deducted from balances due to banks on the ground that from a practical standpoint foreign currency balances due from foreign banks are not quickly available to meet demand liabilities. Such balances would require selling in the market like any other investment and the proceeds of the sale deposited with the Federal reserve bank in order to become a part of the member bank's reserve. "Dollar balances," due to foreign banks, on the other hand, have been held by the Federal Reserve Board to be individual deposits and not bank deposits, and therefore do not fall within the meaning of balances due to other banks.<sup>37</sup>

The Federal Advisory Council took issue with the Federal Reserve Board on these points and insisted that the banks principally affected by these rulings are those located in the central reserve cities and the reserve cities, especially the former. Banks

<sup>36</sup>*Federal Reserve Act*, Section 19; *Federal Reserve Bulletin*, Vol. V (1919), p. 963.

<sup>37</sup>*Federal Reserve Bulletin*, Vol. V (1919), pp. 963-964; Vol. III (1917), pp. 692-693.

in these cities are required to carry reserves of 13 per cent. and 10 per cent. respectively, against their demand deposits, while banks in other localities are required to carry only 7 per cent. against such deposits. The effect of the ruling is, therefore, to penalize still further the banks located in central reserve and reserve cities in regard to the amount of reserves they are to carry. Funds on deposit with a foreign correspondent, insists the Council, may be converted into reserve funds through sales of checks or of cable transfers just as quickly as the funds on deposit with a domestic bank may be realized upon through drafts or telegraphic transfers. Foreign banks should be encouraged to keep balances with their correspondent banks in this country and if banks doing a foreign exchange business are not allowed to deduct balances due them by foreign banks from the amount of their balances "due to banks," the volume of their foreign exchange business might have to be undesirably and unnecessarily curtailed.<sup>88</sup>

#### **Computation of reserve against balances due from foreign branches of domestic banks**

The Federal Reserve Board, in July, 1925, ruled that balances payable in *foreign currency* due from a foreign branch of *any* domestic bank may not be deducted from balances due to other banks by a member bank in computing its reserve. If, however, the balances due from a foreign branch of *any* domestic bank are payable in *dollars* instead of in foreign currency, they may be deducted from balances due to other banks by a member bank in computing its reserve. The Board believes that the phrase "the net difference of amounts due to and from other banks" contained in Section 19 of the Act has reference only to balances payable in foreign currency.

Another question, closely related to the preceding ones, is whether a member bank, in calculating its reserve requirements, may deduct balances due from *its own* foreign branch. On this point the Board has ruled (July, 1925) that balances payable either in dollars or in foreign currency due to a member bank from *its own* foreign branch may not be deducted from balances due to other banks by a member bank in computing its reserve.

#### **No reserves required against balances due to foreign branches by member banks**

No reserve is required against balances due to foreign branches, in the opinion of the Federal Reserve Board, on the

---

<sup>88</sup>*Sixth Annual Report of the Federal Reserve Board* (1919), p. 531.

ground that branch banks have no separate existence distinct from the parent bank, and a balance due to a foreign branch of a member bank from its parent bank, although shown as a liability on the books of the parent bank, does not constitute, within the meaning of Section 19, a deposit liability against which reserves must be maintained.<sup>39</sup>

**Question of reserves against money paid by a customer in anticipation of acceptances**

Whether a bank is required to keep a reserve against money paid by a customer in anticipation of acceptances is held by the Federal Reserve Board to depend upon the relation between the bank and the customer. If, upon receipt of the money the member bank credits it to the customer's general deposit account subject to check, or if the customer is permitted to withdraw such money either by check or after a certain length of time, that is, if the deposit is treated as a demand or time deposit, it is held that the money deposited constitutes a deposit liability against which the member bank is required to maintain reserves, in accordance with the provisions of Section 19 of the Federal Reserve Act.

If this deposit, on the other hand, is not subject to withdrawal by check or otherwise, but is received in full or part payment of the customer's obligation to put the bank in funds at the maturity of the acceptance, or if the money is received as a special deposit for the purpose of meeting the acceptance when it matures and the customer cannot demand the return of the money but can require only that the bank apply the money in payment of the acceptance at maturity, it is held that the deposit does not constitute a deposit liability within the provisions of Section 19.<sup>40</sup>

**"Special savings deposits" are demand deposits for reserve purposes**

In June, 1923, the Federal Reserve Board ruled that certain deposits labeled as "special savings deposits" in some of the State member banks in California could not be classified properly as savings accounts for reserve purposes. These accounts were segregated in separate savings departments, the assets of which constituted trust funds for the protection of savings depositors; they could be invested only in a restricted manner; and were subject to

---

<sup>39</sup>*Federal Reserve Bulletin*, Vol. VII (1921), p. 815.

<sup>40</sup>*Ibid.*

many other special safeguards not applicable to ordinary commercial deposits. They were represented by pass books, and the banks reserved the right to require the presentation of the pass books at each withdrawal, but in practice they were subject to withdrawal by check without the presentation of the pass books, and an unlimited number of checks could be drawn against them and collected through the clearing houses. Under the provisions of the California law and under the specific rules printed in the pass books, the banks reserved the right to require thirty days' notice before the withdrawal of such accounts, but in practice they did not exercise this right. The Federal Reserve Board, after analyzing these deposits, held that they were not "payable after thirty days," because not payable on a definite date, nor a specified number of days after date, nor only after thirty days' notice which actually is required. The Federal Reserve Board also held that although they were subject to thirty days' notice they could not be classified as "savings accounts" or "certificates of deposit."<sup>41</sup>

#### **Periods over which reserves are computed by member banks**

Member banks are required to maintain the legal reserve under the regulations and subject to such penalties as may be prescribed by the Federal Reserve Board. The present regulations of the Board provide that reserve balances may be averaged over a weekly period by banks in central reserve and reserve cities, and over a semi-monthly period by banks in all other places. From these figures there is computed the average net deposits of the period, and the required reserve which is then compared with the actual reserve as shown by the reserve bank's account with the member. This permits of some fluctuation in the reserve account as it is possible for the member bank to reduce its balance below the average required on some days provided the average for the period is maintained. In the event that the average balance is not equal to the required reserve, the penalties prescribed by the Federal Reserve Board become effective.

Some objection has been raised by the central reserve city bankers in New York against the system of having their reserves computed on the basis of weekly averages on the ground that they are discriminated against as compared with the banks surrounding New York, whose reserves are computed on a semi-monthly

---

<sup>41</sup>See *Federal Reserve Bulletin*, Vol. IX (1923), p. 677. For a further discussion of this subject, see the *Magazine of Wall Street*, Vol. XXXII (May, 1923), pp. 54-55.



basis. It is contended in support of this objection, that the country banks are not only permitted to carry a smaller reserve, but that their reserves are not subject to such radical fluctuations in cash and deposits. Many of the Manhattan banks may maintain their average for the week up to Friday and then may receive telegraphic instructions from correspondents to transfer funds to the Federal reserve bank for credit to another Federal reserve bank, and if these transfers cause a shortage in their own reserves with the Federal Reserve Bank of New York, they will be penalized by a charge of interest on the shortage for the two days, Saturday and Sunday. Interest for two days must be paid on this shortage, although the two-day items in the deferred credit accounts of the banks, credited to the reserve accounts upon payment after that elapsed time, may put the reserves over the requirements. While it is true that if a bank is short on its seven-day average reserve it may borrow from some other member which has excess reserve that week, nevertheless, interest must be paid on the amount borrowed, usually at a rate a fraction of one per cent. below the ruling rate for street money. In fact, quite a business in one-day funds is done by one bank which is a large purchaser of such funds in the early days of the week and a heavy seller at the close of the week. These makeshifts, however, are looked upon as just so much expense that should not have to be borne by member banks, which through force of circumstances over which they have no control are frequently short on their seven-day average, but have ample reserves over a fourteen-day period. At least it would be but fair, they insist, in enforcing the seven-day period, to compute the average from Wednesday to Wednesday rather than from Friday to Friday.<sup>42</sup>

#### **Penalties for deficiencies of member bank reserves**

Regulation J, Series of 1924, provides that items cannot be counted as part of the minimum reserve balance to be carried by a member bank with its Federal reserve bank until such time as may be specified in the appropriate time schedule. If a member bank draws against items before such time the draft will be charged against its reserve balance if such balance be sufficient in amount to pay it; but any resulting impairment of reserve balances will be subject to all the penalties provided by the Act. On this point Section 19 of the Federal Reserve Act provides, in part, as fol-

---

<sup>42</sup>*The Financial Age*, Vol. XLVI, No. 14 (September 23, 1922), p. 437; Vol. XLVII, No. 3 (January 20, 1923), p. 96.

laws: "The required balance carried by a member bank with a Federal reserve bank may, under the regulations and subject to such penalties as may be prescribed by the Federal Reserve Board, be checked against and withdrawn by such member bank for the purpose of meeting existing liabilities: *Provided, however,* That no bank shall at any time make new loans or shall pay any dividends unless and until the total balance required by law is fully restored."

Regulation J provides for penalties as follows: "(c) *Basic penalty.*—Inasmuch as it is essential that the law in respect to the maintenance by member banks of the required minimum reserve balance shall be strictly complied with, the Federal Reserve Board, under authority vested in it by Section 19 of the Federal Reserve Act, hereby prescribes a basic penalty for deficiencies in reserves according to the following rules:

"(1) Deficiencies in reserve balances of member banks in central reserve and reserve cities will be computed on the basis of average daily net deposit balances covering a weekly period of seven days. Deficiencies in reserve balances of other member banks will be computed on the basis of average daily net deposit balances covering a semi-monthly period.

"(2) Penalties for deficiencies in reserves will be assessed monthly on the basis of average daily deficiencies during each of the reserve computation periods ending in the preceding month.

"(3) A basic rate of 2 per cent. per annum above the Federal reserve bank discount rate on 90-day commercial paper will be assessed as a penalty on deficiencies in reserves of member banks.

"(d) *Progressive penalty.*—The Federal Reserve Board will also prescribe for any Federal reserve district, upon the application of the Federal reserve bank of that district, an additional progressive penalty for continued deficiencies in reserves, in accordance with the following rules:

"(1) When a member bank in a central reserve or reserve city has had an average deficiency in reserve for six consecutive weekly periods, a progressive penalty, increasing at the rate of one-fourth of 1 per cent. for each week thereafter during which the average reserve balance is deficient, will be assessed on weekly deficiencies until the required reserve has been restored and maintained for four consecutive weekly periods, provided that the maximum penalty charged will not exceed 10 per cent.

"(2) When a member bank outside of a central reserve or reserve city has had an average deficiency in reserves for three

**NEW YORK FEDERAL RESERVE BANK**  
Comparative statement of condition at the close of business:

	RESOURCES		
	Mar. 12, 1924	Mar. 5, 1924	Mar. 14, 1923
Gold with Federal Reserve agent	\$582,984,000	\$583,041,000	\$609,402,000
Gold redemption fund with U. S. Treasury .....	9,236,000	5,877,000	9,486,000
Gold held exclusively against F. R. notes .....	\$592,220,000	\$588,918,000	\$618,888,000
Gold settlement fund with F. R. Board .....	168,477,000	150,581,000	286,334,000
Gold and gold certificates held by bank .....	187,544,000	185,322,000	147,669,000
Total gold reserves .....	\$948,241,000	\$924,821,000	\$1,052,891,000
Reserves other than gold .....	30,620,000	29,654,000	17,043,000
Total reserves .....	\$978,861,000	\$954,475,000	\$1,069,934,000
Non-reserve cash .....	11,251,000	11,047,000	8,366,000
Bills discounted:			
Secured by U. S. Government obligations .....	72,762,000	59,601,000	176,173,000
Other bills discounted .....	24,164,000	21,059,000	33,309,000
Total bills discounted .....	\$96,926,000	\$80,660,000	\$209,482,000
Bills bought in open market .....	44,284,000	56,862,000	35,264,000
U. S. Government securities:			
Bonds .....	1,202,000	1,202,000	1,149,000
Treasury notes .....	28,971,000	20,940,000	13,278,000
Certificates of indebtedness .....	9,933,000	8,313,000	10,000,000
Total U. S. Govt. securities .....	\$40,106,000	\$30,455,000	\$24,427,000
All other earning assets .....	100,000	100,000	.....
Total earning assets .....	\$181,416,000	\$168,077,000	\$269,173,000
Uncollected items .....	140,409,000	125,643,000	152,414,000
Bank premises .....	13,987,000	13,982,000	10,872,000
All other resources .....	4,494,000	3,367,000	1,896,000
Total resources .....	\$1,330,418,000	\$1,276,591,000	\$1,512,655,000
	LIABILITIES		
Federal Reserve notes in actual circulation .....	\$371,197,000	\$372,537,000	\$567,168,000
Deposits:			
Member bank—reserve account .....	740,888,000	697,335,000	724,458,000
Government .....	6,405,000	8,456,000	480,000
Other deposits .....	10,779,000	10,074,000	9,815,000
Total deposits .....	\$758,072,000	\$715,865,000	\$734,753,000
Deferred availability items .....	109,190,000	96,445,000	119,055,000
Capital paid in .....	29,728,000	29,728,000	28,888,000
Surplus .....	59,929,000	59,929,000	59,800,000
All other liabilities .....	2,302,000	2,087,000	2,991,000
Total liabilities .....	\$1,330,418,000	\$1,276,591,000	\$1,512,655,000
Ratio of total reserves to deposit and Federal Reserve note liabilities combined .....	86.7%	87.7%	82.2%
Contingent liability on bills purchased for foreign correspondents .....	\$2,185,000	\$3,120,000	\$13,857,000

consecutive semi-monthly periods, a progressive penalty, increasing at the rate of one-half of 1 per cent. for each half month thereafter during which the average reserve balance is deficient, will be assessed on semi-monthly deficiencies until the required reserve has been restored and maintained for two consecutive semi-monthly periods, provided that the maximum penalty charged will not exceed 10 per cent.”<sup>43</sup>

## 2. Computation of reserves by Federal reserve banks

There are no definite or prescribed forms for computing reserves in the Federal reserve banks. The Federal Reserve Act and the regulations of the Federal Reserve Board prescribe definitely what the reserve shall be, its composition and minimum amount, and the liabilities against which the reserve shall be computed. With these few requirements in mind, the reserve department readily computes the reserves. These are reported each week and are consolidated into what is known as the Consolidated Statement of the Federal reserve banks.

Using the statement of the Federal Reserve Bank of New York for March 12, 1924, as an example, the method of computation is readily comprehended.

In a Federal reserve bank the reserve against deposits must consist of gold or lawful money and must equal at least 35 per cent. of the deposits. Against Federal reserve notes the bank must keep a reserve in gold of not less than 40 per cent., the remainder to be covered by eligible commercial paper. Referring to the above statement it will be noticed that the Federal reserve bank totals the following items: (1) Gold with the Federal reserve agent, (2) gold redemption fund in the United States Treasury which must be equal to at least five per cent. of the Federal reserve notes in actual circulation and which counts as part of the 40 per cent. reserve. These two items combined indicate the total amount of gold held against the Federal reserve notes. Next are added (3) the gold and gold certificates in the Gold Settlement Fund to the credit of the Federal reserve bank, and (4) the gold and gold certificates held by the bank, the total representing the total gold reserves. The reserves other than gold, which are composed of silver, silver certificates, and United States notes, are next added, the total giving the total reserves against notes and deposits.

The liabilities against which these reserves are held are divided

---

<sup>43</sup>*Federal Reserve Bulletin*, Vol. X (1924), pp. 490-491.

into two main classes: (1) Federal reserve notes in actual circulation and (2) deposits. Consulting the statement of the Federal reserve bank given above, it will be noticed that the first item listed under liabilities is that indicating the amount of Federal reserve notes in actual circulation. This amount is determined daily. Every day each Federal reserve bank is shipping its own unfit notes and those of other Federal reserve banks to the Treasury Department and is also shipping fit notes redeemed by it to the other Federal reserve banks through which such notes were originally issued. All such shipments are reported daily by wire to the Federal Reserve Board at Washington, the accounts are cleared daily by the Board, and wire advices of the results are sent daily to all Federal reserve banks, thus enabling them to know the amount of their notes in actual circulation against which reserves are computed.

The second item listed under liabilities is deposits. It is divided into three classes as follows: (1) The reserve deposits of member banks, (2) government deposits, and (3) other deposits. The nature of these deposits has been explained above. The Federal reserve banks compute the required reserve against only real reserve deposits to the credit of member banks. Such deposits, when built up as a result of sending collection items through the Federal reserve banks for collection or direct to other banks for credit to their reserve accounts, become effective as reserve deposits only according to the published time schedules. The same principle applies to checks and drafts on all other deposits, but not to checks and warrants on the government deposits; for the latter immediate credit is given.

Reference was made above to the fact that each Federal reserve bank maintains on its books two active accounts with each of the other Federal reserve banks, although these accounts do not appear in the published statement. One of these is the debit or *Due from Account* representing all items forwarded for collection and amounts due for transfer of funds. A settlement is received at the close of business each day for the amount due as shown by the books of the other reserve bank. This account is, in fact, a remittance account and any unpaid balance after the daily settlement would not be represented by a corresponding credit on the books of the other bank, but rather by items in transit or not yet collected.

The other item is the credit or *Due to Account*. This account is the exact opposite of the *Due from Account* and represents the credits due another reserve bank for items collected and for

transfers of funds during the day. The total of the account is paid through the Gold Settlement Fund, so the account shows a zero balance at the close of business; the only exception being on local holidays when through the closing of a part of the reserve banks it is not possible to settle with them. In all such cases the account is paid at the close of the following business day.

Even though a reserve bank does not maintain a balance with another reserve bank, it nevertheless may draw its drafts on another reserve bank. Such drafts are charged by the paying bank to its *Due to Account*, thereby effecting an immediate collection of the draft by reducing the amount to be paid the other reserve bank at the close of business that day.<sup>44</sup>

Deferred availability items on the liability side and uncollected items on the asset side of the bank statement are ignored in computing reserves. Prior to March 18, 1921, "net deposits" were used in calculating the reserve ratio, while since that date "total deposits" have been used. According to the earlier practice, "net deposits" were ascertained by taking the sum of government deposits, member banks' reserve deposits, other deposits, and deferred availability items and subtracting from the total the asset item, "uncollected items and other deductions from gross deposits," composed chiefly of clearing house exchanges, transit items, Federal reserve notes of other Federal reserve banks, unassorted currency, and domestic transfers. Since the change, total deposits include government, member bank, and other deposits, without reference to deferred availability or uncollected items. This action tended to apply a more severe standard of computation.<sup>45</sup>

#### **The question of reserve deficiencies in Federal reserve banks**

The question arises as to whether a Federal reserve bank whose total reserves against the aggregate of note and deposit liabilities is below the minimum requirements, may allocate its gold assets in such a manner that its reserves against notes are maintained at 40 per cent. while its reserves against deposits fall below 35 per cent. If, in determining whether a deficiency of reserve exists, a Federal reserve bank subtracts 35 per cent. of the deposits and finds the remaining reserve does not equal 40 per cent.

<sup>44</sup>L. R. Rounds, *op. cit.*, pp. 665-66.

<sup>45</sup>*Eighth Annual Report of the Federal Reserve Board* (1921), p. 27. This plan was first provided for as early as December 19, 1919 in accordance with an opinion of counsel for the Federal Reserve Board, and was to have been effective February 12, 1920, but was postponed until March 18, 1921. See *Federal Reserve Bulletin*, Vol. VI (1920), p. 3.

of the Federal reserve notes outstanding, it becomes liable for a tax on the reserve deficiency as prescribed by the Act and as set forth below. Some of the Federal reserve banks in order to evade this tax, changed their method of computing the reserve by subtracting the 40 per cent. reserve against Federal reserve notes from the total reserve so that the deficiency or excess of reserve would be shown with respect to deposits, as no penalties for deficiencies of reserve against deposits had been prescribed by the Federal Reserve Board.

In February, 1920, the Board faced this problem and ruled that Section 16 of the Federal Reserve Act implied that a Federal reserve bank may maintain its 40 per cent. reserve against Federal reserve notes even though the reserve against deposits, as a result, may fall below the 35 per cent. limit. Paragraph 3 of Section 16, which fixes the minimum reserve requirements against both note and deposit liabilities, provides that when the Federal reserve agent holds gold or gold certificates as collateral for Federal reserve notes issued to the bank, such gold or gold certificates *shall be counted as part of the gold reserve* which such bank is required to maintain against its *Federal reserve notes* in actual circulation. Under the terms of this paragraph all gold or gold certificates held by the Federal reserve agent as collateral for outstanding notes must necessarily be counted as reserve against those outstanding notes and cannot lawfully be considered as part of the reserve against deposits.

So, also, Section 16 provides that gold deposits standing to the credit of any Federal reserve bank with the Federal Reserve Board shall be counted, *at the option of said bank*, as part of the lawful reserve which it is required to maintain against outstanding Federal reserve notes, or as part of the reserve it is required to maintain against deposits. Although there is no express provision in the law itself conferring upon the bank the right to allocate the free gold held by it<sup>46</sup> as a part of its reserve against Federal reserve notes instead of as a part of its reserve against deposits, the Board held that such option exists. In other words, inasmuch as the bank is authorized to procure Federal reserve notes from the Federal reserve agent upon the deposit of as much as 100 per cent. gold, and inasmuch as all deposits with the Federal reserve agent must necessarily count as part of the reserve to be maintained against notes outstanding, the Federal reserve bank may

---

<sup>46</sup>That is, gold not with the Federal reserve agent and not with the Gold Settlement Fund.

always maintain its reserve against notes at the expense of its deposit reserve account by transferring free gold to the Federal reserve agent as collateral for outstanding notes. The banks may also accomplish this same purpose by depositing free gold in the Gold Settlement Fund since credits in the Gold Settlement Fund, by law may be counted, *at the option of the bank*, either as reserve against notes or as reserve against deposits. Thus in view of these facts the Board held that the Federal reserve banks had a right to consider free gold in its vaults as reserve against notes even though to do so results in a deficiency in the reserve against deposits. In a summarized sentence it may be said that the Board established the principle that an excess of reserve in the possession of the Federal reserve agents against Federal reserve notes may not count automatically as reserve against deposits, although an excess of reserve against deposits may count as reserve against the notes.

At the same time the Board prescribed the penalty to be applied to the Federal reserve banks for deficiencies in reserves against their deposits. It held that paragraph (c), Section 11 of the Federal Reserve Act, required it to establish a graduated tax on such deficiencies. This regulation, retroactive in nature, prescribed a tax of 1 per cent. per annum on the first 5 per cent. deficiency below 35 per cent., the tax increasing 1 per cent. on each additional 5 per cent. the reserve falls. This means that in case the reserve falls to 25 per cent. the tax will be 1 per cent. per annum on the first 5 per cent., and 2 per cent. per annum for the second 5 per cent., but not 2 per cent. on the entire 10 per cent. deficiency. The following table will illustrate the manner in which the graduated tax applies:

When the reserves against deposits are:	The tax rate upon each 5 per cent. deficiency is:
Below 35 to 30 per cent. ....	1 per cent.
Below 30 to 25 per cent. ....	2 per cent.
Below 25 to 20 per cent. ....	3 per cent.
Below 20 to 15 per cent. ....	4 per cent.
Below 15 to 10 per cent. ....	5 per cent.
Below 10 to 5 per cent. ....	6 per cent.
Below 5 to 0 per cent. ....	7 per cent.

As pointed out above, eight Federal reserve banks paid taxes on such deficiencies in 1920.

There is nothing in the law specifying to whom such a tax must be paid, but the Board held that there is no one to whom the tax could reasonably be paid except to the government even though, as a matter of fact, it amounts to a tax upon the gov-



ernment's own equity in the Federal reserve bank's surplus. It seemed to be the only way to give effect to the provision of the law imposing the tax upon reserve deficiencies against deposits.

The penalties for deficiencies of reserves against Federal reserve notes are prescribed in paragraph (c), Section 11 of the Federal Reserve Act. When the reserve falls below 40 per cent., a tax of 1 per cent. is levied upon this deficiency until the reserve falls to 32.5 per cent. after which the rate increases by 1.5 per cent. upon each 2.5 per cent. or fraction thereof that the reserve falls below 32.5 per cent. The following table will show the manner in which the graduated tax applies:

When the reserves against Federal reserve notes are:	The tax rate upon the deficiency is:
Below 40.0 to 32.5 per cent. ....	1.0 per cent.
Below 32.5 to 30.0 per cent. ....	2.5 per cent.
Below 30.0 to 27.5 per cent. ....	4.0 per cent.
Below 27.5 to 25.0 per cent. ....	5.5 per cent.
Below 25.0 to 22.5 per cent. ....	7.0 per cent.
Below 22.5 to 20.0 per cent. ....	8.5 per cent.
Below 20.0 to 17.5 per cent. ....	10.0 per cent.
Below 17.5 to 15.0 per cent. ....	11.5 per cent.
Below 15.0 to 12.5 per cent. ....	13.0 per cent.
Below 12.5 to 10.0 per cent. ....	14.5 per cent.
Below 10.0 to 7.5 per cent. ....	16.0 per cent.
Below 7.5 to 5.0 per cent. ....	17.5 per cent.
Below 5.0 to 2.5 per cent. ....	19.0 per cent.
Below 2.5 to 0.0 per cent. ....	20.5 per cent.

To obviate deficiencies of reserves the Federal Reserve Board may cause any Federal reserve bank to rediscount paper for another, thus making it possible for the Board to shift reserve balances at will. Or one Federal reserve bank may borrow from another to "adjust" its reserves. As a result of such an operation two technical expressions have arisen: "Unadjusted reserves" signifying the reserves the bank would have if it had not borrowed from other Federal reserve banks, and "adjusted reserves," signifying the reserves after the money borrowed has been added or money loaned has been subtracted. Such methods undoubtedly secure more elasticity in our credit structure than could be obtained otherwise.<sup>47</sup>

#### Method of reporting the reserve condition of the Federal reserve banks

Each week a consolidated statement is published in the public press showing the condition of the twelve Federal reserve banks.

<sup>47</sup>See Westerfield, *op. cit.*, II, p. 361.

On January 11, 1924, the consolidated statement appeared in a revised form which has raised some doubt and uncertainty in the public mind. The old and new methods of presenting the statements may be contrasted most effectively by placing them side by side. Fortunately for our purpose, the weekly comparative statement of the twelve Federal reserve banks as of January 9, 1924, was released by the Federal Reserve Bank of New York on January 11, according to the old method, while the Federal Reserve Board released the statement from Washington for the same period according to the new method.

The differences in the statements were explained in the report given out from Washington as follows: "Beginning with this week a number of changes have been made in the arrangement of the items in the Board's statement showing condition of Federal reserve banks. The principal changes include the substitution of a sub-total representing 'Gold held exclusively against Federal reserve notes' for the sub-total heretofore carried representing 'Total gold held by banks,' the substitution of a sub-total of 'Total bills discounted' for 'Total bills on hand,' the addition of a sub-total of 'United States government securities,' and the placing of the liabilities to the public and to the banks for Federal reserve notes and deposits at the beginning of the liability statement."

One of the critics of this change, Mr. Theodore H. Price,<sup>48</sup> objects to the term "rearrangement" and insists that the change amounts to something more than that. He thinks that in setting aside \$2,158,153,000 and describing it as "held exclusively against Federal Reserve Notes" there is created a special reserve of more than 100 per cent. of the Federal reserve notes in circulation, which leaves but \$972,389,000 of gold to be considered as a reserve against \$1,983,755,000. This amounts to less than 50 per cent. of the deposits. Mr. Price anticipates that the Board will order another rearrangement of the statement which will show the ratio of reserves to deposits, and after setting aside a 100 per cent. gold reserve for Federal reserve notes outstanding, will have the effect of deceiving the public as to the true ratio of gold reserves to liabilities and ". . . defeat the purpose of the Federal Reserve Act, which was to provide the nation with abundant credit facilities at a reasonable cost rather than to create a quasi-governmental agency that could be used to sustain or advance

<sup>48</sup>See Theodore H. Price, "Juggling the Federal Reserve Statement," *Commerce and Finance*, Vol. XIII, No. 4 (January 23, 1924), pp. 211-212.

interest rates whenever they threaten to decline." Even though the Board does not rearrange the method of publishing the reserve against deposits, anyone attempting to compute the reserve against

---

STATEMENT OF TWELVE FEDERAL RESERVE BANKS COMBINED

January 9, 1924

*As issued in New York*

RESOURCES

Gold and gold certificates .....	\$389,867,000
Gold settlement fund, Fed. Res. Board .....	582,522,000
<b>Total gold held by banks .....</b>	<b>\$972,389,000</b>
Gold with Federal Reserve agents .....	2,106,705,000
Gold redemption fund .....	51,448,000
<b>Total gold reserves .....</b>	<b>3,130,543,000</b>
Reserves other than gold .....	106,965,000
<b>Total reserves .....</b>	<b>3,237,507,000</b>
Non-reserve cash .....	67,756,000
Bills discounted:	
Secured by U. S. Government obligations .....	306,373,000
Other bills discounted .....	300,548,000
Bills bought in open market .....	319,166,000
<b>Total bills on hand .....</b>	<b>\$926,087,000</b>
United States bonds and notes .....	81,992,000
U. S. certificates of indebtedness .....	18,366,000
Municipal warrants .....	51,000
<b>Total earning assets .....</b>	<b>\$1,926,496,000</b>
Bank premises .....	54,006,000
Five per cent. redemption fund against Federal Reserve Bank notes .....	28,000
Uncollected items .....	606,178,000
All other resources .....	15,576,000
<b>Total resources .....</b>	<b>\$5,007,547,000</b>

LIABILITIES

Capital paid in .....	\$110,506,000
Surplus .....	220,915,000
Deposits:	
Government .....	19,343,000
Member bank—Reserve account .....	1,941,006,000
Other deposits .....	23,406,000
<b>Total deposits .....</b>	<b>\$1,983,755,000</b>
Federal Reserve notes in actual circulation .....	2,147,064,000
Federal Reserve Bank notes in circulation—net liabilities .....	456,000
Deferred availability items .....	532,205,000
All other liabilities .....	12,646,000
<b>Total liabilities .....</b>	<b>\$5,007,547,000</b>
Ratio of total reserves to deposit and Federal Reserve not liabilities combined .....	78.4%
Contingent liability on bills purchased for foreign correspondents .....	\$18,175,000

deposits after deducting the gold reserve against Federal reserve notes will arrive at the same conclusion. This change in method is in harmony with a demand made in certain quarters for a plan

STATEMENT OF TWELVE FEDERAL RESERVE BANKS COMBINED

January 9, 1924

*As issued in Washington*

RESOURCES

Gold with Federal Reserve agents .....	\$2,106,705,000
Gold redemption fund with U. S. Treasury .....	51,448,000
Gold held exclusively against F. R. notes .....	\$2,158,153,000
Gold settlement fund with F. R. Board .....	582,522,000
Gold and gold certificates held by banks .....	389,867,000
<b>Total gold reserves .....</b>	<b>\$3,130,542,000</b>
Reserves other than gold .....	106,965,000
<b>Total reserves .....</b>	<b>\$3,237,507,000</b>
Non-reserve cash .....	67,756,000
Bills discounted:	
Secured by U. S. Government obligations .....	306,373,000
Other bills discounted .....	300,548,000
<b>Total bills discounted .....</b>	<b>\$606,921,000</b>
Bills bought in the open market .....	319,166,000
U. S. Government securities:	
Bonds .....	19,903,000
Treasury notes .....	62,089,000
Certificates of indebtedness .....	18,366,000
<b>Total U. S. Government securities .....</b>	<b>\$100,358,000</b>
All other earning assets .....	51,000
<b>Total earning assets .....</b>	<b>\$1,026,496,000</b>
Five per cent. redemption fund—Federal Reserve bank notes ...	28,000
Uncollected items .....	606,178,000
Bank premises .....	54,006,000
All other resources .....	15,576,000
<b>Total resources .....</b>	<b>\$5,007,547,000</b>

LIABILITIES

Federal reserve notes in actual circulation .....	\$2,147,064,000
Federal Reserve Bank notes in circulation—net .....	456,000
Deposits:	
Member bank—reserve account .....	1,941,006,000
Government .....	19,343,000
Other deposits .....	23,406,000
<b>Total deposits .....</b>	<b>\$1,983,755,000</b>
Deferred availability items .....	532,205,000
Capital paid in .....	110,506,000
Surplus .....	220,915,000
All other liabilities .....	12,646,000
<b>Total liabilities .....</b>	<b>\$5,007,547,000</b>
Ratio of total reserves to deposit and F. R. note liabilities combined .....	78.4%
Contingent liability on bills purchased for foreign correspondents .....	\$18,175,000

to establish a "super-reserve" by segregating a part of this gold and so making the ratio appear smaller.<sup>49</sup>

Mr. Price insists that while the power of the government is being exerted in nearly every other direction to reduce the cost of living the Federal Reserve Board is now working in the opposite direction by maintaining high interest rates. He continues: "We submit that the Federal reserve officials are presuming upon their power; that the Federal Reserve Act does not warrant them in setting aside any part of the gold or other assets in their possession as held 'exclusively against Federal Reserve Notes' and that in 'rearranging' the weekly statement, as they have, they have disregarded the amendment to the Federal Reserve Act passed June 21, 1917, and are attempting to read into the law an authority that it does not give them and create an impression that is at variance with the facts."

Thomas F. Woodlock, in his column, "By Way of Comment," in the *New York Herald*, says: "If this represents a change of policy—and if it does the Board should so state it in a definite and formal way—then the gold securing the note circulation is stripped of reserve functions and returns to a mere circulatory status. The effect of this is to abolish at one stroke note issuing powers to an amount of over \$3,000,000,000, or, if member bank deposits with the system be considered, to obliterate a reserve which would support not far from \$4,000,000,000 additional reserve deposits. Putting it another way, it strips \$1,300,000,000 of gold of reserve powers and makes it mere currency."<sup>50</sup>

If these criticisms may be taken as typical of those who oppose the new plan, it may be anticipated that they will be answered by a large number of persons who will see in this practice a well-advised move on the part of the Board to prevent an undue expansion of credit made possible by the great influx of gold as a result of foreign trade conditions growing out of the late War. It has not been long since the Board was severely criticised for not preventing credit expansion following the armistice by means of a sharp raise in the rediscount rates, which, combined with the stress generally found in banking literature on the wisdom of a policy which would prevent expansion to get beyond the control of the Board, would seem to indicate that the policy of the Board

---

<sup>49</sup>Cf. the *Magazine of Wall Street*, Vol. XXXI, No. 13 (April 14, 1923), p. 1065.

<sup>50</sup>Quoted by Price, *op. cit.*, p. 212. For similar criticisms see the *Commercial and Financial Chronicle*, Vol. CXVIII (January 12, 1924), p. 1; *Commerce and Finance*, Vol. XII, No. 49 (December 5, 1923), p. 2236.

is in harmony with what a large percentage of the writers and thinkers in banking would advocate.

### 3. Computation of reserves in non-member State banks, trust companies, and private banks

In general, the method of computing reserves in non-member State banks, trust companies, and private banks, does not vary widely from that employed by banks in the Federal Reserve System. In New York State—and this discussion will be confined to that State—reserves are required against aggregate demand deposits only. That term as used in the New York law means the deposits against which reserves must be maintained, by banks, trust companies, and private and individual bankers, and includes total deposits, all amounts due to banks, bankers, trust companies, and savings banks, the amounts due on certified and cashiers' checks, and for unpaid dividends, less the following items:

- (1) Total time deposits,
- (2) Deposits secured by the deposit of outstanding unmatured stocks, bonds, or other obligations of the State or City of New York,
- (3) Deposits to an amount not exceeding either the market or par value of outstanding unmatured stocks, bonds, or other obligations of the State or City of New York owned and held by such corporation or banker,
- (4) Deposits due to the United States of America, representing the proceeds of the sale of bonds or certificates of the said United States, known as the war loan of nineteen hundred and seventeen, or the proceeds of any other bonds or certificates of the United States hereafter issued for war purposes,
- (5) The amount due it on demand from banks, bankers, and trust companies other than its reserve depositaries, including foreign exchange balances credited to it and subject to draft,
- (6) The excess due it from reserve depositaries over the amount required to maintain its total reserves,
- (7) The amount due for exchanges and checks on other banks and trust companies in the same city to be presented for collection the following day,
- (8) Cash items.

RESERVE AND METHOD OF COMPUTATION

	TRUST COMPANIES			BANKS		
	Total	Reserves on hand	Depositories	Total	Reserves on hand	Depositories
In Manhattan or Brooklyn Boroughs.....	15	10	5	18	12	6
In the Boroughs of The Bronx, Queens and Richmond, and in the Cities of Buffalo, Rochester, Syracuse, Albany, Yonkers, Troy, Utica and Schenectady....	10	4	6			
Elsewhere .....	10	3	7	12	4	8

To ascertain amount of aggregate deposits upon which reserve is to be computed:

ADD	1. Amount due banks, bankers and trust companies.....	\$ .....
	2. Amount due New York State savings banks and savings and loan associations..	.....
	3. Amount due other depositories.....	.....
	4. Amount due on certificates of deposit.....	.....
	5. Amount due on certified and cashier's checks.....	.....
	6. Amount due on unpaid dividends.....	.....
	Total .....	\$ .....
DEDUCT	1. Amount due (subject to call) from banks, bankers and trust companies not reserve depositories, including foreign exchange balances credited to it and subject to draft.....	\$ .....
	2. Amount due for exchanges and checks on other banks and trust companies in your city to be presented for collection the following day.....	.....
	3. Amount due on deposits the payment of which cannot legally be required within thirty days.....	.....
	4. Amount of deposits secured by outstanding unmatured bonds of the State of New York and of the City of New York.....	.....
	5. Amount of New York State and New York City bonds owned and held at market value but not exceeding par value, exclusive of amount necessary to cover item No. 4.....	.....
	6. Deposits due to the United States of America, representing the proceeds of the sale of bonds or certificates of the said United States known as the war loan of nineteen hundred and seventeen, or the proceeds of any other bonds or certificates of the United States hereafter issued for war purposes.....	.....
	7. Amount of cash items.....	.....
	8. Amount due from reserve depositories, excess over amount required to maintain its total reserve.....	.....
	Total .....	\$ .....
	Balance upon which reserve is to be computed.....	\$ .....

Note—In case reciprocal accounts are kept with reserve depositories, only the excess due to the institution under examination can be counted as reserve.

The accompanying form (Form 5) shows the method by which the reserves are computed and, in the main, is self-explanatory. Reports are made weekly to the Superintendent of Banks.

#### 4. Computation of reserves by non-member national banks

The only exception to the general rule that all national banks must become members of the Federal Reserve System as the price of retaining their charters is to be found in the national banks of Alaska and Hawaii. Such banks may remain non-member banks, complying with the law applicable to them,<sup>51</sup> or, with the consent of the Federal Reserve Board, may become member banks of any one of the reserve districts, in which case they are subject to all the Provisions of the Federal Reserve Act. Section 5192, *United States Revised Statutes*, provided that three-fifths of the reserve of 15 per cent. required to be kept by country banks might consist of balances due to such associations from associations approved by the Comptroller of the Currency in one of the reserve or central reserve cities. These sections govern the reserve to be held by national banks in Hawaii and Alaska.<sup>52</sup>

Form 6 on the following page, for the computation of reserves as prescribed by the Comptroller of the Currency, is largely self-explanatory.

No attempt will be made to consider the methods by which reserves are computed in foreign branches since they are not required to maintain a specific amount of reserve or report regularly to State or national authority in respect to their reserves.

#### 5. The computation of reserves by Federal foreign banking corporations

There is no prescribed form to be followed by Federal foreign banking corporations in computing reserves, nor are there any regulations requiring that such reports shall be made at stated intervals to the Federal Reserve Board. The reserves are computed daily and can be reported to the Board at any time. There are no penalties for deficiencies; it is presumed that the Board will prescribe such penalties as it sees fit if the occasion ever arises.

---

<sup>51</sup>Which is the National Banking Act as amended.

<sup>52</sup>*Instructions of the Comptroller of the Currency Relative to the Organization and Powers of National Banks Together with the Regulations of the Federal Reserve Board Relating to National Banks* (Washington, 1923), pp. 78-79.



**COMPUTATION OF RESERVE OF NON-MEMBER NATIONAL BANKS**

No. of blanks \_\_\_\_\_

STATEMENT showing the Net Deposits, Reserve required, and Amounts composing the Reserve held by non-member National Banks located in the territory of \_\_\_\_\_ at close of business on \_\_\_\_\_, 19

**ITEMS ON WHICH RESERVE IS TO BE COMPUTED**

Due to Banks and Bankers .....	_____
— Less —	
Due from National Banks	
Not reserve Agents .....	_____
Due from other Banks .....	_____
Net amount due to Banks .....	_____
Demand Deposits .....	_____
Time Deposits .....	_____
Total Gross Deposits .....	_____

**DEDUCTIONS ALLOWED**

Exchange for Clearing House .....	_____
Checks on other banks in same place .....	_____
Notes of other National Banks .....	_____
Due from U. S. Treasurer .....	_____
(1) Net Deposits .....	_____
(2) Reserve required is 15% of above .....	_____

**RESERVE AND PER CENT HELD**

(3) Cash in vault (less National Bank notes) ..	_____
(4) Reserve with Reserve Agents .....	_____
(5) Total Reserve held .....	_____
(6) Ratio of Reserve held (No. 5) to Deposits (No. 1) ....	_____ per cent

**RECLASSIFICATION**

	Reserve	Required	Held	Excess
In Vault .....	.....	.....	.....	.....
Reserve Agents .....	.....	.....	.....	.....
Total .....	.....	.....	.....	.....

## CHAPTER X

### THE CLEARING HOUSE

#### Nature of clearing operations

A clearing house has been defined in an earlier chapter as a voluntary association of banks to simplify and facilitate the exchanges of such items as checks, drafts, bills and notes, to facilitate settlements of balances among the banks, and to serve as a medium of united action upon all questions affecting their common welfare.

For the purpose of carrying on these operations, banks associate themselves into clearing house associations, commonly called "clearing houses". A brief account of the origin of clearing houses has been given in Chapter III. At present there are 362 clearing house associations in the United States.<sup>1</sup> Most of them are unincorporated, co-operative associations and derive their authority over their members through their written assent to their respective constitutions.<sup>2</sup>

While most, if not all, clearing house associations exercise certain special functions in addition to that of clearing, this chapter is concerned principally with clearing, the primary function of clearing house associations. In principle, clearing houses do not vary widely; consequently their nature, functions, and operations can be understood by the study of a clearing house association like that in New York City, the oldest if not the largest.

#### The New York Clearing House Association

The New York Clearing House Association was founded in 1853. At present it consists of forty member and six non-member clearing banks located in Greater New York, one of the forty being the Federal Reserve Bank of New York. In smaller cities or towns the clearing house facilities will be found to differ widely.

<sup>1</sup>Data from Clearing House Section of the American Bankers' Association.

<sup>2</sup>In Mississippi banks are prohibited by statute (Code Sec. 3628 et seq.) from becoming members of unincorporated clearing house associations. See Thomas B. Paton, Jr., *Digest of Legal Opinions* (New York, 1922), p. 225.

Some will have separate buildings, while others may use a single room in a rented building or in one of the banks. Outside of New York City, it seems that most, if not all, of the permanent quarters are rented. In New York the association began in the early seventies to accumulate a building fund and in 1875 purchased and equipped its first building which was formerly the National Bank of the Commonwealth Building, on the corner of Nassau and Pine Streets. Proving inadequate, this property was sold in 1894 and a new property located at 79 to 83 Cedar Street was purchased, title to it being held by a separate and newly organized corporation, called the "New York Clearing House Building Corporation". This company drew upon the members of the clearing house association in proportion to their respective capital and surplus for funds sufficient to build and equip their present beautiful home. Altogether the New York Clearing House Association has occupied five different locations in its history.<sup>3</sup>

#### The administration of the clearing house association

The constitution of the clearing house provides for the regulation of the association and the guidance of its members. Administration of the affairs of the association is vested in five officers and five standing committees. The officers are the president, secretary, manager, assistant manager, and the examiner. The president, the secretary, and the five committees are chosen at annual meetings by ballot, from officers of members, to serve for one year or until successors are elected. The president and secretary are eligible for office for two successive years and after an interval of one year are again eligible in like manner. The president presides at the meetings of the association, is an *ex-officio* member of all committees except the nominating committee, and performs such other duties as may be incident to the office. He serves without compensation, this being generally true of clearing house presidents.

The secretary exercises the powers usually vested in such officers. He attends the meetings of the association, keeps a record of the proceedings, and performs such other duties as are incidental to the office.

The manager of the association is an important official. He is appointed by the clearing house committee and by custom the

---

<sup>3</sup>J. G. Cannon, *Clearing Houses*, U. S. Nat. Mon. Com. Pubs., 61st Cong., 2d Sess., Sen. Doc. No. 491, pp. 155-159

same manager has been retained from year to year. In fact, there have been but four incumbents of this office since 1853. The manager has full charge of the clearing operations. He controls the clerks and employees of the association as well as the employees of member banks during the work of clearing. As superintendent of the clearing house session he is responsible for maintaining discipline on the exchange floor, adjusting balances, imposing fines for violation of the rules of procedure, keeping records of the operations of the association, etc.<sup>4</sup> Unlike the president, the manager commands a salary. The assistant manager, as his title implies, assists the manager in his duties and assumes his functions and responsibility in his absence. The examiner heads the examination department of the clearing house and has charge of the examination of the member banks. During its seventy years' history the New York Clearing House has been officered by 28 presidents, 32 secretaries, 4 managers, and 7 assistant managers.

#### **The New York Clearing House committees**

The New York Clearing House Association has five standing committees, each composed of five members: Clearing house, conference, admission, nominating, and arbitration. The work of the clearing house committee is by far the most important; the work of the others is comparatively light. The clearing house committee stands next to the association itself in authority. All of its members are presidents of important banks. It provides for the maintenance of the association and may draw upon members for their quotas of the expense. It fixes the salaries of all employees save those of the manager and assistant manager. It appoints and also has the power to remove the manager and other employees. At every annual meeting it submits a statement of expenditures for the past year and a detailed estimate of expenditures required for the ensuing year, which amount, when approved by the association, will fix the limit of authorized expenditures for that year. It is the duty of this committee to make such arrangements and provisions as may be necessary to receive and store gold coin or United States legal tender notes or other notes issued under the authority of the United States, other than national bank notes, and to issue clearing house certificates under such rules and regulations as it may consider necessary.

---

<sup>4</sup>Cf. L. H. Langston, *Practical Bank Operation*, Vol. I (New York, 1921), p. 72.

It may examine a bank and if it deems such a course necessary, it may require the bank to deposit securities to protect its balances which result from the clearings. Subject to the approval of the association, the clearing house committee is empowered to fix fines for errors and to establish rules governing proceedings when they are not provided for in the constitution. It may make regulations upon the subject of collections outside New York City. All applications of banks for membership or for the privilege of clearing through members come to this committee, the latter for action, the former for approval before they can be considered by the committee on admissions. Finally, this committee, in conjunction with the conference committee, may suspend members of the association temporarily when it is considered that their conduct merits such punishment.<sup>5</sup>

The conference committee acts in conjunction with the clearing house committee in all cases involving the temporary suspension of a member from the privileges of the clearing house, and in other matters of importance when called upon by the clearing house committee.

The committee on admissions acts upon applications for membership only after a majority of the clearing house committee has voted in favor of the applications. It is the duty of the committee on admissions to make or have made a thorough examination of the condition of the applicant and report the result to the association.

It is the duty of the nominating committee to present to the association at each annual meeting names of candidates for president, secretary, and the various committees for the ensuing year.

It is the function of the arbitration committee to hear and determine disputes which may arise between members of the association and are submitted to the committee by the parties involved. The committee keeps a record of each case referred to it, together with its decision, and the proceedings relating to it, in a book provided for the purpose, which is kept at the clearing house and open to the inspection of the members.

If a vacancy should occur in any of the committees, it is filled by the remaining members of the committee.<sup>6</sup>

In addition to the regular standing committees certain special committees are created from time to time. Probably one of the

---

<sup>5</sup>*Constitution of the New York Clearing House Association* (November, 1923), pp. 9-10, hereafter cited as *The Constitution*; Langston, *op. cit.*, pp. 72-73.

<sup>6</sup>*The Constitution*, pp. 9-11.

most important is the special loan committee which is appointed in times of stress to provide and supervise measures for relieving the stringency. It has been the practice of the New York Clearing House Association to appoint such a committee at such times to provide for the issue of clearing house loan certificates. This committee has consisted usually of about five leading bankers and the president of the clearing house. The member banks feeling the need for aid in meeting the demands incident to the period of stress submit acceptable collateral to this committee. Against this collateral, the committee issues the clearing house loan certificates up to a certain per cent. of its value. All details relating to the issue of these emergency certificates are regulated by this committee whose functions terminate with the retiring of the certificates and the passage of the period of stress.<sup>7</sup>

#### **Membership in the association**

Banks in order to be admitted to the association must have their applications approved not only by the clearing house committee and the committee on admissions, but by a favorable vote of three-fourths of the members of the association which are represented at the meeting at which the application is considered. Applicants for membership are required to have an unimpaired capital of \$1,000,000, must signify their assent to the constitution in writing, and pay an admission fee which varies with their capital and surplus. Banks having a capital and surplus of over \$5,000,000 pay an admission fee of \$7,500; those having a capital and surplus of \$5,000,000 or less pay \$5,000. Any member increasing its capital is required to pay a sum to correspond with these rates.

A member may be suspended by the joint action of the clearing house and the conference committees. Expulsion of a member is effected only by an affirmative vote of the majority of the members of the association. A member may withdraw from the association whenever it wishes to do so, provided it pays its share of the expenses of the association up to the time of the withdrawal. The Federal reserve bank was admitted as a special member November 13, 1914. It was not required to sign the constitution and has no vote; it is not required to furnish a weekly report, nor is it subject to the rules governing collection charges. Other-

<sup>7</sup>See Chapter V above.

wise it is expected to conform to the methods and rules of the clearing house.<sup>8</sup>

When a member of the association makes any change in its condition, either in its management or ownership, any change in its charter, or merges with any other institution not a member of the association, the clearing house committee has power to examine such a member and submit the question of the continuance of its membership to the association. Any action on such questions must receive the same assent as provided in the case of the expulsion of members.

Trust companies organized under the laws of the State of New York may be admitted as members of the association in the same manner and to the same extent as banks, and are entitled to all rights and subject to all the obligations to which member banks are entitled or subjected.

The list of members and clearing non-members is given on the opposite page. The membership is much smaller than in former years, due primarily to consolidations and in a much less degree to the facilities now offered by the Federal reserve bank for the collection of items. From the maximum of 67, the membership has fallen to 38 voting members, or a total of 40 if the clearing house and Federal reserve bank be included. During the entire period since 1853, but three members have withdrawn and this was due to the fact that severe competition in the form of interest on deposits on the part of non-member banks in the vicinity of the members made it seem unwise for the members to attempt to conform to the requirements laid down by the clearing house. It is to be observed, however, that the decline in membership in the clearing house is no indication that its functions are of decreasing importance or that it is serving fewer individuals in the community. Indeed, the reverse is nearer the truth, as will be observed by consulting Table XXXIII on clearings, which shows a rather steady increase in the number of items cleared.<sup>9</sup>

Clearing house numbers are assigned to the members in the order that they become members of the association, and in case a member withdraws, its number is dropped and not reassigned to a new member. The New York Clearing House is given number 200, thus leaving ample room for increasing membership without depriving the clearing house of the highest number in the associa-

<sup>8</sup>*The Constitution*, pp. 10, 44; Ray B. Westerfield, *Banking Principles and Practice*, Vol. III (New York, 1921), p. 632.

<sup>9</sup>See Table XXXIII on pp. 426-427 which also shows the changes in membership.

## NEW YORK CLEARING HOUSE ASSOCIATION

## CLEARING HOUSE MEMBERS AND THEIR NUMBERS

- 1 Bank of New York & Trust Company, 48 Wall Street.
- 2 Bank of the Manhattan Company, 40 Wall Street.
- 4 Mechanics' & Metals National Bank, 20 Nassau Street.
- 6 Bank of America, 44 Wall Street.
- 8 National City Bank, 55 Wall Street.
- 12 Chemical National Bank, 270 Broadway.
- 15 National Butchers' & Drovers' Bank, 501 Seventh Avenue.
- 17 Greenwich Bank, 135 William Street.
- 21 American Exchange National Bank, 128 Broadway.
- 23 National Bank of Commerce, 31 Nassau Street.
- 28 Pacific Bank, 470 Broadway.
- 30 Chatham & Phenix National Bank, 149 Broadway.
- 33 Hanover National Bank, Nassau and Pine Streets.
- 45 Corn Exchange Bank, William and Beaver Streets.
- 54 National Park Bank, 214 Broadway.
- 59 East River National Bank, 680 Broadway.
- 65 First National Bank, 2 Wall Street.
- 67 Irving Bank-Columbia Trust Company, Woolworth Building.
- 70 Bowery Bank, 124 Bowery.
- 72 Continental Bank, 23 Broad Street.
- 74 Chase National Bank, 57 Broadway.
- 76 Fifth Avenue Bank, Fifth Avenue and 44th Street.
- 78 Commonwealth Bank, 190 Bowery.
- 81 Garneid National Bank, Fifth Avenue and 23rd Street.
- 82 Fifth National Bank, Lexington Avenue and 23rd Street.
- 85 Seaboard National Bank, 59 Broad Street.
- 96 State Bank, 376 Grand Street.
- 99 Coal & Iron National Bank, Liberty and West Streets.
- 103 Bankers' Trust Company, 16 Wall Street.
- 104 United States Mortgage & Trust Company, 55 Cedar Street.
- 106 Title Guarantee & Trust Company, 176 Broadway.
- 107 Guaranty Trust Company, 140 Broadway.
- 108 Fidelity-International Trust Company, Chambers and Hudson Streets.
- 110 Lawyers' Title & Trust Company, 160 Broadway.
- 114 New York Trust Company, 100 Broadway.
- 117 Metropolitan Trust Company, 120 Broadway.
- 120 Federal Reserve Bank of New York, 15 Nassau Street.
- 121 Farmers' Loan & Trust Company, 22 William Street.
- 123 Equitable Trust Company, 37 Wall Street.
- 200 New York Clearing House, 77 Cedar Street.

## CLEARING NON-MEMBERS AND NUMBERS OF THEIR CLEARING AGENTS

- ( 8 ) Bank of Montreal, Agency, 64 Wall Street.
- ( 4 ) Bank of Washington Heights, 1915 Amsterdam Avenue.
- (21) Canadian Bank of Commerce, Agency, 16 Exchange Place.
- (17) Colonial Bank, Columbus Avenue and 81st Street.
- (33) Mechanics' Trust Company, Bayonne, N. J., 19 West Eighth Street, Bayonne, N. J.
- (45) Grace National Bank, 7 Hanover Square.

---

tion. The numbers preceding the names of the clearing non-members are those of the member banks through which they have their checks cleared and collected.



**Certain non-member banks may clear through members**

The volume of clearings of many banks is not sufficient to justify them in becoming members of the association, consequently provision is made whereby such banks may arrange with member banks to clear for them, provided the arrangement has the sanction of the clearing house committee. Banks enjoying this privilege are required to pay an annual fee of \$1,500, in addition to which they must submit to examination by the clearing house examiner, and furnish reports to the association in the same manner as do members. Six banks make use of the facilities of the association in this manner in addition to over 200 branches of clearing members.

No member of the association is permitted to make exchanges through the clearing house for any bank or other institution whose exchanges prior to that time have not been made through a member, unless this member has been doing business for at least one year, but in no case until approved by the clearing house committee. Every non-member bank is bound by all the provisions of the constitution, and all the rules and regulations which are established by the clearing house committee, affecting clearing non-members. Members, who clear for non-members, become their agents and are liable in the premises the same as for their own transactions, and their liability in all such cases continues until after the completion of the exchanges of the morning next following the receipt of notice of discontinuance of any such agency. Every clearing non-member is required to keep the same reserve against its deposits as prescribed for clearing house members of the same class.

**Expenses of the association**

The expenses of the association, with the exception of those arising from the work of the department of examinations, are apportioned among members pro rata, according to the average amount which each member has sent to the clearing house during the preceding year. A minimum charge of \$1,000 per year, however, is made against each member and \$1,500 against non-members. The expenses of the department of examination are assessed separately against each member on the basis of that member's gross assets.<sup>10</sup>

<sup>10</sup>*The Constitution*, p. 12; Langston, I, p. 74.

### Clearing house departments

The most important departments which may or have been found in clearing houses are:

1. The city department.
2. The city collection department.
3. The country department.
4. The examination department.

All but the third is found in the New York Clearing House. Of the 362 clearing houses in the United States only two conduct country departments, approximately 35 have examination departments and only one (New York City) has a city collection department. It is quite evident that the city department is the main department in all clearing houses and the only department in others. It is the department which conducts the daily exchange of the city items among the members. Before the country department of the New York Clearing House was closed, it was, itself, a member of the city department of the clearing house and adjusted its balances with the other members through the city department as did the other members.<sup>11</sup>

In order to maintain clearness of treatment, these departments will be discussed in the order mentioned. Our chief interest centers in the city department. But before describing the process of clearing it will be advisable to examine the steps leading to the presentation of items at the clearing house. The first question to be considered is the nature of items eligible for clearing.

### Items eligible for clearing

The items which may be sent by a bank through the clearing house include, in general, all cash items payable by the banks which are entitled to use the facilities of the association and certain collection items. Such cash items include checks, clean drafts and bills of exchange, and all certified items. The only collection items which may be sent through the clearing house are matured notes and acceptances. These may be sent through the morning clearings on the day of their maturity. The following types of notes and evidences of indebtedness are excluded absolutely: Those of the Federal or State governments or any subdivision thereof, or other matured corporate or individual bonds, or collateral notes arising out of or related to capital

---

<sup>11</sup>Westerfield, *op. cit.*, Vol. III, p. 632.

financing or money lending operations.<sup>12</sup> Items to be returned for indorsement or because of informality, or after being certified by the member returning them, may be returned through the exchanges the following morning in an amount not exceeding \$5,000 to any one member.

The rules of the association exclude certain items absolutely and others conditionally. Items drawn by a concern transacting business in New York upon non-clearing banks but made payable if desired by a clearing bank are excluded conditionally. Such items can be cleared only if they are accepted and made payable through the New York Clearing House by the bank upon which they are drawn. Furthermore, such checks, when drawn on a non-clearing bank, but made payable at a clearing non-member bank, cannot under any conditions pass through the exchanges. Items which bear restrictive indorsements, such as "For Collection," "For Account of," or "pay any Bank or Banker or order," or similar indorsements, are excluded also unless the sending bank guarantees all indorsements which precede its own. Errors in the exchanges, and claims arising from the return of checks, or from other cause, are to be adjusted directly between the members which are parties thereto, and not through the clearing house. Regulations of the clearing house further provide that checks and drafts should not be presented through the clearing house on the day of their date, although notes and acceptances may be sent through the clearings on the day of their maturity. Documentary instruments are not proper items for the exchanges.

#### **Indorsement of items for clearing**

The clearing house association requires that all items which are to be cleared bear indorsement acknowledging receipt of payment through the clearing house. Combined with this indorsement is another by which the sending bank guarantees all previous indorsements. This is done by the sending bank, as it is virtually impossible for the bank to examine the indorsement on all the checks which it sends through the clearing house each day. The bank, accordingly, uses upon each clearing house item a uniform indorsement stamp which includes both of these indorsements. As a first step in the process of preparing the items for

---

<sup>12</sup>*The Constitution* (as amended July 29, 1918; December 11, 1922; July 23, 1923), p. 37.

clearing they are run through an endorsing machine which places upon them the following stamp:<sup>13</sup>

Received Payment	16
Through New York Clearing House	31
(date)	6
Name of institution (and No. if desired)	4/0

**Work of assembly racks**

Langston describes the work of the assembly racks as carried on in the National City Bank as follows: "Inside the bank the process of preparing items for clearing is practically a continuous one. Beginning just after ten o'clock in the morning, when the day's regular clearing sessions are over, the clearing house items of the various departments of the bank are sorted into five divisions as a regular part of the process of proving receipts of those departments. These divisions, which correspond to the division of labor in the assembly rack department, are as follows:

A	containing	items	drawn	upon	clearing	house	banks	numbered	1-23
B	"	"	"	"	"	"	"	"	28-54
C	"	"	"	"	"	"	"	"	59-76
D	"	"	"	"	"	"	"	"	77-100 <sup>14</sup>
E	"	"	"	"	"	"	"	"	102-122 <sup>15</sup>

"In the late afternoon, after the work of the various operating departments has been proved, the clearing house items are passed to the assembly rack department, the function of which is to complete the process of preparing them for the clearing house session held the following morning. A special force of the assembly rack department handles the material in each of the five divisions into which the clearing house items were separated by the operating departments.

"Each of the units of the assembly rack department sorts its items according to drawee banks. During the process batch proofs are prepared which show that the total amount distributed to the banks equals the amount received by the unit. After the

<sup>13</sup>This form which is prescribed by the constitution does not include the statement "All previous endorsements guaranteed," although it is customary for banks to add such an endorsement to that prescribed by the clearing house. When items bearing qualified or restrictive endorsements are sent through the clearing house, then the constitution requires that the member sending such items through guarantee all endorsements. It simplifies procedure to guarantee them all.

<sup>14</sup>These numbers would now be 78 and 99, respectively.

<sup>15</sup>This would now be 123.

work of sorting has been completed the items to be presented for payment to each bank are listed and enclosed in a standard form envelope to the outside of which the list of contents is attached.

"Proof of each section of the work is obtained by combining the batch proofs. The section proofs are further combined to form the departmental proof. This proof shows that the amount charged to the department equals the amount enclosed for the various drawee banks by the units."<sup>16</sup>

### **The mail teller's work**

A special assembly rack is operated in connection with the mail teller's department in order to prepare the night mail receipts for the morning clearings. The mail teller has a night force to sort and prove such items. The purpose of such a plan is to save a day's interest on items which arrive in the night and morning mail. It will be observed that the assembly rack department prepares for the clearing house only those items of the previous day which were received after the ten o'clock clearing. The special assembly rack in the mail teller's department sorts and proves the clearing house items which appear in the night and in the morning prior to the time of clearing. These items, sorted and proved by the special assembly rack are added to the exchanges for the day as prepared by the assembly rack department. When all possible exchanges have passed through the racks, an assembly rack proof showing the combined results of the day's work is prepared.

### **Forms required at the New York Clearing House**

After the assembly rack work has been completed the mail teller's assembly rack force prepares the forms which are required at the clearing house session. These forms include the following:

1. The exchange slip. This is a list of the items to be delivered to a given bank. One is made up for each bank against which claims are presented and the slip is then attached to the outside of the envelope containing the claims, or "exchanges," as they are called.

2. The "small ticket" (Form 7). One of these is made out and presented to each bank of the clearing house. This ticket shows the name of the bank against which the claims are presented, the name of the claimant, and the aggregate claim brought. The

---

<sup>16</sup>Langston, I, pp. 83-84.

following small ticket would show the sum evidenced by cash items which the Bank of New York and Trust Company (No. 1) presents to the National City Bank (No. 8):

<p><b>No. 8</b></p> <p><b>NATIONAL CITY BANK</b></p> <p><b>From No. 1</b></p> <p><b>Bank of New York and Trust Co.</b></p>	<p>5</p> <p>18</p> <p>10</p> <p>30</p>
--	--

FORM 7

3. The "first ticket" (Form 8). This is for the use of the proof clerk of the clearing house and consists of a ticket showing the date, name, and clearing house number of the claimant bank and the aggregate claims or exchanges brought by it for the day.

<p>New York Clearing House</p>	<p>No. 1</p>	<p>New York Clearing House</p>	<p>192</p>
	<p>Credit Bank of New York and Trust Company. \$</p>		<p>Settling Clerk</p>

FORM 8

4. The delivery clerk's receipt form. This form is for the purpose of securing the receipt of the banks against which claims are presented. It consists of the names of the clearing house banks arranged in order of their clearing house numbers on the left side, followed to the right by columns for the total claim against each and the signatures of their clerks who receive the

claims. All but the columns for signatures is completed at this time.<sup>17</sup> This form is practically the same as Form 10, except that it is headed "Delivery Clerk's Statement" instead of "Settling Clerk's Statement."

### Clearing house sessions

There are three exchanges at the New York Clearing House: A preliminary exchange at nine o'clock, the regular clearing session at ten o'clock, and an exchange at three o'clock for returned items. At nine o'clock most of the member banks meet together and merely exchange whatever items they have been able to prepare for clearing at that time. A large part of the day's exchanges are transferred at this time since most of the large banks operate night forces, or assembly racks. The items exchanged at nine o'clock are considered and treated as though actually passed through the ten o'clock exchanges and are subject to the same

<p>***</p> <p>\$ _____ 19</p> <p>CHARGE BANK No. _____</p> <p>AMOUNT OF EXCHANGE DELIVERED THIS 9 A. M.</p> <p>CREDIT <b>Bank of New York and Trust Company</b></p>
---

FORM 9

rules and regulations. No settlement is made, however, until the ten o'clock clearing. Form 9 shows the type of ticket used between banks at the nine o'clock clearing. The purpose of the nine o'clock session is to give the banks a start of an hour upon the incoming checks. The check clerks and bookkeepers of each bank are thus enabled to begin the work shortly after nine o'clock, instead of being obliged to wait until after ten.

Members who wish to participate in the nine o'clock exchanges are required to file a prescribed agreement to that effect which obligates them to send a settling and delivery clerk each

<sup>17</sup>See also Langston, I, pp. 86-87.

day to such sessions. The settling clerks are required to deposit with the manager, on arrival at the clearing house, tickets showing the amount brought. This datum is desired for clearing house records. The delivery clerks deliver the packages of items at the respective desks in numerical order, taking receipts for them on a prepared sheet, as at the ten o'clock clearing. As there is no intention of striking a proof, the manager dismisses the clerks as soon as deliveries have been completed. A fine of \$2.00 is imposed for failure of settling or delivery clerks to attend punctually with packages and receipt sheets. Tickets for the amounts delivered to the respective members must be included in the ten o'clock clearing of the same day.<sup>18</sup>

The main session of the clearing house is at ten o'clock. The hours for clearing vary widely throughout the country. In some cities the hour is as early as 8:30; in others as late as 3:15. Some associations have but one exchange each day, while others have two, forenoon and afternoon. An account of the three o'clock session is given below, pp. 406-408.

#### **Force for effecting clearing**

Shortly before ten o'clock a representative of the receiving teller's department takes charge of the items prepared by the morning assembly racks and the forms showing the totals of exchanges made at both clearing sessions. This representative of the receiving teller's department is known as the bank's settling clerk whose duty at the clearing house consists primarily in receiving from other banks, through their delivery clerks, the checks drawn on his own bank. The settling clerk has charge of the bank's clerical force which is required to effect the exchanges, a force sometimes consisting of as many as eight men. Each member bank must have at least two men at the clearing house session: The settling clerk and a delivery clerk, the latter to make the deliveries to the settling clerks of other banks. Banks send as many clerks as are required to aid the delivery and settling clerks.

#### **The clearing procedure**

Upon the clearing house floor, desks are arranged in rows and each bank is assigned a desk according to its clearing house number. The settling clerk stations himself in the cage behind

✓ <sup>18</sup>*The Constitution*, p. 41.



the desk assigned to his bank while the delivery clerk stations himself in front of the desk. The latter, or his assistant, carries the envelopes, exchange slips, and small tickets, together with the form for obtaining the receipts of each bank to which he is to make delivery.

Promptly at ten o'clock the signal for starting the exchange of items is given by the clearing house manager or his assistant. Each delivery clerk moves forward past the desk of each of the other banks until he has visited them all and returned to the desk of his own bank, a procedure which requires about ten minutes. As he passes each desk he leaves with the settling clerk stationed there the envelopes containing the items drawn on that bank, together with the exchange slips, and the small ticket. He presents to the settling clerk before him his receipt form and obtains the initials of the settling clerk opposite the amount listed and delivered to that settling clerk. When all the delivery clerks have completed their deliveries the exchange has really been effected. Only the settlement of net differences remains to be made. The delivery clerk hurries to his bank at once with the checks received by the settling clerk, who remains until proof is made. With the batches of checks gone the settling clerk has the small tickets to fall back upon in order to check his record. This is the purpose of the small ticket.

#### **Settling clerk's statement**

After the exchanges have been received the settling clerk prepares his statement. See Form 10 on opposite page. The first column of his statement sheet represents claims on other banks which have been brought to the clearing house by his bank. An entry of these amounts was made at the time the assembly rack proof was completed. The settling clerk now completes his statement by entering in the second column the amounts which have been presented against his bank. He gets these data from the envelopes containing the exchanges presented against his bank by the delivery clerks of other banks. He must check these figures against the small tickets. The columns are footed, the footings proved against the totals of the small tickets received, and the amount and character of the balance, that is, whether debit or credit, is determined.

After completing his statement the settling clerk makes out



his "second ticket." See Form 11. This consists of a ticket for the use of the clearing house, showing the bank's debit for the amount of exchanges presented against it, its credit for the

New York Clearing House	No. 1	New York Clearing House
		192
	Debit Bank of New York and Trust Company, Am't received, \$	.....
	Credit " " " " " brought, \$	.....
	<hr/>	
	\$	Debit Balance Due Clearing House,
Cr. bal. due Bank of New York and Trust Company, \$		.....
		Settling Clerk

FORM 11

amount brought, and the amount of debit or credit balance. A copy of this second ticket is returned to the paying teller of his bank by the settling clerk to be used by the teller in preparing the clearing house section of his proof.

### Clearing house proof

In the meantime the proof clerk of the clearing house has been occupied in preparing a proof of the day's work. See Form 12. When the settling clerks of the various banks arrived at the clearing house they immediately sent their "first tickets" to the proof clerk. It will be recalled that these tickets indicate the aggregate claims on other banks brought by each bank that day. From these tickets the proof clerk prepares the third column of his sheet, which is to the bank's credit. As soon as the settling clerks complete their second tickets they are presented to the proof clerk. From these he prepares the other three columns of his proof which are: First, debit balance; second, bank's debit; fourth, credit balance.

The proof is completed when the total of the first column equals that of the fourth, and that of the second equals that of the third. In case a difference exists the amount is announced and the clerks are set to looking for it. When the proof is completed the manager reads the balances in thousands of dollars. These balances are kept by the settling clerks to serve as a general statement of the day's clearings for the use of the officers of their respective banks.<sup>19</sup>

<sup>19</sup>Cf. Langston, I, pp. 91-92.



**The settlement of balances**

After the completion of the proof the various balances resulting from the day's exchanges are settled. These balances are settled through the Federal reserve bank in which all the banks which are members of the clearing house association carry deposits. All member banks of the Federal Reserve System are required by law to keep their reserves with the Federal reserve banks, consequently they have balances on which to draw. Other members of the association which are not members of the Federal Reserve System are required to carry a balance with the local Federal reserve bank for the purpose of settling clearing house balances. Thus, at the close of the ten o'clock session the clearing house manager sends to the Federal reserve bank a certified list of the day's balances and by a special agreement between the clearing house association, the member banks, and the Federal Reserve Bank of New York, book entries are made whereby the Federal reserve bank debits the accounts of all clearing house debtors and credits the accounts of all the creditor banks for the amount of their respective balances. See Form 13 on opposite page. Each creditor bank thus receives settlement for its balances in the form of an additional deposit to its credit with the local Federal reserve bank, while each debtor bank effects settlement by having a deduction made from its balance with the same bank.

When the individual bank has a credit balance at the clearing house, it debits its account with the Federal reserve bank entitled "Lawful Reserve with the Federal Reserve Bank," and when it has a debit balance it credits this account. Thus the balances are settled in the most effective manner, with the most desired medium of exchange because so effective, with the least effort, and with no risk of loss or theft. One can appreciate the value of such an economical and safe means of settlement by considering the risk and inconvenience that would be involved were the banks obliged to bring to the clearing house actual cash to settle balances. In the early days of the clearing house this was actually done. Later clearing house certificates were substituted for cash, but even the counting and transfer of certificates is cumbersome as compared with the simple transfers on the books of the Federal reserve bank, a system which was introduced in New York in March, 1917. The same system is in use in Boston, San Francisco, and other cities. In July, 1917, the Los Angeles Clearing House banks, all of which were member banks, arranged for settling of the clearing house

NEW YORK CLEARING HOUSE			
No	MEMBERS	DEBIT	CREDIT
1	Bank of N. Y. & Trust Company		
2	Bank of the Manhattan Company		
3	Mechanics & Metals Nat'l Bank		
4	Bank of America		
5	National City Bank		
6	Chemical National Bank		
7	Nat'l Butchers' and Drovers' Bk.		
8	Greenwich Bank		
9	American Exchange Nat'l Bank		
10	National Bank of Commerce		
11	Pacific Bank		
12	Chatham & Phoenix Nat'l Bank		
13	Hancock National Bank		
14	Coca Exchange Bank		
15	Importers' and Traders' Nat'l Bk.		
16	National Park Bank		
17	East River National Bank		
18	First National Bank		
19	Irving Bank Columbia Trust Co.		
20	Rockwell Bank		
21	Continental Bank		
22	Chase National Bank		
23	Fifth Avenue Bank		
24	Commonwealth Bank		
25	Garfield National Bank		
26	Fifth National Bank		
27	Seaboard National Bank		
28	State Bank		
29	Coal and Iron National Bank		
30	Bankers' Trust Company		
31	U. S. Mortgage and Trust Co.		
32	Title Guaranty and Trust Co.		
33	Guaranty Trust Company		
34	Fidelity International Trust Co.		
35	Lawyers' Title and Trust Co.		
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
151			
152			
153			
154			
155			
156			
157			
158			
159			
160			
161			
162			
163			
164			
165			
166			
167			
168			
169			
170			
171			
172			
173			
174			
175			
176			
177			
178			
179			
180			
181			
182			
183			
184			
185			
186			
187			
188			
189			
190			
191			
192			
193			
194			
195			
196			
197			
198			
199			
200			
201			
202			
203			
204			
205			
206			
207			
208			
209			
210			
211			
212			
213			
214			
215			
216			
217			
218			
219			
220			
221			
222			
223			
224			
225			
226			
227			
228			
229			
230			
231			
232			
233			
234			
235			
236			
237			
238			
239			
240			
241			
242			
243			
244			
245			
246			
247			
248			
249			
250			
251			
252			
253			
254			
255			
256			
257			
258			
259			
260			
261			
262			
263			
264			
265			
266			
267			
268			
269			
270			
271			
272			
273			
274			
275			
276			
277			
278			
279			
280			
281			
282			
283			
284			
285			
286			
287			
288			
289			
290			
291			
292			
293			
294			
295			
296			
297			
298			
299			
300			

This certifies that the above are the correct balances of the members of the New York Clearing House Association, resulting from the day's exchanges as balanced through the Federal Reserve Bank of New York.

balances through the Federal Reserve Bank at San Francisco. After each day's clearings the manager certified by telegraph the balances due from and due to the clearing banks. The Federal reserve bank then entered the proper credits and debits upon its books and telegraphed confirmation. In addition to the authority telegraphed by the clearing house manager, each debtor bank drew its draft on and sent it to the Federal reserve bank for the amount of its debtor balance. In the same year a similar plan was adopted by Spokane, Seattle, and Portland, except that the clearing balances were and are settled through the respective branches of the Federal Reserve Bank of San Francisco. The San Francisco banks adopted the plan at the same time that the Los Angeles banks initiated the movement.<sup>20</sup> This new method of settlement is being operated by banks in the following cities in the second Federal reserve district in addition to New York City: Buffalo, Syracuse, Birmingham, and Elmira in New York, and Newark in New Jersey.

Other plans of settlement which have been used and are used today in some communities to settle clearing house balances are:

1. The payment of actual money, either transported to and from the clearing house, or deposited in the clearing house and exchanged by means of clearing house certificates.

2. The payment of clearing house loan certificates based upon securities pledged with the clearing house loan committee. Both methods have been discussed sufficiently already to make any further explanation unnecessary.

3. Borrowing and loaning balances. This was a device formerly used in the Boston Clearing House. Banks with favorable balances resulting from clearings loaned to banks which had debit balances to meet as a result of unfavorable clearings. The rate of interest on these loans followed closely the market rate, and the clearing house rate was reported regularly in the financial papers. Westerfield says the common criticisms of this method are: "(1) That it is an unsecured loan which endangers the borrowing bank if insistence is made for immediate payment; (2) that it deprives a bank which is an habitual borrower of the advantages of clearing house loan certificates; for as soon as a bank takes out loan certificates and is therefore with funds, a bank which has loaned a balance will demand payment; the bank simply exchanges clearing house loan certificates backed by very high collateral for unsecured loans outstanding; in bor-

<sup>20</sup>*Fourth Annual Report of the Federal Reserve Board (1917), p. 597.*

rowing balances it anticipates the help which would be rendered it when clearing house loan certificates are issued."<sup>21</sup>

4. Settlement by manager's check. Under this plan of settlement, the manager of the clearing house draws a check on the debtor bank in favor of the creditor bank whose representative calls at the clearing house for the manager's check. The check is then presented to the debtor bank and paid by a cashier's check or exchange on another city, or it is deposited in the Federal reserve bank or its branch and sent through the clearings next day. This plan is used frequently today.<sup>22</sup>

5. Settlement by draft. This is probably the most common device used by clearing houses today. It prevails in the small clearing houses. According to this plan debtor banks pay creditor banks by drawing drafts on some financial center as, for example, New York. New York funds are quite generally acceptable among banks of the greater part of the United States. The ultimate settlement of the balances in such cases is, therefore, among the correspondent banks in New York, which is by book entries at the Federal Reserve Bank of New York. It is expected that in time the Federal reserve banks of the respective Federal reserve districts will tend to become the settling points for clearing houses of their districts.<sup>23</sup>

On December 16, 1919, the transactions at the New York Clearing House amounted to \$1,519,848,984. The balance to be settled was \$135,234,928. Had it been necessary to transport actual gold to meet all the claims presented that day it would have required 411<sup>24</sup> five-ton trucks to haul the gold. Allowing thirty feet for each truck they would have extended over a distance of 2.3 miles. This transaction would have required about one-sixth of the world's gold supply to meet the claims.

To settle the balances alone would have required 45.4 five-ton trucks to haul the gold. The clearing house obviates the necessity of the former and the settlements on the books of the Federal reserve bank eliminates the necessity for any movement of specie. This fact should give the reader a keen appreciation of the speed and economy made possible to banks in the New York Clearing House Association as the result of the use of the clearing house

---

<sup>21</sup>Weslerfield, *op. cit.*, III, pp. 643-644.

<sup>22</sup>*Ibid.*, p. 644.

<sup>23</sup>*Ibid.*

<sup>24</sup>410.7 to be exact.



for offsetting claims and the use of the Federal reserve bank as a means of paying debit balances.

### **The adjustment of errors**

All items which come to a drawee bank through the clearing house have the same status as checks drawn upon the bank but which are presented to it directly over the counter. As a result, the items received through the clearing house must be examined for irregularities, signatures, insufficient funds, stop-payment orders, and to determine whether the items are really drawn upon it and whether they have been properly listed and charged to it.

The rules of the clearing house association prescribe the procedure which members are to follow in adjusting errors and in making returns which result from the daily clearings. In brief, all errors are to be adjusted between the banks themselves, as the clearing house association assumes no responsibility for them. Items which are to be returned because they are "not good" or because they have been missent must be returned by hand the same day to the bank which sent them through the clearing house. The clearing house association provides fines which are assessed and collected from the offending banks by the one which has been injured through errors. When returned by hand, the members from which the items were received are required to refund immediately to the member returning them the amount which it had received through the clearing house. However, checks, drafts, notes, or other items to be returned for endorsement or informality may be returned through the exchanges the following morning if they have been certified by the member returning the items and if the amount does not exceed \$5,000. The return of checks, drafts, etc., for informality, not good, missent, guarantee of endorsement, or for any other cause is supposed to be made before three o'clock of the same day. The work of searching out these items and presenting them to the sending banks for redemption and adjustment must be performed with accuracy and speed if the receiving bank is to avoid loss from failure to obey the clearing house regulations. Consequently, the check desk of each bank begins work upon the items as soon as they can be rushed from the clearing house. For the convenience of members of the association a special daily session is held at three o'clock in the afternoon in order that members may return items received in the morning exchanges which are "not good," etc., and which they do not choose to return by hand or through the next morning's exchanges. Missent items and

those in excess of \$1,000 must be returned by hand. The afternoon exchange is confined to items not exceeding \$1,000 each. Items missent in the afternoon exchange must also be returned by hand the same afternoon.

RETURN ITEMS CLEARING	<b>New York Clearing House</b>	
	Due to No. 1 Bank of New York & Trust Company	
	For CREDIT balance in Clearing for Return Items this day.	
	\$ _____	Settling Clerk. _____
	<small>To be charged to No. 200 through Clearing of morning following return of items.</small> Correct: _____	

FORM 14

The procedure at the three o'clock exchange is the same as at the morning exchanges, is governed by the same rules, deliveries are made in the same manner, and settling clerks use similar sheets, tickets, etc.<sup>25</sup> As soon as his balance is found, each settling clerk

RETURN ITEMS CLEARING	<b>New York Clearing House</b>	
	Due from No. 1 BANK OF NEW YORK, N. B. A. <sup>26</sup>	
	For DEBIT balance in Clearing for Return Items this day.	
	\$ _____	Settling Clerk. _____
	Correct: _____	

FORM 15

hands to the manager a ticket showing the amount of the balance, whether debit or credit. If the balance is due to the bank the manager will verify the amount of the balance and hand the ticket back to the representative of the bank at the conclusion of the

<sup>25</sup>The Constitution, pp. 14, 15, 42.

<sup>26</sup>This was the form used by the Bank of New York and Trust Company before that bank assumed its present name. N. B. A. is the abbreviation of National Banking Association.

proof. This ticket must be charged against the clearing house, as No. 200, in the exchanges of the following morning (Form 14). If the balance is due from the bank the manager will retain the ticket and charge it through the exchanges of the following day against the debtor bank (Form 15). In order to keep the tickets uniform, the clearing house keeps each bank supplied with a sufficient quantity, charging the individual banks with the expense as at present for debit receipts. The Forms 14 (the Credit Ticket) and 15 (the Debit Ticket) are samples of those used.

### **The city collection department of the clearing house**

A city collection department was organized in 1917 for the express purpose of providing the clearing house members with an efficient means of making collections of certain city items. These items are checks and clean drafts that cannot be collected through the clearing house. The area covered by this department reaches as far north as 59th Street and includes a selected list of banks, financial houses, insurance, steamship, railroad, mercantile, and other companies not otherwise connected with the clearing house which desire to have checks and drafts drawn on them presented at once by this department rather than be inconvenienced by having runners from each bank and trust company in the clearing house come to them at various hours during the day with checks and drafts. The latter practice necessitates individual payments by check or cash to each runner throughout the day which is both inconvenient and annoying. Consequently, the city collection department has made a list of all the concerns which desire to have checks and drafts drawn on them presented through the collection department. This department thus delivers at one time to the messenger from each concern on the list all the items on it which all the clearing house members might choose to collect in this manner. In the same manner the drawee concern can pay all by means of one check or cash payment to the city collection department. It is arranged that the items are ready for delivery to the paying concern at about 10:30 o'clock, and the institution agrees to pay by certified check to the order of the clearing house by 1:30 o'clock. The check must be accompanied with the return items, properly marked with the reason for returning each. The returned items then may be sent to the clearing house members before three o'clock, the hour of closing.

The items deposited by the members may be only those which are payable by a listed institution. They must be enclosed in

sealed envelopes, or packages, one for each listed institution which is to pay. The envelopes must be listed on deposit letters in the order given on the department lists, and sub-totals shown for each route, the paying institutions being grouped in routes. The contents of the envelopes are not examined by the collection department, but the totals of each deposit letter are entered on a due bill, or receipt accompanying the deposit, and these are verified and signed by the manager and returned to the messenger. This due bill is payable through the exchanges of the next business day. The deposited items are sent out for collection the same day by messengers, and the returns made to the department are put through the exchanges the next day to offset the due bills of that day. The deposits must be made before ten o'clock and only one deposit may be made each day by each member. The items must bear a stamped endorsement as follows:

Received Payment  
Through  
City Collection Department  
New York Clearing House  
Prior endorsements guaranteed.  
(Date)  
(.....Name of institution.....)

The clearing house association is not liable in any way for the contents of the envelopes deposited, or for any lost or missing items, or for any claims for loss arising under any dispute or disagreement as to the contents of such envelopes. Settlements with the clearing house by individuals, firms, and corporations on which items are drawn must be made by checks drawn on, or payable at, clearing house institutions. Should any loss arise through the non-payment of such checks, it is pro-rated among the members according to the amount of items deposited by each member and payable by the individuals, firms, or corporations giving such checks.<sup>27</sup> The use of this department by clearing house members is entirely optional although practically all of them elect to collect their items on these concerns in this manner.

#### Other methods of collecting city items

There are at least three other means that may be employed by these banks in collecting city items that are not collectible through

<sup>27</sup>*The Constitution*, pp. 38-40.

the clearing house. (1) Banks may send messengers direct to the drawee institutions; (2) they may employ the Federal clearing division of the Federal reserve bank; or (3) they may use the city collection department of the Federal reserve bank.

Banks use messengers when the drawee banks cannot be reached through any of the usual clearing channels or when it is desirable to secure the certification of checks.

#### **The Federal clearing division of the Federal Reserve Bank of New York**

This division is quite similar to the city collection department of the clearing house, although it covers a much larger territory, namely, Manhattan, Bronx, and Brooklyn, and for that reason is frequently called the "Manhattan, Bronx, and Brooklyn collection arrangement." The purpose of this division is to eliminate the great network of messengers and offer to member banks in Greater New York a convenient means of converting their checks and drafts into Federal funds without delay. Banks and other important institutions which wish to have checks on them presented to them in bulk are placed on the list according to routes. There are about 130 concerns on the list, if branches of banks be counted, and the list is divided into nine units or routes. Items on these concerns are delivered by member banks of the Federal reserve bank to this division properly sorted into batches according to the units or routes. A non-member bank cannot collect checks through this division except by using one of the member banks as a correspondent. This department is for the benefit of the member banks just as the city collection department of the clearing house is for the benefit of its member banks.

Items presented to this division before nine A. M. are credited on the same day; those coming in after that time are deferred for one day. Thus, it will be observed that on those items which are presented to this division before nine A. M. one day's time is saved as compared with the time required for collecting such items through the city collection department of the clearing house where settlement is deferred one day. Each morning messengers from the concerns on the list are sent to the Federal reserve bank where the items which have been sorted into batches are delivered to them. Remittance is made before three o'clock in Federal reserve funds which are credited at once to the accounts of the member banks. This division was created in March, 1919.

### **The city collection department of the Federal Reserve Bank of New York**

The third method which may be employed in New York City is to use the city collection department of the Federal reserve bank. This department handles only hand-presented items and is designed to collect items through messengers from the Federal reserve bank on any bank or concern that is not a member of the New York Clearing House, the city collection department of the clearing house, or the Federal clearing division of the Federal reserve bank. Messengers are sent anywhere in Greater New York, that is, in Manhattan, Bronx, and Brooklyn. The items are usually left with the payee banks or other houses and the messengers return for remittances later in the day. Payment is made, ordinarily, by certified check.<sup>28</sup>

### **The country collection department**

In addition to receiving checks collectible in the city through the channels mentioned, that is, through the city department of the clearing house, through its city collection department, through messengers sent direct to the drawee banks, through the city collection department of the Federal reserve bank, or through the Federal clearing division of the Federal reserve bank, a bank receives many checks drawn on out-of-town banks. Such checks and drafts—the so-called transit items—may be collected in three ways: (1) Through correspondent banks, (2) through the country collection department of the clearing house if such a department exists, or (3) through the Federal reserve bank. It is in no sense an exaggeration to say that of all the problems which face banks in the clearing and collection of checks, none is greater than that of collecting out-of-town items. Depositors usually are given immediate credit with or without charge for such items while the bank is compelled to wait some time before it can convert the items into available funds. It is the bank's problem to convert these out-of-town items into acceptable funds upon the most advantageous terms and with as little delay as possible.

Prior to the organization of the Federal Reserve System, and

---

<sup>28</sup>An arrangement was made in 1920 whereby the banks in Hudson County, New Jersey, have established a clearing house in New York City. The Federal Reserve Bank of New York, which is also a clearing member, has set aside a room for them to which they send their messengers each day for a ten o'clock clearing. The procedure, in every way, is the same as the New York Clearing House. Banks in Hudson County were "two-day points" with respect to New York City; now immediate credit is given for their items. This organization is commonly known as the Northern New Jersey Clearing House Association.

to a less extent since its organization, it has been the common practice for banks throughout the United States, to collect such items through correspondent banks. The scheme was closely bound up with the system of reserves; the reserve and central reserve city banks acted not only as reserve agents for country banks, but also as their collecting agents. Unrestrained competition on the part of the banks in the larger centers for these deposits led to concession after concession to the country banks until the accounts in some cases were carried at an actual loss. To protect themselves the members of the clearing house in some of the principal reserve cities joined in agreements to fix minimum exchange rates and time schedules for deferring credit in collecting such items. It has been pointed out elsewhere<sup>29</sup> how Buffalo started such a movement in 1881. The New York Clearing House Association adopted such a system in 1899 and it has been applied in more or less the same form since that time. The effect of making such collection charges on out-of-town items was to reduce somewhat the volume of items sent to the banks of New York for collection. The New York banks were put in the contradictory position of soliciting accounts by paying interest and doing service on the one hand, and on the other of repelling the checks on these country banks by prohibitive charges.<sup>30</sup>

The collection of items through so many banks individually in the large cities, and by the circuitous routes which resulted from the attempt to avoid remittance charges was not an economical system. As a solution of this problem efforts were made to devise plans to collect out-of-town checks in a more efficient and economical manner. The most hopeful plan adopted was found in the form of the country clearing department, frequently called the country clearing house. It will be recalled<sup>31</sup> that Sedalia, Missouri, devised such a scheme in 1895; Boston followed in 1899 with her country clearing department which proved to be most efficient in making most of the New England checks collectible at par. New York City did not establish a country collection department until August 9, 1915.

The chief purpose of the country collection department of a clearing house is to provide a single agent for the member banks through which they can collect their out-of-town items. The economy of such a department is to be found in the fact that mem-

---

<sup>29</sup>See Chapter VII.

<sup>30</sup>Westerfield, III, p. 654.

<sup>31</sup>See Chapter IV.

ber banks are relieved from the expense and trouble of maintaining many correspondent accounts, clerical work at the banks and postage expense are reduced, items are routed directly and pass through fewer hands, and there is a saving in interest due to the reduction of the time in transit.

An account of the Boston country collection department was given in Chapter IV and will not be repeated here. The aim of the New York Clearing House in establishing its country collection department in 1915 was to collect out-of-town checks on all banks in New York, New Jersey, Connecticut, Massachusetts, and Rhode Island, which agreed to remit at par in New York funds on the day of the receipt of any items sent them. Starting with 347 members, the system included over 500 by the end of the year 1915. The volume of transactions was about twice as large as that of the collection system of the Federal reserve bank at that time. On December 30, 1915, the clearing house offered to receive items on any banks joining its system in places from which the mail could reach New York over night.<sup>32</sup> The country collection departments in both Boston and New York as well as in other places experienced successful careers, but with the coming of the Federal reserve banks these departments were found to duplicate the work which it was hoped and expected that the Federal reserve banks would do. Consequently, in Federal reserve bank cities like Boston and New York, the country collection department of the clearing house has been closed and the function absorbed by the respective Federal reserve banks. Other outstanding country collection departments, or country clearing houses, as they were more commonly called, were those of Atlanta and Kansas City.

The New York Clearing House closed its country collection department on November 15, 1918. The facilities offered by the Federal reserve bank for the collection of out-of-town checks, combined with the ruling made by the New York Clearing House, effective October 1, 1918,<sup>33</sup> and the closing of the country collection department of the clearing house, now made the Federal reserve bank the most important medium for the collection of out-of-town checks. The method of collecting out-of-town checks through the Federal reserve banks is described elsewhere.

---

<sup>32</sup>*Second Annual Report of the Federal Reserve Board* (1915), p. 169.

<sup>33</sup>This rule provided that the members of the clearing house should neither pay a higher charge for the collection of checks on banks on the Federal reserve par list than would be incurred in collecting such items through the Federal reserve bank, nor allow the paying bank to hold back the remittance beyond the day on which the item was received. *Fifth Annual Report of the Federal Reserve Board* (1918), p. 331.



**The examination department**

The New York Clearing House Association maintains an examination department which was provided for in 1911. However, this does not mean that the clearing house did not examine member banks prior to 1911. In June, 1884, the clearing house adopted an amendment to its constitution which authorized the clearing house committee to examine any bank in the association whenever it considered such examination to be for the interest of the associated banks. The Chicago Clearing House was the first to establish a separate examination department; this was done in 1906. Chicago was followed by the associated banks of Minneapolis in 1907, which, in turn, were joined in 1908 by the banks of St. Paul. St. Louis adopted the plan in 1908 and was followed by other important associations such as those of Los Angeles, San Francisco, Kansas City, Philadelphia, and others, about 35 in all.

Clearing house examinations are designed to supplement those which are made by public officials. Examinations by public officials, while usually effective in discovering and bringing to justice those who have broken the law, are punitive in nature and such officials are generally without the power to enforce the correction of minor irregularities and practices which, if unchecked, might finally wreck a bank or impair the faith of the public in the clearing house members. It is urged that clearing house examinations enable the clearing houses to correct this defect and take preventive rather than remedial measures. As such a method of examinations has developed, it has become possible for the clearing house as a body to exercise such supervision of any weak bank as to amount to a virtual taking over of its management until it can regain a sound condition.

The Clearing House Section of the American Bankers' Association, which has been conducting an active campaign in an effort to secure a wider adoption of the plan, claims that such examiners are better judges of local credits than any public examiner can possibly be, and furthermore, can give prompter attention to the banks and secure a speedier response to their wishes and those of the clearing house than could any official sent from Washington.

In New York it is the business of the clearing house bank examiner to make an examination of and report on the condition and practices of each bank at least once each year. In addition, special examinations are made at the discretion of the clearing house committee, and also by constitutional requirement, when

any clearing bank undergoes a change of management or when two or more are merged or consolidated. The recommendations of the clearing house committee are generally carefully followed, and the member banks endeavor to conduct their banks in ways that will insure compliments rather than criticisms from the committee. Clearing house examinations have the virtue of discovering and eradicating in their incipency practices which might in time lead to disaster; they make for a sounder and more conservative banking policy.

#### Penalties for violating New York Clearing House rules, and for errors

At the ten o'clock exchange forty-five minutes are allowed for a proof. If a proof cannot be effected within that time limit fines are levied upon the clerks responsible for the errors or delay. For all errors remaining undiscovered at 11:15 A. M., the fine is doubled, and at twelve M. quadrupled. The regulations as to fines are as follows:

1st.—All errors on the Credit side of the Settling Clerk's statement (that is, in the <i>amount brought</i> ), whether of footing or entry, and all errors causing disagreement between the credit entries, the check tickets, and the exchange slips, each.....	\$3.00
2nd.—Errors in making the Debit (that is, <i>amount received</i> ) entries, each .....	2.00
3d.— <i>Errors in the Tickets</i> reported to the Clearing House, causing disagreement between the balances and aggregate, each.....	2.00
4th.— <i>Errors in footing</i> the amount received.....	1.00
5th.— <i>Disorderly Conduct</i> of Settling or Delivery Clerk, at the Clearing House; or <i>disregard of the Manager's instructions</i> , each offense....	2.00
6th.—Settling or Delivery Clerk <i>failing to attend punctually</i> , with statements and tickets complete, at the morning exchanges, each.....	2.00
7th.—Debtor members, <i>failing to appear to pay</i> their balances before 1:00 P. M. ....	3.00
8th.—Errors in <i>delivery or receipt</i> of exchanges, each.....	1.00
9th.—For <i>each item missent</i> , payable to the returning member (but in no case more than five dollars for items returned by any member to any one member, on the same day) .....	1.00
(a)—For each item missent in the <i>afternoon</i> exchange for return items payable to the returning member (but in no case more than ten dollars for items returned by any member to any one member, on the same day) .....	5.00
(This applies to all missent items, whether listed or not. Members must return missent items by three o'clock P. M. to be entitled to collect the fine prescribed.)	
10th.—For errors in <i>reporting amount of Depository Certificates</i> on hand	10.00
11th.—For <i>failure to discover errors in footing</i> when sheets are passed for verification .....	1.00
12th.—For errors in <i>listing</i> or in <i>footing exchange slips</i> , payable to member making claim (but in no case more than five dollars to any member by any one member, on the same day), each.....	1.00

To be entitled to collect this fine, the claiming bank must make claim not later than three P. M. the following day direct to the bank making the error, over its counter, with the evidence of the error. Claims cannot be made through the clearing house.

The fines are imposed at the nine A. M. and the afternoon exchanges, where applicable. A fine of \$2.00 is imposed for failure of settling or delivery clerks to attend punctually with packages and receipt sheets at the nine o'clock exchanges. For the afternoon exchanges the fines are the same as for the morning exchanges except that the fine for items missent in the afternoon exchanges is \$5.00 for each item, but cannot exceed \$10.00 by any one member to any one member on the same day.<sup>34</sup>

### **Special functions of clearing houses**

In addition to exercising the prime function of clearing checks, drafts, etc., clearing houses, from time to time, have assumed various other functions. The examination of member banks may properly be listed as one of the special functions of clearing houses. Others that have assumed some importance are: (1) The regulation of interest on deposits, (2) the regulation of exchange charges, (3) the regulation of reserves frequently above those required by law, (4) rendering assistance to members, (5) gathering credit data for members, (6) the issue of clearing house loan certificates in times of stress, (7) extending loans to the government, (8) publishing of statements of total amounts of clearings and conditions of member banks, and (9) participating in annual conferences. Inasmuch as these special functions have been discussed at some length in Chapter V, only their most modern aspects as found in New York will be discussed here.

### **Regulation of interest on deposits**

One of the special functions of the New York Clearing House performed in the interest of maintaining conservative banking is the regulation of interest rates on deposits. Without such regulation in the interest of the member banks, competition for deposits becomes so severe that banks are led to offer higher rates of interest for deposits than can be done with profit. It is a problem that cannot be left to individual banks to solve.

The rules of the association, which in all cases fix the maximum rate which may be allowed on deposits, by member banks and

---

<sup>34</sup>*The Constitution*, pp. 23, 24, 36, 41, 42.

banks clearing through members, are set forth in a summarized manner in the following schedule:<sup>35</sup>

**SCHEDULE OF MAXIMUM INTEREST RATES WHICH MAY BE PAID**

When the New York Federal Reserve Bank ninety day discount rate for commercial paper is	On Certificates of Deposit payable within thirty days from date of issue; and on Certificates of Deposit payable within thirty days from demand; on Credit Balances payable on demand; and on Credit Balances payable within thirty days from demand			To Banks, Trust Companies and Private Banks, but excluding Mutual Savings Banks	To Mutual Savings Banks	To Others	On Certificates of Deposit payable on or after thirty days from the date of issue or demand; and on Credit Balances payable on or after thirty days from demand
Less than - - -	2½%	1%	1½%	1½%	1½%	1½%	1½%
2½% or over, but less than	3%	1¼%	2%	1½%	2%	1½%	2%
3% " " "	3½%	1½%	2½%	1½%	2½%	1½%	2½%
3½% " " "	4%	1¾%	3%	1½%	3%	1½%	3%
4% " " "	4½%	2%	3½%	1½%	3½%	1½%	3½%
4½% " " "	5%	2¼%	4%	1½%	4%	1½%	4%
5% " " "	5½%	2½%	4½%	1½%	4½%	1½%	4½%
5½% " " "	6%	2¾%	5%	1½%	5%	1½%	5%

Interest not to exceed three per cent. per annum may be allowed on credit balances of \$10,000 or less on accounts in respect to which checking privileges are not allowed, but the pass book or other form of receipt must be presented to the bank whenever a withdrawal is made, and the bank retains the right to require the depositor to give notice of an intended withdrawal not less than thirty days before such withdrawal, as provided by the printed regulations of the institution accepted by the depositor at the time the account is opened. An interest rate within the limits of the above schedule stipulated in a certificate of deposit with a fixed maturity, or in respect of a credit balance payable on or after a given date, is not affected by any change in the ninety-day discount rate occurring subsequent to the creation of the credit balance, or the date of issuance of the certificate of deposit, and prior to maturity. On all time deposits and on certificates of deposit without fixed maturity, but payable only upon notice of thirty or more days, each member (as well as each non-member) upon any change in the ninety-day discount rate, must bring the interest rates within the maximum limits of the above schedule not later than thirty days after the date of such change, and must immediately give notice of the required change. The above regulations apply only to credit balances and certificates of deposit belonging to persons, corporations, associations or co-partnerships residing, organized, located or having their prin-

<sup>35</sup>*Ibid.*, p. 17. Amended to July 2, 1924.

cial place of business in continental United States, Alaska, Hawaii, or Canada. They do not affect interest rates that are fixed by law such as rates to be paid on balances of the Federal or State governments, the government of Canada, or any subdivisions thereof. They do apply to the United States branch of a foreign insurance corporation transacting business in competition with and under the same regulations as domestic insurance companies.

### Regulation of exchange charges on out-of-town items

It is observed that there is a tendency among competing banks located in the leading collection centers to charge an excessively low rate of exchange on out-of-town items, or, if possible, to make no charge at all; this is done in the effort to secure deposits. To eliminate such practice and to place the collecting machinery of its member banks upon a self-supporting basis, the New York Clearing House has provided rules to the effect that each of the banks which uses its facilities for collecting such items shall assess and collect exchange against depositors for certain transit items deposited by them. For all items deposited by or collected for the account of the governments of the United States, the State of New York, or the city of New York, from whatever source received,<sup>36</sup> the charge is discretionary with the collecting banks. For checks or drafts drawn on banks, bankers and trust companies, and for all other items, the charges shall not be less than those prescribed for all the respective points in the following schedule:<sup>37</sup>

### RULES AND REGULATIONS

#### Regarding Collections Outside of the City of New York

States	Checks or Drafts Drawn on Banks,		All Other Items
	Bankers and Trust Companies	Bankers' Acceptances	
†Alabama .....	1/10 of 1%	‡1/40 and 1/10 of 1%	1/10 of 1%
Birmingham .....	1/40	Discretionary	1/10
Arizona .....	1/10	1/40	1/10
Arkansas .....	1/20	1/40	1/10
Little Rock .....	1/20	Discretionary	1/10
California .....	1/10	1/40	1/10
Los Angeles .....	1/20	Discretionary	1/10
San Francisco .....	1/20	Discretionary	1/10

<sup>36</sup>But not checks, warrants, etc., issued by these governments and deposited by or collected for the account of the banks' other customers.

<sup>37</sup>Revised to March 1, 1921. *The Constitution*, pp. 24-28.

RULES AND REGULATIONS—(Continued)

States	Checks or Drafts Drawn on Banks, Bankers and Trust Companies		All Other Items
		Bankers' Acceptances	
Colorado .....	1/10	1/40	1/10
Denver .....	1/20	Discretionary	1/10
Connecticut .....	Discretionary	1/40	1/10
Delaware .....	Discretionary	1/40	1/10
District of Columbia...	Discretionary	1/40	1/10
†Florida .....	1/10	†1/40 and 1/10	1/10
Jacksonville .....	1/40	Discretionary	1/10
†Georgia .....	1/10	†1/40 and 1/10	1/10
Atlanta .....	1/40	Discretionary	1/10
Idaho .....	1/10	1/40	1/10
Illinois .....	1/20	1/40	1/10
Chicago .....	1/40	Discretionary	1/10
Indiana .....	1/20	1/40	1/10
Iowa .....	1/20	1/40	1/10
Kansas .....	1/20	1/40	1/10
Kansas City .....	1/20	1/40	1/10
Kentucky .....	1/20	1/40	1/10
Louisville .....	1/40	Discretionary	1/10
†Louisiana .....	1/10	†1/40 and 1/10	1/10
New Orleans .....	1/20	Discretionary	1/10
Maine .....	Discretionary	1/40	1/10
Maryland .....	Discretionary	1/40	1/10
Baltimore .....	Discretionary	Discretionary	1/10
Massachusetts .....	Discretionary	1/40	1/10
Boston .....	Discretionary	Discretionary	*Discretionary
Michigan .....	1/20	1/40	1/10
Detroit .....	1/40	Discretionary	1/10
Minnesota .....	1/20	1/40	1/10
Minneapolis .....	1/40	Discretionary	1/10
St. Paul .....	1/40	Discretionary	1/10
†Mississippi .....	1/10	†1/40 and 1/10	1/10
Missouri .....	1/20	1/40	1/10
Kansas City .....	1/20	Discretionary	1/10
St. Louis .....	1/40	Discretionary	1/10
Montana .....	1/10	1/40	1/10
Helena .....	1/20	Discretionary	1/10
Nebraska .....	1/10	1/40	1/10
Omaha .....	1/20	Discretionary	1/10
Nevada .....	1/10	1/40	1/10
New Hampshire .....	Discretionary	1/40	1/10
New Jersey .....	Discretionary	1/40	1/10
Hoboken .....	Discretionary	Discretionary	*Discretionary
Jersey City .....	Discretionary	Discretionary	*Discretionary
New Mexico .....	1/10	1/40	1/10
New York .....	Discretionary	1/40	1/10
Buffalo .....	Discretionary	Discretionary	1/10
New York City.....	Discretionary	Discretionary	Discretionary
North Carolina .....	1/20	1/20	1/10
North Dakota .....	1/10	1/40	1/10
Ohio .....	1/20	1/40	1/10
Cincinnati .....	1/40	Discretionary	1/10
Cleveland .....	1/40	Discretionary	1/10
Oklahoma .....	1/10	1/40	1/10
Oklahoma City .....	1/20	Discretionary	1/10
Oregon .....	1/10	1/40	1/10
Portland .....	1/20	Discretionary	1/10

## RULES AND REGULATIONS—(Continued)

States	Checks or Drafts Drawn on Banks,		All Other Items
	Bankers and Trust Companies	Bankers' Acceptances	
Pennsylvania .....	Discretionary	1/40	1/10
Philadelphia .....	Discretionary	Discretionary	*Discretionary
Pittsburgh .....	Discretionary	Discretionary	1/10
Rhode Island .....	Discretionary	1/40	1/10
†South Carolina .....	1/10	1/20	1/10
South Dakota .....	1/10	1/40	1/10
†Tennessee .....	1/10	‡1/40 and 1/10	1/10
Memphis .....	1/20	Discretionary	1/10
Nashville .....	1/40	Discretionary	1/10
Texas .....	1/10	1/40	1/10
Dallas .....	1/20	Discretionary	1/10
El Paso .....	1/20	Discretionary	1/10
Houston .....	1/20	Discretionary	1/10
Utah .....	1/10	1/40	1/10
Salt Lake City .....	1/20	Discretionary	1/10
Vermont .....	Discretionary	1/40	1/10
Virginia .....	1/40	1/40	1/10
Richmond .....	Discretionary	Discretionary	1/10
Washington .....	1/10	1/40	1/10
Seattle .....	1/20	Discretionary	1/10
Spokane .....	1/20	Discretionary	1/10
West Virginia .....	1/20	‡1/40 and 1/20	1/10
Wisconsin .....	1/20	1/40	1/10
Wyoming .....	1/10	1/40	1/10

\*Except Purchased Paper. See Section 6 (B).

†See Section 4(B).

‡See Bankers' Acceptances Schedule issued by Federal Reserve Bank of New York, given above, p. 205. Sections 4-6, which qualify the above schedule are given in the constitution and regulations of the New York Clearing House as follows: "Sec. 4. (A.) The charge for checks and drafts drawn on banks, bankers and trust companies located in Federal Reserve cities and cities where Federal Reserve Bank branches are at present or may hereafter be established, shall be governed by the 'Schedule showing when the proceeds of ITEMS will become available,' as published by the Federal Reserve Bank of New York from time to time; that is to say, for such items on said cities where immediate credit is given and for such items which become available one day after receipt, the charge shall be discretionary; for such items available two days after receipt, the charge shall be 1/40 of 1%; for such items available three, four and five days after receipt, the charge shall be 1/20 of 1%; and for such items available eight days after receipt, the charge shall be 1/10 of 1%.

"(B.) Whenever the Federal Reserve Bank of New York shall add to its par list as an all par state, any state not now listed thereon as such (the present non-par states are indicated by † [Section 3 omitted] in the Schedule under Section 3), the charge for checks and drafts drawn on banks, bankers and trust companies located in such added state (except in cities having Federal Reserve Banks and their branches) shall thereupon be automatically fixed to correspond with, and be governed by, the charges specified in (A) of this Section 4, according to the said 'Schedule showing when the proceeds of ITEMS will become available,' as published by the Federal Reserve Bank of New York.

"Sec. 5. In case the charge upon any item at the rates above specified does not equal ten (10) cents, the collecting bank shall charge not less than that sum; but all items received in any one deposit and subject to the same rate, may be added together and treated as one item for the purpose of determining the amount of exchange to be charged.

"Sec. 6 (A.) On acceptances of banks, bankers, and trust companies taken by member or clearing non-member institutions the charge shall be governed by

the 'Schedule showing when the proceeds of BANKERS' ACCEPTANCES will become available,' as published by the Federal Reserve Bank of New York from time to time; that is to say, for such items for which credit is available at the Federal Reserve Bank of New York on the day of maturity, the charge shall be discretionary; where credit is available at said bank one or two days after maturity, 1/40 of 1%; where credit is available at said bank three or four days after maturity, 1/20 of 1%; where credit is available at said bank later than four days after maturity, 1/10 of 1%.

"(B.) All notes or other time obligations, not provided for in Sub-division (A) of this Section, purchased by member or clearing non-member institutions payable elsewhere than in New York City, shall be subject to a charge of not less than 1/10 of 1%, provided, however, that for notes or other time obligations purchased or discounted by any collecting bank, payable elsewhere than in New York City, but with respect to which the maker, endorser or guarantor, or any bank, banker or trust company maintaining an account with the collecting bank, gives a written agreement at the time of such purchase or discount, that payment is to be provided in New York City on date of maturity in New York funds at par, the charge shall be discretionary."

The charges specified in the above schedule must be collected at the time of deposit or not later than the tenth day of the following calendar month and no collecting bank is permitted to allow any abatement of such charges either directly or indirectly. Violation of any of these regulations is punishable by a fine and in case of a second violation by expulsion from the association. In general, it may be said that the above rules contemplate the charging of collection rates on all out-of-town items, from whatever source derived, unless otherwise provided in the rules. This ruling is made comprehensive in order to meet ingenious cases of evasion.<sup>38</sup>

### Regulation of reserves

In the interest of conservative banking practices the clearing house association also regulates the amount and kind of reserve which the member and clearing non-member banks must keep against their deposits. This rule states that each bank must maintain a reserve of the same proportion and definition as that required by the laws under which it operates. In computing the amount of net demand deposits upon which reserve is to be figured, however, banks are restrained from deducting deposits secured by the deposit of outstanding unmatured stocks, bonds, or other obligations of the State or City of New York, or deposits to the amount of the stock, bonds, or other obligations of the State or City of New York owned and held by the bank or trust company. The association also provides that all required reserve other than that which is in the form of cash on hand must be maintained in

<sup>38</sup>For rulings and interpretations of the Association relative to the charges in peculiar cases, the reader should consult *The Constitution*, pp. 28-30.



the form of a deposit with the Federal Reserve Bank of New York, or in some other bank which is a member of both the Federal Reserve System and the clearing house association, or with any other member of the association, which maintains in the Federal Reserve Bank of New York the reserve required by member banks. Failure on the part of any institution to keep the required reserve renders the member liable to expulsion from the association.<sup>39</sup>

### Rendering assistance to members

The question of rendering assistance to members has been discussed at sufficient length in Chapter V to obviate the necessity of any further detailed discussion. Article II of the constitution of the New York Clearing House Association states as one of the objects of the association “. . . the promotion of the interests of the members and the maintenance of conservative banking through wise and intelligent operation.”<sup>40</sup> Within the scope of this general statement can be included virtually any question of common interest. In times of stress it is common practice for weak banks to go to the association for aid which may take any form even to the extent of taking over the control and direction of the bank in trouble.<sup>41</sup>

Other matters of common interest to banks which are discussed or investigated are: The question of loans to individuals who go from bank to bank seeking accommodation, the questions that arise in connection with the deposit of public funds frequently not pro-rated among the banks, the charges for handling accounts where the average balance falls below a certain amount, opening and closing hours, the question of the policy to be adopted in connection with the safekeeping of securities and the rental to be charged for safety deposit boxes, fixing a minimum per transaction and per thousand dollars for handling matters in escrow, the policy to be adopted in answering inquiries in order to protect banks from the abuse of this courtesy generally extended by banks, arranging for all requests for donations of certain amounts to be referred to a special committee, submitting to a committee periodically a list of all past due paper and overdrafts, and finally, virtually any questions considered to be of common interest.

<sup>39</sup>*Ibid.*, pp. 7, 13.

<sup>40</sup>*Ibid.*, p. 1.

<sup>41</sup>See above, pp. 132-134 for illustrations.

**Gathering credit data for members**

It has been pointed out above<sup>42</sup> that some clearing house associations gather valuable credit data for members, such as information bearing upon large borrowers. New York has never adopted such a practice.

**The issue of clearing house loan certificates in times of stress**

The mutual support which clearing house banks give each other in times of stress also has been reviewed in Chapter V. One of the chief forms of such aid to members in need has been the issuance of loan certificates in exchange for the pledge of certain of their unmatured assets. A committee is appointed especially for the purpose of passing upon such collateral and if all is in order, clearing house loan certificates are issued against it. The applicant bank is permitted then to use these certificates in lieu of cash in paying its clearing house debit balances, and thus release for use a corresponding amount of cash to meet other demands. The New York Clearing House began issuing such certificates in 1860 and repeated the process at different times of stress until the Federal Reserve System was organized effectively. The last issue was in 1914. During the period 1860-1914, ten separate loan committees acted in financial crises and issued \$394,000,000 loan certificates against collateral at least 25 per cent. in excess of that amount.<sup>43</sup>

Another common form of aid employed by clearing house associations in times of stress is the assessment of certain strong members of the clearing house in order to aid an especially weak member during a period of stringency.

**Extending loans to the government**

On two occasions only have clearing house associations extended aid to the government in the form of loans and on both of these occasions the New York Clearing House Association participated. During the Civil War the association joined with those of Boston and Philadelphia in making loans to the government. The second occasion was that of the recent European War. In September, 1914, the Federal Reserve Board called in conference the representatives of the clearing houses in reserve cities in order to devise plans to solve the problem of gold exportations to meet

<sup>42</sup>Chapter V, pp. 136-137.

<sup>43</sup>*Extracts from Managers' Annual Report for 1923*, a pamphlet issued by the New York Clearing House (1924). See also Chapter V.

foreign obligations. The result was the creation of a gold exchange fund to which the clearing house associations subscribed and which relieved the foreign exchange situation. The future undoubtedly will find the government looking less to the clearing house associations and more to the Federal reserve banks in times of stress, although there should be opportunity for the associations to render much valuable service in securing organized effort and unity of purpose.<sup>44</sup>

#### **The issue of public statements by clearing house banks**

In New York, every bank which clears through the association, with the exception of the Federal reserve bank, is required to furnish a weekly report of its daily condition as well as a statement of its actual condition at the close of business each Friday. These reports which contain a total of the loans, discounts and investments, reserves, deposits, and circulation of the bank, give the association information regarding the standing of each member. They are combined into a weekly statement of clearing house banks and act as a check upon the conditions and practices of each clearing bank. Considerable value attaches to such reports as a business barometer. This is especially true when coupled with reports on the volume of clearings. Over 90 per cent. of the country's business is done by checks and the fraction of the checks cleared is fairly constant, thus acting to some extent as a business barometer if certain important factors are recognized and discounted, such as changes in the price level and certain local conditions which obviously render unreliable the apparent conclusions.<sup>45</sup>

The statements which are issued include (1) the "Statement of the Members of the New York Clearing House Association from reports as required under Article III of the Constitution," and (2) the "Statement of Clearing Non-Members from reports as required under Article IX of the Constitution." Samples of such statements may be obtained from the clearing house.

In addition to these two statements, three others are compiled at the clearing house for the use of members of the association. One is a report of the combined resources and liabilities of the national banks in New York City as shown by their official statements to the Comptroller of the Currency. These are compiled for the use of the member banks whenever the Comptroller

---

<sup>44</sup>See Chapter V.

<sup>45</sup>On this point see Chapter XII.

happens to call for reports from the national banks, thus making the material available for the clearing house. Another report gives in a similar manner the condition of the trust companies in New York City as shown by their official statements to the Superintendent of Banks. This report is compiled in a corresponding manner when the Superintendent of Banks calls for reports from the trust companies and makes the information available for the clearing house. The same is true for the third report which shows the condition of State banks in the City of New York as indicated by their official statements to the Superintendent of Banks.<sup>46</sup>

#### **Participation in annual conferences. The Clearing House Section of the American Bankers' Association**

All regularly organized clearing house associations are eligible for membership in what is known as the Clearing House Section of the American Bankers' Association. Meetings are held annually, at which matters of interest common to all clearing house associations are discussed. Membership is free and the expenses of the section are defrayed by appropriations made semi-annually by the American Bankers' Association.

The Clearing House Section is the outgrowth of the Conference of Clearing Houses of the United States which, in turn, owed its birth to resolutions adopted by the Michigan Bankers' Association in convention at Port Huron, July 14, 1899. This conference met annually and was quite active up to 1905, at which time its work was taken over by a committee representing the American Bankers' Association. The constitution and by-laws of the American Bankers' Association were then amended, and under the provisions of the amendment the Clearing House Section was created and assumed charge of the work of this special committee.

The administration of the affairs of the section is vested in an executive committee, consisting of six members and three *ex-officio* members, namely, the president, vice-president, and the ex-president, for a period of one year. Two of the six regular members are elected for terms of three years by vote of the official delegates present at the annual meeting of the section, which is held during the convention of the American Bankers' Association. Temporary vacancies may be filled by the committee. The section is represented in the council meetings of the American Bank-

---

<sup>46</sup>Such reports can be had at the clearing house.

TABLE XXXIII  
CLEARINGS FOR 70 YEARS, BALANCES FOR 70 YEARS

Fiscal year ending Sept. 30	No. of clearing members	Clearings for year	Average daily clearings	Balances for year	Average daily balances	Bal. to Clearings %
1854	50	\$5,750,455,987.06	\$19,104,504.94	\$297,411,493.69	\$988,078.06	5 <sup>11</sup>
1855	48	5,362,912,098.38	17,412,052.27	289,694,137.14	940,565.38	5 <sup>00</sup>
1856	50	6,906,213,328.47	22,278,107.51	334,714,489.33	1,079,724.16	4 <sup>00</sup>
1857	50	8,333,226,718.06	26,968,371.26	365,313,901.69	1,182,245.64	4 <sup>00</sup>
1858	46	4,756,664,386.09	15,393,735.88	314,238,910.60	1,016,954.40	6 <sup>00</sup>
1859	47	6,448,005,956.01	20,867,333.19	363,984,682.56	1,177,943.96	5 <sup>00</sup>
1860	50	7,231,143,056.69	23,401,757.47	380,693,438.37	1,232,017.60	5 <sup>00</sup>
1861	50	5,915,742,758.05	19,269,520.38	353,383,944.41	1,151,087.77	5 <sup>00</sup>
1862	50	6,871,443,591.20	22,237,681.53	415,530,331.46	1,344,758.35	6 <sup>00</sup>
1863	50	14,867,597,848.60	48,428,657.49	677,626,482.61	2,207,252.39	4 <sup>00</sup>
1864	49	24,097,196,655.92	77,984,455.20	885,719,204.93	2,866,405.19	3 <sup>00</sup>
1865	55	26,032,384,341.89	84,796,040.20	1,035,765,107.68	3,373,827.71	3 <sup>00</sup>
1866	58	28,717,146,914.09	93,541,195.16	1,066,135,106.35	3,472,752.79	3 <sup>11</sup>
1867	58	28,675,159,472.20	93,101,167.11	1,144,963,451.15	3,717,413.80	3 <sup>00</sup>
1868	59	28,484,288,636.92	92,182,163.87	1,125,455,236.68	3,642,249.95	3 <sup>00</sup>
1869	59	37,407,028,986.55	121,451,392.81	1,120,318,392.87	3,637,397.10	2 <sup>00</sup>
1870	61	27,804,539,405.75	90,274,478.59	1,036,484,821.79	3,365,210.46	3 <sup>11</sup>
1871	62	29,300,986,682.21	95,133,073.64	1,209,721,029.47	3,927,665.68	4 <sup>11</sup>
1872	61	33,844,369,568.39	109,884,316.78	1,428,582,316.78	4,638,255.54	4 <sup>11</sup>
1873	59	35,461,052,825.70	115,885,793.58	1,474,508,024.95	4,818,653.67	4 <sup>11</sup>
1874	59	22,855,927,636.26	74,692,573.97	1,286,753,176.12	4,205,075.73	5 <sup>00</sup>
1875	59	25,061,237,902.09	81,899,470.26	1,408,608,776.68	4,603,296.65	5 <sup>00</sup>
1876	59	21,597,274,247.04	70,349,427.51	1,295,042,028.82	4,218,377.94	5 <sup>00</sup>
1877	58	23,289,243,701.09	76,358,176.06	1,373,996,301.68	4,504,905.90	5 <sup>00</sup>
1878	57	22,508,438,441.75	73,785,746.54	1,307,843,857.24	4,273,999.53	5 <sup>11</sup>
1879	59	25,178,770,690.50	82,015,539.70	1,400,111,062.86	4,560,622.35	5 <sup>00</sup>
1880	59	37,182,128,621.09	121,510,224.25	1,516,538,631.29	4,956,008.60	4 <sup>00</sup>
1881	61	48,565,818,212.31	159,232,190.86	1,776,018,161.58	5,823,010.36	3 <sup>00</sup>
1882	62	46,552,846,161.34	151,637,935.38	1,595,000,245.27	5,195,440.54	3 <sup>00</sup>
1883	64	40,293,165,257.65	132,543,306.76	1,568,983,196.15	5,161,128.93	3 <sup>00</sup>
1884	62	34,092,037,337.78	111,048,981.55	1,524,930,993.93	4,967,201.93	4 <sup>00</sup>
1885	64	25,250,791,439.90	82,789,480.38	1,295,355,251.89	4,247,069.39	5 <sup>11</sup>
1886	64	33,374,682,216.48	109,067,588.94	1,519,565,385.22	4,965,899.95	4 <sup>00</sup>
1887	65	34,872,848,785.90	114,337,209.13	1,569,626,324.77	5,146,315.82	4 <sup>00</sup>
1888	64	30,863,686,609.21	101,192,415.11	1,570,198,527.78	5,148,191.89	5 <sup>00</sup>
1889	64	34,796,465,528.87	114,839,820.23	1,757,637,473.47	5,800,783.74	5 <sup>00</sup>
1890	65	37,660,686,571.76	123,074,139.12	1,753,040,145.23	5,728,889.36	4 <sup>00</sup>
1891	64	34,053,698,770.04	111,651,471.39	1,584,635,499.88	5,195,526.21	4 <sup>00</sup>
1892	65	36,279,905,235.59	118,561,781.82	1,861,500,574.56	6,083,335.18	5 <sup>11</sup>
1893	65	34,421,380,869.50	113,978,082.31	1,696,207,175.52	5,616,580.05	4 <sup>00</sup>
1894	66	24,230,145,367.70	79,704,425.55	1,585,241,633.52	5,214,610.63	6 <sup>00</sup>
1895	67	28,264,379,126.23	92,670,095.49	1,896,574,349.11	6,218,276.55	6 <sup>11</sup>
1896	66	29,350,894,883.87	96,232,442.24	1,843,289,238.66	6,043,571.27	6 <sup>00</sup>
1897	66	31,337,760,947.98	103,424,953.62	1,908,901,897.67	6,300,006.26	6 <sup>11</sup>
1898	65	39,853,413,947.74	131,529,418.97	2,338,529,016.43	7,717,917.54	5 <sup>00</sup>
1899	64	57,368,230,771.33	189,961,029.04	3,085,971,370.53	10,218,448.24	5 <sup>11</sup>
1900	64	51,964,588,564.31	170,936,146.61	2,730,441,810.27	8,981,716.48	5 <sup>00</sup>
1901	62	77,020,672,493.65	254,193,638.59	3,515,037,741.05	11,600,784.62	4 <sup>00</sup>
1902	60	74,753,189,435.86	245,898,649.46	3,377,504,072.11	11,110,210.76	4 <sup>11</sup>
1903	57	70,833,655,940.29	233,005,447.17	3,315,516,487.48	10,906,304.23	4 <sup>00</sup>
1904	54	59,672,796,804.41	195,648,514.11	3,105,858,575.60	10,183,142.87	5 <sup>00</sup>
1905	54	91,879,318,369.00	302,234,599.89	3,953,875,974.80	13,006,170.97	4 <sup>00</sup>
1906	55	103,754,100,091.25	324,422,772.57	3,832,621,023.87	12,648,914.27	3 <sup>00</sup>
1907	54	95,315,421,237.96	313,537,569.86	3,813,926,108.35	12,545,809.56	4 <sup>00</sup>
1908	50	73,630,971,913.18	241,413,022.66	3,409,632,271.41	11,179,122.20	4 <sup>00</sup>
1909	51	99,257,662,411.03	326,505,468.45	4,194,484,028.37	13,797,644.83	4 <sup>00</sup>
1910	50	102,553,959,069.28	338,461,911.11	4,195,293,966.90	13,845,854.67	4 <sup>00</sup>

# THE CLEARING HOUSE

427

TABLE XXXIII—(Continued)

Fiscal year ending Sept. 30	No. of clearing members	Clearings for year	Average daily clearings	Balances for year	Average daily balances	Bal to Clearings %
1911	67	92,420,120,091.67	305,016,897.99	4,388,563,113.05	14,483,706.64	4 <sup>14</sup>
1912	65	96,672,300,863.67	319,050,497.89	5,051,262,291.57	16,670,832.64	5 <sup>24</sup>
1913	64	98,121,520,297.15	323,833,400.32	5,144,130,384.69	16,977,328.00	5 <sup>24</sup>
1914	62	89,760,344,971.31	296,238,762.28	5,128,647,302.16	16,926,228.72	5 <sup>21</sup>
1915	63	90,842,707,723.90	299,810,916.58	5,340,846,740.16	17,626,556.89	5 <sup>27</sup>
1916	63	147,180,709,461.18	484,147,070.60	8,561,624,447.46	28,163,238.31	5 <sup>32</sup>
1917	62	181,534,031,387.84	601,106,064.20	12,147,791,432.60	40,224,474.94	6 <sup>28</sup>
1918	59	174,524,179,028.72	575,987,389.53	17,255,062,671.17	56,947,401.55	9 <sup>28</sup>
1919	60	214,703,444,468.43	708,592,225.96	20,950,477,482.92	69,143,490.04	9 <sup>28</sup>
1920	55	252,338,249,466.28	830,060,031.13	25,216,212,385.55	82,948,067.05	9 <sup>28</sup>
1921	52	204,082,339,375.84	673,539,073.84	20,860,245,122.05	68,845,693.47	10 <sup>22</sup>
1922	43	213,326,385,751.57	706,378,760.76	21,032,674,951.96	69,644,619.04	9 <sup>24</sup>
1923	40	214,621,430,806.71	713,028,009.32	23,281,765,357.97	77,348,057.66	10 <sup>24</sup>
<b>Totals,</b>		<b>\$4,202,187,518,523.72</b>	<b>\$196,703,998.43</b>	<b>\$272,443,840,849.64</b>	<b>\$12,753,070.30</b>	<b>06<sup>24</sup></b>

## EXTRACTS FROM MANAGER'S ANNUAL REPORT FOR YEAR ENDING SEPTEMBER 30, 1923

The Clearing House Transactions for the year have been as follows:

Exchanges .....	\$214,621,430,806.71
Balances .....	23,281,765,357.97

**Total transactions .....** **\$237,903,196,164.68**

The average daily transactions:

Exchanges .....	\$713,028,009.32
Balances .....	77,348,057.66

**Total .....** **\$790,376,066.98**

Total transactions since organization of Clearing House (70 years):

Exchanges .....	\$4,202,187,518,523.72
Balances .....	272,443,840,849.64

**Total .....** **\$4,474,631,359,373.36**

Largest exchanges on any one day during the year (May 1, 1923) ..	\$1,253,117,991.75
Largest balances on any one day during the year (Oct. 18, 1922) ..	122,893,681.71
Largest transactions on any one day during the year (May 1, 1923)	1,344,800,316.58
Smallest exchanges on any one day during the year (Aug. 27, 1923)	356,106,742.79
Smallest balances on any one day during the year (Aug. 22, 1923) ..	46,839,237.87
Smallest transactions on any one day during the year (Aug. 27, 1923) .....	425,712,851.64

Largest daily transactions on record, Jan. 3, 1921:

Exchanges .....	\$1,423,063,788.35
Balances .....	101,275,424.02

**Total transactions .....** **\$1,524,339,212.37**

Largest Exchanges, Jan. 3, 1921 .....	\$1,423,063,788.35
Largest Balances, June 17, 1920 .....	157,020,486.37

Transactions of the Federal Reserve Bank of New York:

Debit Exchanges .....	\$2,795,955,820.14
Credit Exchanges .....	21,995,578,652.35
Credit Balances .....	19,199,622,832.21

The Association is now composed of 16 National Banks, 10 State Banks, and 12 Trust Companies. The Federal Reserve Bank of New York, and the Clearing House City Collection Department also make Exchanges at the Clearing House, making 40 institutions clearing direct.

There are 6 Banks and Trust Companies in the city and vicinity, not members of the Association, that make their exchanges through banks that are members, in accordance with constitutional provisions.

ers' Association by its president, who is an *ex-officio* member of the association. The executive committee selects its own chairman and is authorized to employ a secretary of the section, who may or may not be a member of the committee, and to use the funds appropriated in the interests of the section. The committee is empowered to transact such business as may be authorized by the section or as may be required in the furtherance of the interest of clearing houses.<sup>47</sup>

#### **Clearings and balances of the New York Clearing House for a period of seventy years**

On October 2, 1923, the New York Clearing House Association was seventy years old. During that period over four thousand billions of dollars in checks were exchanged in its clearing room, and over two hundred and seventy billions in balances settled, of which balances one hundred and forty-five billions in cash or clearing house certificates representing cash passed over its counters and one hundred and twenty-five billions during the past six years were settled by adjustment through the reserves of the members on the books of the Federal Reserve Bank of New York. The tables on pages 426 and 427 will give a summarized picture of the clearings for seventy years.<sup>48</sup>

---

<sup>47</sup>*The Clearing House, Its Methods, Operation, Functions and Suggestions on How to Organize*, a pamphlet published by the Clearing House Section of the American Bankers' Association (1923), *passim*.

<sup>48</sup>*Extracts from Manager's Annual Report for Year ending September 30, 1923*, a pamphlet issued by the New York Clearing House (1924).

## CHAPTER XI

### BANK ORGANIZATION FOR CLEARING AND COLLECTION

#### **Internal organization of a bank for purposes of clearing and collection**

It is quite obvious that the internal organizations of banks differ widely. The larger the bank the greater the specialization; the smaller the bank the fewer the divisions and departments and the less the specialization. As a result, it is difficult to describe the internal organization of a bank in terms that are applicable to all or even a large number of banks. A fairly exact idea of bank organization with reference to the functions of clearing and collection of checks and other items can be gained by a study of the departmental organizations found in a large bank in New York City. If any particular procedure is to be found it is most likely found there. Other banks may have fewer departments and simplify procedure in accordance with the size of the bank and the nature of their business, but the general principles underlying the procedure do not differ widely.

Banks in New York City, and, in fact, a large number of banks, are organized so as to provide an elaborate mechanism for the clearing or collection of various classes of checks and other items. These items may be classified as follows:

1. Items drawn on or payable at the bank itself.
2. Items cleared or collected through the clearing house.
3. Items drawn on banks or other institutions within the same city, but not collectible through the clearing house.
4. Out-of-town items.

The mechanism which is provided for handling these different classes of items will be described in the order just mentioned.

#### **Method of handling items drawn on or payable at the bank itself.**

##### **The paying teller's department**

Checks drawn on or payable at the bank itself may reach the bank through the paying teller who is ordinarily ranked as the "first" teller. Regular depositors wishing to draw funds from the



bank present their checks to this teller for payment. Such depositors may present checks in the same manner which are drawn on other banks in the same city and will be paid at once and then collected through the city department of the bank, the city department of the clearing house, the city collection department of the clearing house, by messenger, or, as in New York City, through the city collection department of the Federal reserve bank or the Federal clearing division of the Federal reserve bank. Such depositors may present checks to this teller which are out-of-town checks, and although ordinarily paid at once, must be collected either through correspondents or the Federal reserve banks.

The internal organization of the paying teller's department depends to a large extent upon the size of the bank. In small banks his functions may not be separated widely from those of the receiving teller. His prime function, however, is to keep the bank's cash and pay it over the counter and this is done largely through cashing checks and drafts. In large banks he will perform such additional functions as making shipments of currency to the bank's correspondents, to the United States Treasury, and to the Federal reserve bank; he certifies checks and other items; he may have charge of signature files; he may supervise or have charge of the recording and watching of stop-payment orders; he settles clearing house balances when they are settled in cash or clearing house certificates and not on the books of the Federal reserve bank; he may attend to the payroll of the bank and of other institutions for which the bank performs the service.<sup>1</sup>

Since most of the items paid by the paying teller are checks, he assumes large responsibilities. He must protect the bank against forgeries, raised checks, post-dated checks, stop-payments, overdrafts, stale checks, and payments to unwarranted parties. In the smaller banks he certifies checks, although in the larger banks such work ordinarily is given over to a certification department. In the same manner large banks will relieve him of some of the above-mentioned duties by having a separate signature department which collects, files, renews, and examines signatures. There also may be a money department, which performs certain operations common to several departments having to do with the counting and sorting of cash and providing an independent check on the various amounts of money received and issued. That part of the bank's mail relating to payments of

<sup>1</sup>See Ray B. Westerfield, *Banking Principles and Practices*, Vol. III (New York, 1921), p. 542 ff. for an account of the organization and functions of the paying teller's department.

cash is turned over to the paying teller. This comes from many sources and from almost any part of the country. It includes requests for payments to be made on account of the redemption fund, transfer of funds, interest on public deposits, letters of advice from out-of-town correspondents relative to shipments of currency forwarded for their credit, and letters from correspondents containing signatures of indorsers of checks, sent for the purpose of identification.<sup>2</sup>

### The receiving teller's department

Checks drawn on or payable at the bank itself may reach the bank through the receiving teller, known as the "second" teller. In small banks his work is frequently combined with that of the paying teller. Even in large banks this practice is found where the so-called unit system of internal organization is followed. In such large banks where the counter trade is large and customers experience inconvenience in being compelled to go from the paying teller's window to that of the receiving teller to complete their transactions, the counter trade is broken up into distinct units complete in themselves and combining the functions of both tellers, as well as perhaps others, in one teller.<sup>3</sup> But whether combined or separate, the function of receiving items for deposit is a distinct one.

The receiving teller's department receives all cash items delivered over the window by depositors for credit to their accounts, proves such items, and distributes and charges them to the proper departments of the bank. These cash items may include not only paper money and specie, but checks and drafts on other depositors in that bank, on banks in the same city or on out-of-town banks. Depositors may deposit also bills of exchange, post office orders, travelers' checks, coupons, notes, and time drafts. All deposits when received are entered on the pass book of the depositor by the teller, although some of the deposits entered as cash may require collecting. But by far the greater part of the items consist of checks and drafts.

It is the practice in the larger banks in New York City to handle checks and drafts which come over the counter according to the "batch" or "block" method. When a suitable number of deposits have been received, a "batch" is made and sorted somewhat as follows: Clearing house checks with subdivisions based on

---

<sup>2</sup>*Ibid.*, p. 546.

<sup>3</sup>*Ibid.*, p. 568.

clearing house numbers, checks drawn against the bank itself, "sights,"<sup>4</sup> "trust companies" which are items drawn against trust companies not members of the clearing house, "small countries,"<sup>5</sup> "large countries,"<sup>6</sup> and cash.<sup>7</sup> The packages of these batches are listed separately and their aggregate must equal that of the deposit tickets contained in the batch. Speed and accuracy in listing such items are essential and it is necessary for clerks to know the routing of checks in order to get the work out with dispatch.<sup>8</sup>

When the batches prove, an assistant runs off proof sheets which show the totals of all items handled in the departments. Copies of these sheets are sent to the city collection department and the transit department, which handle the collection of non-clearing house items. The originals are filed with the receiving teller.

The clearing house checks are sent to clerks who indorse them with the clearing house stamp; this is usually done by an indorsing machine. The checks on the clearing house members are sorted into sections according to clearing house numbers and then sent to the assembly rack department, where they are sorted and listed according to clearing house numbers, in preparation for clearing the next morning.<sup>9</sup>

Sight drafts and trust companies are stamped with a "Paid" indorsement stamp and, together with the small and large countries, are sent to the transit department where they are analyzed. The sight drafts and trust companies are returned to the receiving teller, who lists them, proves them against the totals on his proof sheet, and turns them over to the city collection department, which presents them for payment at their respective places of payment on the day after receipt. Checks drawn on the bank itself by foreign and domestic customers are sent to the check desk. Coupons are usually deposited in envelopes with the amount entered on the outside. They are charged and sent to the coupon collection department.<sup>10</sup>

<sup>4</sup>Sight and demand drafts.

<sup>5</sup>Small checks for less, let us say, than \$500 against out-of-town banks and larger checks on up-town banks in New York City.

<sup>6</sup>Out-of-town items of large amount that are sent from the transit department the same days as received.

<sup>7</sup>Received in different deposits in the batch.

<sup>8</sup>Westerfield, III, p. 572.

<sup>9</sup>*Ibid.*, pp. 572-573.

<sup>10</sup>*Ibid.*, pp. 573-574.

### The mail teller's department

In large city banks an important part of the deposits comes by mail through the mail teller, known as the "fourth" teller. This is especially true where the reserve and central reserve city banks have a large number of correspondents and important out-of-town depositors. In general, it is the function of this department to receive, open, acknowledge, prove, record, distribute, and charge the items of the cash letters. In metropolitan banks incoming mail is customarily sorted into three classes by the department: (1) The personal, official, and departmental letters, (2) the foreign mail, and (3) the letters containing cash and collection items for credit. The foreign mail is turned over to the foreign division, and the personal, official, and departmental mail is given to a special force of clerks for distribution through the bank.

The handling of the letters containing cash and collection items cannot be described in such summary fashion. It is quite important to the bank as well as to its correspondents to have these items handled with all the dispatch possible. As a result, the day's mail in large banks in New York City is divided into three lots: (1) The night mail, the morning mail, and the afternoon mail. The night force, which begins about midnight and works until about eight o'clock in the morning, handles the mail received after bank closing hours. The afternoon mail is that which is received after ten o'clock and up till the hour of closing. The morning mail is composed of that which arrives in the morning up till ten o'clock. The work done by the morning staff is similar to and really a continuation of that done by the night force. The same staff sorts the morning mail that sorts the afternoon mail with the exception that clerks from such departments as the check desk and the transit department assist in the morning mail, but not with the afternoon mail.

That part of the mail teller's department which prepares items for the clearing house is commonly known as the "assembly rack" department. A rack is a sorting table with pigeon holes, although the work is spoken of as a preparation of "racks"—the assembly rack, the morning rack, and the evening rack. Ordinarily the same room, desks, and sorting fixtures are used in preparation of the three different racks, the work of each rack being done and proved by its own clerical group.

In sorting the morning mail the foreign, personal, official, and departmental mail is first laid aside and then the cash letters are

sorted and distributed to the proper departments. Westerfield,<sup>11</sup> in writing of the organization of the National City Bank, says that the regular cash letters are sorted into section boxes, somewhat as follows, in order to facilitate the work:

- Section 1. National banks, A-C.
- Section 2. National banks, D-M.
- Section 3. National banks, N-Z.
- Section 4. State banks.
- Section 5. (a) Trust companies and savings banks.  
(b) Individuals.  
(c) Credits for the collection ledger.<sup>12</sup>  
(d) Doubles.<sup>13</sup>
- Section 6. Letters containing collection items for credit.

Collection items are passed to the collection clerk, who charges and distributes the items as follows: (1) The coupons to the coupon collection department, (2) the out-of-town and up-town items, to the country collection department, (3) notes, stock drafts, collections for remittance, foreign exchange items for sale and collection, to the note teller, and (4) time drafts and special advice and other items on the home city, to the city collection department.<sup>14</sup>

The cash items are divided into and proved according to the following classes, batches, or "racks": (1) Clearing house checks, (2) checks on the bank itself, (3) checks on trust companies not members of the clearing house, (4) country checks and checks on the Treasury of the United States, (5) sight drafts, and (6) sundries. After the batches are proved, the clearing house checks are stamped by machine and sorted into the rack according to the clearing house numbers. The package totals are copied on a clearing house sheet, and the packages forwarded to the assembly rack. The trust companies and sights are passed to the city collection department; the countries and checks on the United States Treasury, to the transit department; checks on the bank itself go to the check desk department; cash, if any, goes to the mail teller, who signs for it on the original letter; and cash return items, to a clerk whose special duty is to prove the cash return items, including those listed in the cash letters.<sup>15</sup>

<sup>11</sup>*Op. cit.*, p. 578.

<sup>12</sup>Remittances from collections.

<sup>13</sup>Letters enclosing credits for two or more banks.

<sup>14</sup>Westerfield, III, p. 578.

<sup>15</sup>*Ibid.*, p. 580.

The assembly rack deserves an additional word. It is the main link between the bank and the clearing house. In the morning it receives the packages of the evening rack and also the packages of the banks for which the bank acts as clearing agent. The packages for the clearing house are listed by the settling clerk on his settling sheet. A ticket is made out for each member bank, showing its clearing house number and the amount of checks with which it is charged. Another ticket is made showing the total amount brought by the bank to the clearing house. This is signed by the settling clerk and goes to the manager of the clearing house and constitutes the credit of the bank at the clearing house that morning.

The afternoon mail—that received after the morning exchanges—is handled in somewhat the same manner as the morning mail. The clearing house checks are sorted into sections and handled by the rack department, together with items from the receiving, note, and fifth tellers. Sights and trusts companies of large amounts are sent at once to the city collection department, by which they are immediately collected. All large countries are separated from other out-of-town items and turned over to the transit department to be handled the same day. The small countries, those of perhaps \$500 or less, are charged to the city collection department where they are held over night. All items sent in for collection, unless they are for large amounts or request telegraphic advice, are held over until morning as are all return items not for large amounts, and letters in payment of collections. If the enclosure letters are received from parties for whom accounts are kept on the collection ledger, they are handled at once, as are checks on the bank itself received in payment of cross-credits.<sup>16</sup> Checks on other banks are held over for the night force.<sup>17</sup>

### The check desk department

At this point it will be well to describe briefly the check desk department which has been referred to frequently. The functions of such a department vary considerably among banks as they are combined in different degrees with the general bookkeeper's de-

<sup>16</sup>Remittances received from one bank for the credit of another bank.

<sup>17</sup>Westerfield, III, p. 587. For additional information on the mail teller's department, see Westerfield, III, Chap. XXXI; L. H. Langston, *Practical Bank Operation*, Vol. I (New York, 1921), Chap. II; W. H. Kniffin, *American Banking Practice* (New York, 1921), Chap. IV; L. H. Langston and N. R. Whitney, *Banking Practice* (New York, 1921), Chap. V.

partment. In general, it may be said that the check desk department is the bookkeeping department for domestic customers' accounts. As part of this function it receives checks against the bank itself and checks against banks for which the bank acts as clearing agent which it prepares for proper credits and charges. This preparation includes sorting, listing, proving and examining for stop-payments, overdrafts, certification, indorsements, signatures, dates, and filing. In some banks this department devotes itself to this work with checks and clearances<sup>18</sup> alone, and the bookkeeping work is handled by a distinct bookkeeping department.

The check desk department is headed by a so-called check clerk. His department may be divided into several specialized divisions in order to handle the receipts, proof, sorting, etc. The items which come to the proof desk are received from the clearing house, the paying teller, the receiving teller, the city collection teller, and the foreign division. Each check bears evidence of the department through which it has been received in the form of a stamp or a spindle cut of a distinctive form. During the night the mail teller's department has sorted the incoming cash letter items, and those for the check desk department are ready for the proof clerks who begin work about eight o'clock.

The items coming to the check desk department from the morning mail are stamped with the mail teller's "Paid" stamp and include the following: (1) Checks on the bank, (2) clearances, (3) checks certified by the bank, (4) dividend checks of the bank, and (5) general checks, including the bank's cashier's checks, coupon checks, redemption checks, clearances returned, and irregular items.

This department also receives the checks or exchanges from the nine and ten o'clock sessions of the clearing house. Clerks from this department are constantly collecting checks from the various tellers of the bank each afternoon, and these are sorted, listed, and proved against the various ledgers in much the same way as are the checks received from the clearing house. These checks are handed to the signature clerks, who examine them carefully for defects and pass them on to the bookkeepers whose accounts are divided, ordinarily, into bank accounts, impersonal accounts, and personal accounts. The checks are then sent to the accounts current clerks where they are sorted into accounts alphabetically arranged and the total of each account listed. Finally

---

<sup>18</sup>Checks against banks for which the bank acts as clearing agent.

they go to the various bookkeepers who debit the customers' accounts with the total amount of checks drawn against them.<sup>19</sup>

### ✓ The handling of clearing house items

Although there has been occasion to mention items destined for and coming from the clearing house in the description of the methods of handling items drawn on or payable at the bank itself, it will add clarity to treatment, to outline briefly the general methods of handling checks going to and coming from the clearing house.

The list of items which may be sent through the clearing house was treated somewhat at length in Chapter X. In general, they include all cash items like checks, and drafts, and matured collection items, not documented, such as notes and bills of exchange. A bank may receive these from individual depositors, correspondent banks, banks for which this bank clears through the clearing house, or its branches, if it has branches, through any of the following channels: (1) Paying teller's department, (2) receiving teller's department, (3) the mail teller's department, or (4) the note teller's department. Items from these departments or banks clearing through this member bank, go to the assembly rack department which is a part of the mail teller's department. The process of preparing items for clearing is practically a continuous one. Beginning just after the ten o'clock clearing session is over, the items of the various departments of the bank are sorted into five divisions as a part of the process of proving the receipts of these departments. These divisions correspond to the divisions of labor of the assembly rack department, that is, the clearing house member banks are divided into divisions on the basis of the following clearing house numbers: 1-23, 28-54, 59-76, 78-100, 102-123. In the late afternoon, items destined for the clearing house, are sent to the assembly rack department which completes the process of preparing them for the clearing house session to be held the following morning. A special force of the assembly rack department handles the material in each of the five divisions just mentioned. Each unit of the assembly rack department sorts its items into packages according to drawee banks. The amounts are listed on the exchange slip attached to the package.

While the bank's clearing house receipts of the previous day

---

<sup>19</sup>For further details of the routine in the check desk department, see Westerfield, III, Chap. XXXII, from which the above account is drawn.



are being prepared for clearing by the assembly rack department, the mail teller's night force is busily engaged in sorting and proving the night mail receipts. By early morning a considerable mass of clearing house items has been accumulated. The morning mail brings many more such items. The various tellers and departments of the bank also receive in their early morning work large clearing house items which should be cleared that day. In order to prepare such items received for the morning clearings and thereby save a day's interest on them a special assembly rack is operated in connection with the mail teller's department. Such mail and early morning departmental clearing house items are added to the exchanges for the day as prepared by the assembly rack department. When all possible exchanges have passed through the racks, an assembly rack proof showing the combined results of the day's work is prepared.

The assembly rack now has all the items for the clearing house sorted into packages with exchange slips attached. In addition to the exchange slip attached to each batch, the mail teller's assembly rack force prepares a "small ticket" which contains the amount of the package and agrees with the amount on the exchange slip. This will be presented to the drawee member bank at the clearing session as a memorandum of the amount brought. All these packages are listed by the settling clerk on his settling sheet which he takes with him to the clearing house. Another ticket, called the "first ticket," is made out showing the total amount taken to the clearing house by the bank. Upon arrival at the clearing house, the settling clerk will hand this "first ticket" to the proof clerk of the clearing house who will enter the amount on his proof sheet under the head, Banks' Credit. This "first ticket" constitutes this bank's claim against the clearing house.<sup>20</sup>

Shortly before the clearing hour, the settling clerk, who is a representative of the receiving teller's department, takes charge of all the items and forms and with the delivery clerk and other assistants goes to the clearing house. As soon as the exchanges have been made at the clearing house, the delivery clerk carries back to his bank the checks received by the settling clerk from the delivery clerks of the other member banks.

The items which are brought from the clearing house are turned over to the check desk department where they are examined, proved, and finally debited to the proper accounts of the bank in the manner described above.

---

<sup>20</sup>L. H. Langston, *op. cit.*, I, Chap. IV.

**✓The city collection department of a bank**

Thus far, the discussion has dealt with items, both cash and collection, (1) drawn on or payable at the bank itself, and (2) cleared and collected through the clearing house. The bank receives many items drawn on banks within the city which cannot be collected conveniently through the clearing house, Federal reserve bank, or any other channel except by messengers sent out by the bank. All such items are handled by the city collection department of the bank, the nature and functions of which will now be described briefly. At the head of the city collection department is the city collection teller, known as the "fifth" teller.

**Type of items handled by this department**

The items which are handled through the city collection department are of three principal kinds: (1) Cash items, (2) collection items, (3) dishonored and rejected items. The cash items are composed of those large items which cannot reach the transit department in time to be sent to the Federal reserve bank for immediate credit on the given day. In such cases the loss of interest more than outweighs the expense of collecting them by messenger. Certain documentary drafts are forwarded to the bank on a cash basis for collection which neither the clearing house nor the Federal reserve bank will collect for members. These, also, are collected by this department.

The collection items are composed of demand, sight or matured time items, mainly drafts which are payable within the territory covered by the collection department. Arrival drafts, which, in nature, are time drafts, are also collected. An arrival draft is one accompanied by a bill of lading and made payable when the shipment covered by the bill of lading arrives at its destination. The bank presents such drafts to the drawee on the day of receipt, the presentment serving merely as a means of notifying the drawee that the bank has the draft for collection. Collection of the draft and surrender of the bill of lading will be made only when the shipment arrives, although notices are sent out regularly to the drawee until the draft is finally paid or refused by the drawee.

In addition to the actual collection of collection items, the city collection department secures the acceptance of those time items which come to the bank drawn upon drawees within the city territory. If accepted the drafts are turned over to the note teller's department for collection at maturity, or to the discount depart-

ment if they are to be discounted in accordance with the instructions of the owner. Items which fail to be accepted are handled according to the instructions of the drawers in much the same way as are regular collection items.

The drafts may be classified, also, according to whether they are clean or documentary. The clean drafts, as a rule, consist of those which cannot be handled as cash items because some special service, such as allowing the drawee a discount from the face of the item, sending a special advice of the result of the collection, etc., as desired by the customer, or because the owner has no account at the bank. The documentary drafts are those accompanied by bills of lading, stocks, bonds, and other securities and negotiable instruments which are to be delivered to the drawees upon payment of the draft.

The third main class of items handled by this department is composed of the dishonored and rejected items which, in the main, have entered the bank on a deposit basis, but have failed of collection through the ordinary channels. Once a cash item has failed of collection it usually enters the collecting departments where it is handled in much the same manner as a collection item. These items include the following: (1) Checks and drafts which are returned to the bank by out-of-town correspondents because they could not pay or collect them, (2) cash items drawn upon the bank which it refuses to pay, and (3) items which have been sent in error to the cash item departments of the bank and to the clearing house.<sup>21</sup> All "sent wrongs" and other items upon which the bank is entitled to collect a fine under the rules of the clearing house are returned to the offending bank by hand. These returns must be presented to the receiving banks before three o'clock, otherwise the fine cannot be claimed. Accordingly, as these items are discovered by the check desk and charged to the city collection department they are forwarded at once by messenger for collection. All other items to be returned to the clearing house are sent, if possible, to the three o'clock session of the clearing house which is held for the purpose of returning items of this sort.<sup>22</sup>

#### Sources of items handled by the city collection department of a bank

The main sources of the items handled by the city collection department are indicated in a general way in the description of

<sup>21</sup>Langson, I, p. 129.

<sup>22</sup>*Ibid.*, pp. 147-148.

the items. Cash items for collection may come to the fifth teller's department from several departments in the bank, as, for example, the receiving teller's department, the mail teller's department, the transit department, the check desk department, or from the clearing house and Federal reserve bank. The main source of collection items is the mail teller's department and the foreign collection import department which receives all collection items sent from abroad. To assist the mail teller with the heavy morning mail, representatives from the city collection department call at the former department and receive the collection items which belong to their department. The sources of the third main class of items are as follows: (1) Collection returns which are returned by out-of-town correspondents come first to the mail teller's department from which those items upon which protest fees have been incurred are sent to the city collection department. Those upon which there are no protest fees are sent by the mail teller's department to the country collection department for return to the customers. (2) Cash return items which were forwarded to Federal reserve banks, correspondents, and the clearing house and are returned because these agencies are unable to pay or collect them are returned in various ways. In general, they will be returned either to the mail teller's department, if sent from a distance, or to the city collection department, if returned by messenger. Clearing house returns are sent directly to the city collection department either by messenger or through the three o'clock session at the clearing house. (3) Cash items drawn upon the bank which it refuses to pay are sent from the check desk department to the city collection department for recovery. (4) The missorts of all other departments of the bank and those items held over from one day's work to another are sent to the city collection department. It often happens that an item is sent from one department to another in error. These errors within the bank are corrected by charging the items to the city collection department, which throws them in with its regular cash items and sends them to the proper department. In a similar manner, to relieve the paying teller, the checks which he has cashed, excepting those which are drawn upon the bank itself, are sent to the city collection department and forwarded by it to the proper departments for collection.

#### **Territory covered by the city collection department of a bank**

The territory covered by the city collection department of a bank in New York City embraces that which is not covered by the

clearing house and transit department for cash items, and by the country collection department for collection items. The natural function of such a department is to collect items upon all city drawees that cannot be reached through the clearing house. In New York City much of this is done by the city collection department of the clearing house, and the city collection department or the Federal clearing division of the Federal Reserve Bank of New York. Items are sent to these agencies by the transit department of a bank, which may send some items also to certain correspondents within the city. The remainder are collected by the city collection department. The territory of this department is narrowed down to include principally down-town New York.

In addition to handling collections in this territory, this department collects large items, for example, those over \$5,000 payable anywhere in the Greater City and in certain of the more important suburbs. While the territory of the city collection department is comparatively narrow, its work is quite heavy, as it includes the New York financial offices of a great many of the large business concerns in the country.<sup>23</sup>

#### Procedure in collection

No attempt will be made here to describe in detail the routine followed within the city collection department of a bank in recording items upon the various forms, registers and journals, and an attempt will be made to describe only in a general way the procedure in collection.<sup>24</sup>

The items for collection are indorsed with a "Paid" stamp, sorted according to routes followed by the messengers, and entered in duplicate on route sheets which show the name of the drawee and the amount of the draft. They also have spaces for indicating the fate of the items after presentation. The original route sheet is retained by the sight draft clerk as a record of the items sent out for collection, the duplicate being turned over to the messengers together with the items for collection. As the messengers return from their routes the fate of each item is entered upon the the original route sheet. If remittances have been received the kinds of funds which have been obtained are indicated, and if refused, notation is made in the "fate" column of the route sheet. These sheets are then filed.

<sup>23</sup>*Ibid.*, pp. 130-131.

<sup>24</sup>Such details can be found in any book dealing with bank organization, such as Langston, *op. cit.*, I, Chap. VI, or Westerfield, *op. cit.*, III, Chap. XXXIII.

The work of making these collections is of such importance that the services of a large messenger force is required. This force is grouped together into a specialized messenger's department attached to the city collection department. The work of this department involves not only the presentation of collection items, but the carrying of money, securities, documents, and notices between the bank and its affiliated corporations, the clearing house, the Federal reserve bank, and such clients as stock brokers, borrowers, etc. As the demand for messenger service is uneven from hour to hour, the messenger force is shifted about from task to task. In the morning the messengers assist the mail teller in handling the morning mail and the assembly racks. In the afternoon they are assigned to the various departments which may be in need of special messengers. While some messengers are thus shifted about, certain older and more experienced ones are assigned to definite tasks which they perform daily, such as attending to gold shipments and carrying large sums of cash between the bank and such institutions as the assay office and the Federal reserve bank. Others assist the paying teller in tending the vaults and carrying large sums of money from place to place. Still others handle stock drafts and other distinctive types of items.<sup>25</sup>

In making collections each messenger travels a definite route, and in general handles a special class of items. He receives these items against his signature from the departments whose work he is assigned to handle, and he is held responsible for all items which he signs for. The collecting bank through its agent accepts only checks drawn on itself, upon clearing house banks, or cash. As a general rule, all checks of \$500 or over in amount must be certified, although such a rule is disregarded in dealing with well-known and highly responsible banks.

When the messenger returns from his route he reports directly to the proper department where the items which he brings back are checked against the route sheets. Each item taken out must be represented either by funds, a left-out ticket,<sup>26</sup> or must be brought back with reasons for non-payment.

#### **Disposition of the receipts of the city collection department**

The receipts of the city collection department are disposed of in the same manner as are those of other departments. The currency goes to the paying teller, the checks upon the bank itself

---

<sup>25</sup>Langston, I, pp. 151-152.

<sup>26</sup>Where items are left with banks for acceptances or examination.

go to the check desk, and the clearing house checks are prepared for collection by the assembly racks. The city collection department does not accept country items, sights, and trusts in payment of the collections which it makes. Through the receipt of checks and drafts from the paying teller and missorts, some such items will have been obtained. These are sent to the transit department for collection. Charge and credit tickets resulting from the day's work are sent to the customers' bookkeepers to be posted to the proper accounts. Separate proofs are made of the cash work, the collection work, and of the returns. In addition to these subsidiary proofs, a general proof is prepared at the close of the day which gives a condensed journal record of the transactions passing through the department for the day and at the same time serves as an inventory of the unfinished cash work, since all unfinished items are charged to this department at the close of the day.<sup>27</sup>

#### **Settling for collections**

Settlement for the proceeds of collections is made according to the instructions of the owner. Depositors generally request the bank to credit their accounts for the proper amounts. If the customer desires the proceeds to be handled in this manner a credit ticket is sent to the bookkeeper for posting. In settling for collections with those who are not depositors of the bank and with those depositors who instruct it to do so, the bank uses a cashier's check. These checks are obtained from the note teller upon requisition as the city collection department is not authorized to issue such checks.

In case an item is not paid the instructions of the customers are carefully followed. In the absence of instructions to the contrary the item is protested if over \$10, and for all those over \$500 a telegram is sent to the customer advising him that the item is unpaid and asking for instructions. Most collection items, however, are subject to some kind of instructions, either special or standing. After it has been established definitely that a collection cannot be made, the item is returned to the customer who reimburses the bank for protest fees and other expense which it has incurred.

#### **Collection of notes, matured bonds, and coupons within the city**

The collection work conducted by large banks in New York City is sometimes divided among the city collection department.

<sup>27</sup>Langston, I, *passim*.

the note teller's department, and the coupon collection department. Genetically the note teller's department is the parent department from which the city collection, the coupon, and the messenger departments have sprung.

The primary function of the note teller's department is to collect notes and acceptances. Indeed, it is the function from which the department derives its name. At the same time, this department acts as a receiving teller for items which are being entered for collection by the local customers of the bank. If these items are notes and acceptances payable within the city it collects them itself and settles with its customers; if they are maturing bonds and coupons, they are sent to the coupon collection department; all other items payable in the city are sent to the city collection department. Notes and acceptances which are payable outside the city are sent to the country collection department. Out-of-town collections will be treated in a separate topic below. An account of the city collection department has already been given; consequently, our attention at this time will be given to the city collections through the note teller's department and the coupon collection department.

The note teller's department, upon receiving notes for collection, enters them upon collection registers or "blotters". When items come from other sources than through the window of the note teller, the registers are kept by the departments receiving them. These registers serve as a means of keeping information relative to the receipt and collection of all such items, and contain such information as the date of the customer's letter, address of the sender, indorser, customer's collection number, due date, instructions, etc.<sup>28</sup> All items are then stamped to show the date of their maturity, the proper tickets are made out, one of which serves as an advice of credit to the customer and is sent to him at the time the collection is made. The notes are then entered in the tickler according to the date of maturity, and, in addition, separated into compartments according to whether they are country or city collections. By means of the tickler the notes and acceptances are readily brought to the attention at the proper time. When the time arrives for collection the items are entered in a route book according to the messengers' routes. These messengers make presentment and demand for payment on the maker or acceptor and turn over the funds obtained or the dishonored items to the note teller's department. The note teller then makes settle-

---

<sup>28</sup>*Ibid.*, p. 158.



ment with the owner by crediting his account or by sending him a cashier's check, according to instructions.

An item made payable at the bank is not collected by messenger. In the absence of instructions to the contrary, the note teller's department merely instructs the proper bookkeeper to withhold from the payer an amount sufficient to meet the amount of the collection. Notes and acceptances payable at clearing house banks are collected by presenting them through the clearing house to the proper banks. Prior to 1918 such items were sent through the clearing house on the date of their maturity and if they were dishonored they were returned to the collecting bank at the three o'clock session which perhaps made it too late to make demand on the maker or acceptor for payment on that day. To obviate this difficulty, the bank on the morning of their maturity, presented items of this kind by messenger to the banks at which they were made payable. If the banks desired to pay them they certified them and the collecting bank then sent them through the morning clearings on the following day. If the items were refused by the banks at which they were made payable there remained time in most cases for the bank to make demand directly on the maker or acceptor for payment.<sup>29</sup>

But at the best where such items were presented for certification or where payment was made in the form of checks, final payment was delayed until one day after maturity. To obviate this difficulty the New York Clearing House agreed to pass acceptances through the clearings and charge them to the accounts of their acceptors at the banks at which they were payable upon date of their maturity precisely as if they were checks, and established regular methods for the reimbursement of acceptances by those in whose favor they were made. This practice eliminated at least one day's interest for the collecting bank.<sup>30</sup>

The note teller handles unpaid collection items in the same manner as does the city collection department, returning them to the owners together with a bill for protest fees, if any.

The note teller's department performs many miscellaneous functions, too various to permit description here. In fact, it is frequently said that this department does everything that the other tellers and departments do not do. It attends to the collection of exchange charges from those customers who desire to pay

<sup>29</sup>*Ibid.*, p. 162.

<sup>30</sup>See *Federal Reserve Bulletin*, Vol. IV (1918), pp. 806, 819-831.

them in cash rather than have the bank charge their accounts for the amount; it acts as a receiving teller for certain special classes of deposits; it receives country checks from the city correspondents which use the bank's transit department for collecting their out-of-town cash items; it receives funds for which it issues certificates of deposit; when the bank acts as paying agent under a telegraphic transfer this department receives the telegram from the correspondent through the proper channels and makes payment to the payee according to the directions in the order; it issues cashier's checks and drafts and performs numerous other functions not mentioned.

In the collection of maturing bonds and coupons, New York City banks are the most important collecting agents in the country and consequently have a highly developed system. Most of the large borrowing corporations, including municipalities, have their financial offices or paying agencies in New York City for paying their obligations. The New York bank is thus a collecting agency not only for its city customers but for the entire country. The bank may secure items for collection in any of the following ways: (1) By mail, (2) over the note teller's window upon a collection basis, (3) it may collect the maturing bonds and coupons placed in its keeping by its customers, (4) it may collect upon maturity for customers who have deposited bonds with the loan department as collateral against loans, and (5) it will have such collections to make as a result of its own investments.

In order to perform this very heavy and specialized work, every large bank usually has a coupon collection department. Its work is quite similar to that of the city collection department. The items are entered in a similar collection register which is kept in the registered mail department of the bank in order to provide a control over the items flowing into the coupon collection department from all sources. This department covers the same territory as the city collection department; it collects by messenger in the same manner; it receives the same class of funds in payment; it makes payments to customers in the same manner as does the city collection department.<sup>31</sup> Coupons which are payable out of town are sent to the country collection department. Out-of-town collections are described below. If the coupons are foreign they are sent to the foreign collection department which

---

<sup>31</sup>Langston, I, pp. 178-180.

collects them and pays the proceeds to the coupon collection department which settles with the customers in the usual manner.<sup>32</sup>

#### **The transit department of a bank**

In addition to the items collectible by the city banks within the city, each bank receives many out-of-town items which it must convert into funds. These items may be divided into two classes: (1) Cash items, and (2) collection items. The out-of-town cash items are called "transits" and are handled by the transit department of the bank; the collection items are handled by the country collection department of the bank. These two departments will be described in the order mentioned.

The transit department may convert its out-of-town checks and drafts into funds through either of the following collection agencies: (1) Correspondent banks or (2) Federal reserve banks. Prior to the inauguration of the Federal Reserve System a third method was used frequently, namely, the country collection department of the clearing house, but the coming of the Federal reserve banks made such departments unnecessary, and they have been discontinued in cities where Federal reserve banks or their branches exist. The use of correspondent banks was the most important method employed prior to 1914, and they are yet important media for collecting out-of-town items. This method has survived, since many banks are not members, or even non-member clearing banks, in the Federal Reserve System. Many banks, although members of the Federal Reserve System, find they can save time by sending items directly to correspondents; this is frequently the case where correspondent banks are nearer to each other than to their respective Federal reserve banks. In addition, Federal reserve banks do not handle items drawn on non-par banks, and banks maintain correspondents in large centers in order to have complete facilities for collecting out-of-town items that cannot be collected through the Federal reserve banks. But the correspondent system prior to the present organization of the Federal Reserve System was linked closely with the reserve system; since reserves, to a large extent, have been concentrated in the Federal reserve banks, it is expected and hoped that the Federal reserve banks will become the principal media for collections. In collecting through the Federal reserve banks and their branches, the transit department of a bank may send the items

<sup>32</sup>Since the handling of collection items is not the subject of primary interest in this book, no effort will be made to describe in further detail the methods of collecting such items. See any standard book on bank organization.

directly to the Federal reserve bank or branch of its own district,—this, of course, will be done if the items are collectible within the same district—or directly to the Federal reserve bank or branch in the district of the payee bank. When collecting through the Federal reserve banks the collecting bank builds up its lawful reserve with the Federal reserve bank; when collecting through correspondent banks it merely builds up its credit balance with the correspondent, reduces the bank's liability to its correspondent, or secures a remittance in acceptable local funds, but does not build up its reserve.

The work of the transit department of a large bank in New York City may comprise the following separate parts: (1) The collection of transit items, (2) the collection of so-called "trusts," items collectible through the city collection department of the clearing house, and (3) the analysis of accounts. Other functions are frequently performed by this department, such as the sale of domestic exchange and the collection of non-transit items where the latter are not handled by a separate country collection department.

The transit department in a large bank, like those in New York City, operates in three sections: The night, the morning, and the afternoon sections. The night work is merely preliminary to the morning work, but that of the morning is quite distinct from the afternoon. The transit department receives its items for collection primarily from the mail and receiving tellers of the bank, although some come from other departments such as the city collection department, the note teller, and the foreign teller. Certain correspondents in the city also make use of the facilities of the transit department under a reciprocal arrangement whereby the bank collects the out-of-town items for these correspondents and they, in turn, collect for it items drawn upon banks in their immediate vicinity. These correspondents send their country items to the note teller for credit as ordinary deposits.

The work of sorting items in the various departments for the transit department is virtually continuous, as is the work of the transit department itself. During the morning each department sorts and sends all its country items to the transit department. During the afternoon they divide the country items into two classes called the "large countries" and the "small countries". The purpose of this procedure is to get the large countries to the transit department at once so that they can be handled that day and effect some saving in interest. The small countries are held over until the next day.

### **The night force in the transit department**

The material upon which the night force works consists of the small countries held over from the work of the preceding day, the night mail from the mail teller's department, the "trusts," and certain hold-overs from the transit work of the preceding day. The main object of the night force is to prepare those items which are to be collected through the Federal reserve bank and which are to be deposited with it before nine o'clock the next morning. The Federal reserve bank gives immediate credit for items that are deposited with it before nine o'clock provided they can be collected the same day. For most items deposited at a later hour the sending bank usually suffers loss of a day's availability. Consequently, it is the prime purpose of the night force to search out all such items and get them to the Federal reserve bank before the time limit expires. Items which are sent elsewhere are laid aside by the night force and are handled by the morning section.

The night force commences the sorting of checks at the analysis desk. The checks are sorted into groups according to the exchange charge to which they are subject and are entered on sheets for interest delays and exchange charges. Such sorting is necessary as many banks still make charges for remittance. The checks then go to another table where they are sorted into packages to conform to the sections into which the department work is divided. These sections are determined by the various channels through which the transit department sends its items for collection, that is, whether through the Federal reserve bank, regular correspondents, or selected correspondents. The sorting clerks must know the proper routes. To aid the forces in the routing of checks a set of route books, one for each State, is kept, in which all banking points in that State are listed alphabetically. Opposite each point is written the place through which it is collected, if not collected direct. The checks are then sorted into "racks" or batches according to the bank's collection methods.

The forces, whether night or day, are divided into units, each of which operates a rack. The items are proved in batches and sorted according to the rack division. Each rack handles items payable in States of a definite group, the groupings being made for the most part to conform to the groups contained in each Federal reserve district, but in the case of nearby districts the volume of the work is so large that these districts are divided among the various racks.

The items to be sent through the Federal reserve bank are di-

vided into sections according to the length of time that credit is deferred. Each Federal reserve bank and branch has two compartments. One is for the items which can be collected by that bank on the day of receipt and are called "Federal reserve city items," since they are generally drawn payable in the Federal reserve cities. The other compartment is for the items which the Federal reserve banks cannot collect on the day of receipt, these items being termed "Federal reserve country items". These items are further divided according to whether they are collectible in one day, two days, or any number of days up to eight days. The items to be dispatched to the bank's correspondents are sorted into sections according to the place of payment and the correspondent, an arrangement, which, in large banks, becomes highly complex and detailed. A comprehensive knowledge of routing arrangements is necessary if the department functions as it is supposed to function. In some cases it is important to collect very large items in the quickest manner possible; this is especially true for those large items drawn on out-of-the-way points, and the transit force or the transit manager must decide the method to be used. It may be deemed better to send the item straight to the drawee bank and perhaps pay remittance charges rather than not have the funds available for some days. The transit department is one of the most important departments in a bank. The work and the problems are almost endless. After making these general observations which apply equally to all transit forces, whether night or day, it may be remarked that the night force closes its work by preparing the proper cash letters which are to be sent out with the items prepared for collection.<sup>38</sup>

#### **The morning and afternoon force**

The main work of the morning force comes from the mail teller, although it completes the work left over from the night section which is composed of items which will not be collected through the Federal reserve bank. The items which come from the mail teller arrive in the morning mail and consist of both large and small country items. The afternoon section handles the items which the receiving teller has received up to a certain hour, together with the large country items from all departments of the bank. Thus the work is so arranged as to enable the bank to despatch for collection upon the day of receipt a considerable part of the items

---

<sup>38</sup>See Westerfield, III, Chap. XXXVII; Langston, I, Chap. V; W. H. Kniffin, *Commercial Banking*, Vol. I (New York, 1923), Chap. XIII.

contained in the day's receipts, thereby avoiding loss of interest, while the size of the working force and also the hours of labor are kept within reasonable bounds.<sup>34</sup>

#### Letters of transmittal

After the items are sorted the rack men prepare letters of transmittal. These are prepared in duplicate and give the amount of the items, the name of the sending bank, a list of the items which are enclosed, instructions as to protest, wiring rate, etc. (See Form 16.) The letters sent to correspondent banks are printed on different colored paper according as the items are sent on a remittance, a charge, or a transfer basis. Letters for the Federal reserve banks are made out on different forms, according as the items are sent to the local Federal reserve bank as a deposit, or are a direct sending to other Federal reserve banks or their branches. The carbon copies of these letters are retained in the bank. In addition to giving a list of the items enclosed, these carbon copies contain the names of the last endorsers of the items for convenience in tracing them should difficulties arise.<sup>35</sup> This work of preparing such letters is now done in large banks by special transit machines which record enough details to make subsequent identification possible. The instructions are generally given in general terms on the transit letter heading, such as "Do not protest items under \$10. Wire non-payment of items \$500 and over, etc." The carbon copies constitute the charge tickets to the accounts of the banks to which the checks are sent. Thus a letter containing a batch of checks going from New York to a country bank will be charged to the latter and appears in the total "due from banks" on the general ledger. The total of a letter to a Federal reserve bank constitutes a charge to the Federal reserve bank to which sent and will be included in the item "Due from Federal reserve bank, collections," to distinguish it from "Due from the Federal reserve bank on the reserve account."<sup>36</sup>

When items are collectible through the Federal reserve banks, they may be handled in two ways. All items which are payable in the local Federal reserve district are taken to the local Federal reserve bank as a deposit. Such items are classed as deposit items,

<sup>34</sup>Langston, I, p. 110.

<sup>35</sup>Langston, I, p. 111; Westerfield, III, p. 689.

<sup>36</sup>Kniffin, *op. cit.*, pp. 352-354.

and a regular deposit slip is made out in duplicate to accompany them. To save time and effort, all other items are sent directly to the Federal reserve bank or branch of the district in which the drawees are located. These items are called direct sendings. The sending bank requests the out-of-town Federal reserve bank to

<p><b>THE NATIONAL CITY BANK OF NEW YORK</b>          55 WALL STREET          NEW YORK</p>
<p><b>TO:</b></p>
<p><b>WE ENCLOSE FOR COLLECTION THE ITEMS AS LISTED BELOW.          UNLESS OTHERWISE INSTRUCTED, DO NOT HOLD COLLECTIONS FOR THE CON-          VENIENCE OF PARTIES. SURRENDER DOCUMENTS ATTACHED TO DRAFT ONLY ON PAYMENT OF THE          DRAFT. WIRE NON-PAYMENT OF ALL ITEMS OVER \$500.          PROTEST ALL DISHONORED ITEMS OVER \$10 AND RETURN WITHOUT DELAY.</b></p>
<p><b>DO NOT PROTEST ITEMS BEARING THE SYMBOL (N.P.1-B) OR A SIMILAR AUTHORITY          OF A PRECEDING ENDORSER</b></p>
<p><small>C 7 50M PG 4-23</small></p>
<p><b>TRANSIT DEPARTMENT</b></p>

FORM 16

credit the account of the Federal Reserve Bank of New York with the proceeds of the collection. The items are divided into two classes—city items and country items—according to whether they can be collected within the city in which the Federal reserve bank is located or outside that city. (See Forms 17 and 18.) The



FORM 80E 10M-8-14-29.

CITY ITEMS

THE MECHANICS & METALS NATIONAL BANK  
OF NEW YORK

TO FEDERAL RESERVE BANK

OF .....

WE ENCLOSE HERewith THE FOLLOWING ITEMS FOR  
CREDIT OF THE FEDERAL RESERVE BANK OF NEW YORK FOR  
OUR ACCOUNT WITH THEM. Waive protest on items \$10, and under, and  
those stamped "N. P. 1-4" or similar authority of a preceding endorser,  
WIRE NON-PAYMENT on items of \$500, and over.

FORM 17

FORM 507 21M-10-8-23

COUNTRY ITEMS

**THE MECHANICS & METALS NATIONAL BANK  
OF NEW YORK**

**TO FEDERAL RESERVE BANK**

**OF.....**

**WE ENCLOSE HERewith THE FOLLOWING ITEMS FOR CREDIT OF THE FEDERAL RESERVE BANK OF NEW YORK FOR OUR ACCOUNT WITH THEM. Waive protest on items \$10, and under and those stamped "N. P. 1-4" or similar authority of a preceding endorser, WIRE NON-PAYMENT on items of \$500, and over.**

72-100-E-000-0-03

## FOUR DAY POINTS

DATE SENT \_\_\_\_\_

REPORT TO FEDERAL RESERVE BANK OF NEW YORK  
OF CASH LETTERS SENT DIRECT BY

BANK \_\_\_\_\_ ADDRESS \_\_\_\_\_

TOTAL TO BE CREDITED OUR ACCOUNT ON \_\_\_\_\_

SENT TO	No.	AMOUNT (LIST EACH LETTER SEPARATELY)	SENT TO	No.	AMOUNT (LIST EACH LETTER SEPARATELY)
<b>ATLANTA, Country</b> ALA. TENN. GA.	6		Total Amount Forwarded		
<b>NASHVILLE, Country</b> TENN.  BRANCH OF ATLANTA	6		<b>LOUISVILLE, Country</b> IND. KY. BRANCH OF ST. LOUIS	8	
<b>BERMINGHAM, Country</b> ALA.  BRANCH OF ATLANTA	6		<b>MEMPHIS, Country</b> ARK. MISS. TENN. BRANCH OF ST. LOUIS	8	
<b>JACKSONVILLE, Country</b> FLA.  BRANCH OF ATLANTA	6		<b>LITTLE ROCK, Country</b> ARK.  BRANCH OF ST. LOUIS	8	
<b>NEW ORLEANS, Country</b> MISS. ALA.  BRANCH OF ATLANTA	6		<b>MINNEAPOLIS, Country</b> MICH. MINN. WIS.	9	
<b>CHICAGO, Country</b> MICH., IOWA, ILL., IND., WIS.	7		<b>HELENA, City</b>  BRANCH OF MINNEAPOLIS	9	
<b>DETROIT, Country</b> MICH.  BRANCH OF CHICAGO	7		<b>RICHMOND, Country</b> No. Cal. So. Cal. W. Va.	5	
<b>CLEVELAND, Country</b> OHIO	4		<b>BALTIMORE, Country</b> W. Va.  BRANCH OF RICHMOND	5	
<b>CINCINNATI, Country</b> Ky. OHIO BRANCH OF CLEVELAND	4		<b>EL PASO, City</b>  BRANCH OF DALLAS	11	
<b>PITTSBURG, Country</b> W. Va.  BRANCH OF CLEVELAND	4		<b>HOUSTON, City</b>  BRANCH OF DALLAS	11	
<b>KANSAS CITY, Country</b> KAN. MO.	10		<b>PORTLAND, City</b>  BRANCH OF SAN FRANCISCO	12	
<b>DENVER, City</b>  BRANCH OF KANSAS CITY	10		<b>SALT LAKE CITY, City</b>  BRANCH OF SAN FRANCISCO	12	
<b>ST. LOUIS, Country</b> ARK., MO., ILL., TENN. IND.	8		<b>SEATTLE, City</b>  BRANCH OF SAN FRANCISCO	12	
<b>TOTAL FORWARD</b>			<b>SPOKANE, City</b>  BRANCH OF SAN FRANCISCO	12	
			<b>GRAND TOTAL—4 DAY ITEMS</b>		

BR 72-304-7-23

NEW YORK

FEDERAL RESERVE BANK OF NEW YORK

BOOKKEEPING DIVISION ADVISING SECTION

RECAPITULATION CASH LETTERS SENT DIRECT

DATE \_\_\_\_\_ 192

REPORT TO

FEDERAL RESERVE BANK OF NEW YORK

FROM

NATIONAL BANK OF COMMERCE IN NEW YORK

NAME OF BANK

ADDRESS

OF CASH LETTERS SENT DIRECT TO OTHER FEDERAL RESERVE BANKS AS PER DETAILED LISTS ATTACHED HERETO:

Table with 2 columns: Description of letter types (e.g., ONE DAY POINTS, TWO DAY POINTS, etc.) and Amount in dollars (\$). Includes a GRAND TOTAL row at the bottom.

NOTE.—CREDIT WILL BE GIVEN ON THE RESPECTIVE DATES FOR THE TOTAL AVAILABLE EACH DAY AS SHOWN ABOVE.

IT IS VERY IMPORTANT THAT THE SEPARATE TOTAL OF EACH LETTER SENT BE SHOWN. DO NOT SHOW A TOTAL SENT TO ANY ONE BANK THAT INCLUDES MORE THAN ONE LETTER.

PLEASE BE PARTICULAR TO SEE THAT ALL FIGURES REPORTED ARE CORRECT AND ARE ENTERED IN THE PROPER PLACES.

KEEP A COPY OF THIS REPORT FOR YOUR OWN FILES

sending bank also advises the local Federal reserve bank of its action on forms showing its sendings of items to each out-of-town Federal reserve bank or branch. Thus there will be a form showing the amount of items sent to all one-day points, another showing those sent to two-day points, and so on up to the eight-day points. Another form gives a recapitulation of the amounts on each form. A form for the four-day points is shown, together with a recapitulation form. (See Forms 19 and 20.) Items which out-of-town Federal reserve banks cannot collect are returned to the Federal Reserve Bank of New York which credits the account of the out-of-town bank for all such items received and charges them back to the bank for which collection was attempted.

### **The numerical transit system**

In sending out checks for collection it is necessary for the sending bank to keep sufficient records to make it possible to trace the checks should it be necessary. To record the required information in full is almost beyond the realm of possibility in large banks where the number of items is very great. Formerly it was necessary to write the full name of the drawee bank in listing each item in the remittance letter; today a system of numbers is used in order to simplify and facilitate procedure. This system of numbers, known as the numerical transit system, has been in use since 1911. In 1910 the transit managers from a number of the leading clearing houses of the United States, under the auspices of the Clearing House Section of the American Bankers' Association, devised a system of numbering all the banks of the country for transit purposes. Under this system, which was adopted by the association in 1911, every bank in the country is assigned a distinctive number which is given in a key or directory published by the association. Banks with long names can now be designated by the use of but two numerals, as, for example, The Corn Exchange Bank of New York by 1-45, the National City Bank of New York, 1-8.

In the plan, the numbers 1-49, inclusive, are used to designate the reserve cities, the number serving as a prefix in numbering the banks in these cities. Two methods are used for numbering the banks within these cities: Those banks which are members of the clearing houses are designated by their clearing house numbers; those not in clearing house associations are provided with numbers. Thus, New York City is No. 1 in the list of reserve cities, while the clearing house number of the Corn Exchange Bank

is 45. Consequently the complete designation would be 1-45. In numbering the reserve cities Brooklyn is included with New York City; Kansas City, Kansas, with Kansas City, Missouri, and South Omaha with Omaha. Combining these reserve cities in this manner left two numbers out of the 49. These two numbers have been given to Buffalo and Memphis.<sup>37</sup> Buffalo was selected because it is the tenth city in population and by giving Buffalo a number of its own, clearing house numbers can be used for Rochester, the next largest city in the State. For example, as will be explained more in detail below, New York State is designated as No. 50, the other States being given higher numbers, so the banks in Rochester would be designated by the State prefix 50 and the clearing house number thus: 50-1, 50-2, etc. This gives the largest cities the advantage of the smallest numbers. Indeed, the chief idea underlying the assignment of numbers was to give the smallest possible numbers to the most important centers, since their numbers are used most frequently. For similar reasons, and also due to the fact that the number of reserve cities in the South was rather small, Memphis was given the remaining vacant number. This permitted Nashville, another important collecting center, and the next largest city in the State, to use its clearing house numbers with the State prefix. On the basis of the 1910 census the reserve cities were numbered as follows:

- |                         |                           |
|-------------------------|---------------------------|
| 1. New York City        | 25. Columbus, O.          |
| 2. Chicago, Ill.        | 26. Memphis, Tenn.        |
| 3. Philadelphia, Pa.    | 27. Omaha, Neb.           |
| 4. St. Louis, Mo.       | 28. Spokane, Wash.        |
| 5. Boston, Mass.        | 29. Albany, N. Y.         |
| 6. Cleveland, O.        | 30. San Antonio, Tex.     |
| 7. Baltimore, Md.       | 31. Salt Lake City, Utah. |
| 8. Pittsburgh, Pa.      | 32. Dallas, Tex.          |
| 9. Detroit, Mich.       | 33. Des Moines, Ia.       |
| 10. Buffalo, N. Y.      | 34. Tacoma, Wash.         |
| 11. San Francisco, Cal. | 35. Houston, Tex.         |
| 12. Milwaukee, Wis.     | 36. St. Joseph, Mo.       |
| 13. Cincinnati, O.      | 37. Fort Worth, Tex.      |
| 14. New Orleans, La.    | 38. Savannah, Ga.         |
| 15. Washington, D. C.   | 39. Oklahoma City, Okla.  |
| 16. Los Angeles, Cal.   | 40. Wichita, Kans.        |
| 17. Minneapolis, Minn.  | 41. Sioux City, Ia.       |
| 18. Kansas City, Mo.    | 42. Pueblo, Colo.         |
| 19. Seattle, Wash.      | 43. Lincoln, Neb.         |
| 20. Indianapolis, Ind.  | 44. Topeka, Kans.         |
| 21. Louisville, Ky.     | 45. Dubuque, Ia.          |
| 22. St. Paul, Minn.     | 46. Galveston, Tex.       |
| 23. Denver, Colo.       | 47. Cedar Rapids, Ia.     |
| 24. Portland, Ore.      | 48. Waco, Tex.            |
|                         | 49. Muskogee, Okla.       |

<sup>37</sup>Buffalo is now a reserve city.

The States are given the numbers ranging from 50 to 99, numbers 59 and 89 being left blank. These numbers have been divided into five sections as follows:

Eastern .....	50 to 58
Southeastern .....	60 to 69
Central .....	70 to 79
Southwestern .....	80 to 88
Western .....	90 to 99

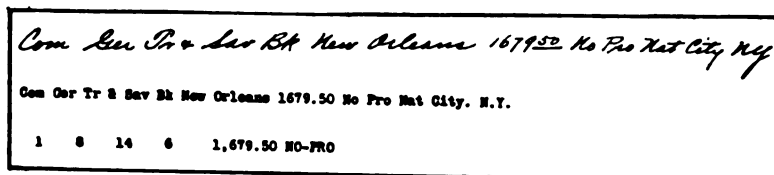
The States containing the principal collecting centers, namely, New York, Pennsylvania, Illinois, Missouri, and California, have been given the first numbers in their respective sections—50, 60, 70, 80, 90—to facilitate the listing of items on the adding machine as only one key is used to print these numbers and also to indicate that the following nine numbers in each section represents the States in the same territory. The system of numbering the States in groups according to territory should prove to advantage in memorizing the State numbers. With the exception of five States representing each section the States are numbered in alphabetical order in each section. The States are numbered as follows:

50. New York	75. Minnesota
51. Connecticut.	76. Nebraska
52. Maine	77. North Dakota
53. Massachusetts	78. South Dakota
54. New Hampshire	79. Wisconsin
55. New Jersey.	80. Missouri
56. Ohio.	81. Arkansas
57. Rhode Island	82. Colorado
58. Vermont	83. Kansas
59. ....	84. Louisiana
60. Pennsylvania	85. Mississippi
61. Alabama	86. Oklahoma
62. Delaware	87. Tennessee
63. Florida	88. Texas
64. Georgia	89. ....
65. Maryland	90. California
66. North Carolina	91. Arizona
67. South Carolina	92. Idaho
68. Virginia	93. Montana
69. West Virginia	94. Nevada
70. Illinois	95. New Mexico
71. Indiana	96. Oregon
72. Iowa	97. Utah
73. Kentucky	98. Washington
74. Michigan	99. Wyoming

The State numbers serve as prefix numbers to designate banks not in the 49 reserve cities; the affix numbers are assigned by the American Bankers' Association. There is one important modification of this general principal. After the 49 large reserve cities are cared for by the assignment of small numbers, 48 more cities

can be cared for by permitting them to use their clearing house numbers as affixes along with their State numbers as prefixes. This will permit the 48 next largest cities to secure the advantages of relatively small numbers. The remaining cities are then compelled to use larger numbers for affixes. Thus Rochester—to use the previous example once more—will number her banks 50-1, 50-2, 50-3, etc., but the First National Bank of Freeport, N. Y., is 50-453, the Centerville State Bank at Centerville, Ind., is 71-1015, and the Washington Trust Company at Washington, Pa., is 60-295. Numbers have been provided for all of the 2,200 banks in the 49 numbered cities and also in the 48 other cities, showing the numbers of the first city in each State numbered with the State prefix. The remaining 25,000 banks of the country are to be numbered according to the following plan: The first numbers are to be given to the banks in the largest cities and are to be continued in the relative order of the population of the cities in each State. Each bank is to be numbered in consecutive order according to seniority in each city. Where there is only one bank in a town the towns are to be numbered in alphabetical order, and are the last to be numbered.<sup>28</sup>

The system, just described, is used in varying degrees by the different banks, but it reaches its maximum usefulness only when all checks, drafts, and indorsement stamps of a bank bear that bank's transit number. A bank desiring to list a check drawn upon that bank would then be enabled to use the transit number; otherwise the effort required to look it up in the key would preclude such use. The economy of such a system is illustrated well by the following example of the evolution of the transit letter.<sup>29</sup>



The first line shows the old method of recording the details on a transit letter by hand. The second line shows the same work by machine, while the third shows the numerical transit system as operated by a transit machine. Numbers 1 and 8 designate the National City Bank of New York City; numbers 14 and 6 designate the New Orleans bank.

<sup>28</sup>W. H. Kniffin, *The Practical Work of a Bank*, 5th ed. (New York, 1919), pp. 334-339; Kniffin, *Commercial Banking*, Vol. I (New York, 1923), pp. 354-357; Langston, 1, pp. 112-113; the *Key to the Numerical System of American Bankers' Association* (1924), Rand, McNally and Company.

<sup>29</sup>From Kniffin, *The Practical Work of a Bank*, p. 339.



**Methods of settling for the proceeds of collections**

When collecting through the Federal reserve banks, the collecting bank is reimbursed at the proper time by having its account with its Federal reserve bank credited.

When items are sent directly to the parent Federal reserve bank for collection, several letters are combined upon one deposit slip, and the records of the bank are kept by deposit slips rather than by individual letters. The duplicate letters for items of immediate availability are charged to the "Lawful Reserve with Federal Reserve Bank" account, while the ones of deferred availability are charged to a "Federal Reserve Bank Collection" account which is kept by the general bookkeepers. The general bookkeepers are charged with the duty of transferring these outstanding collections to the Lawful Reserve accounts as they become available.<sup>40</sup>

When collecting through correspondent banks a bank reimburses itself in one of three ways: (1) By charging the deposit account of the correspondent bank, (2) by charging the account when a certain number of days have elapsed after forwarding the item, or (3) by requiring a remittance from the collecting bank after collection has been effected. These three ways of settling for the proceeds of collection are commonly termed the "charge," the "transfer," and the "remittance" methods, respectively.

When items are sent out on a charge basis the duplicate letter becomes a charge against the bank's account. Such duplicates are sent to the customers' bookkeepers where they are charged to the accounts of the proper banks and later filed for future reference.

Items sent out for collection on a transfer or remittance basis cannot be charged to the deposit account of the collecting agent on the day of transmission. However, in order to make some entry to account for these valuable items which have been disposed of, special collection accounts are set up for each bank to which the items are sent. Ledgers containing these accounts are kept by the collection ledger department.

On this procedure, Langston says:<sup>41</sup> "In sending out letters of this sort the transit clerks charge the items to the collection ledgers on their rack proofs. The duplicate letters are forwarded to the collection ledger bookkeepers who enter them to the debit of the proper collection accounts.

<sup>40</sup>Langston, I, p. 115.

<sup>41</sup>*Ibid.*, pp. 114-115.

“Collections sent out on a transfer basis must be charged off the collection ledger and to the deposit account of the correspondent bank after a certain number of days have elapsed. The collection ledger bookkeepers, consequently, keep a careful watch over maturity dates of transfer items. As the required time elapses charge tickets are made out transferring the charges from the collection ledger to the customers’ ledgers. These tickets are sent through to the customers’ bookkeepers, who charge the amounts to the deposit accounts of the collecting banks.

“As remittances covering collections sent out on a remittance basis come in to the mail teller’s department . . . , the letters are sent to the collection ledger department where they are credited to the collection accounts of the remitter. The transactions are then closed. Some banks remit the proceeds of collections when the collections are made, but it is quite a common arrangement to hold them until a pre-arranged date for settling arrives, say semi-weekly, and remit at one time for all collections which have been made for the whole period. It is an important function of the collection ledger bookkeepers to keep a watch over all such incoming remittances. If remittances are not forthcoming on time the unpaid item is followed up until the transaction is complete.” The collection ledgers of the bank are in nature books of control over cash items in the process of collection.

### **The collection of out-of-town collection items**

Having described the internal organization of a bank with reference to the collection of cash and collection items within the city, and of cash items outside the city, a brief description now will be given of the method of collecting out-of-town collection items.

As in the case of out-of-town cash items, collection items may be collected in one or both of two ways, (1) through the Federal reserve banks, or (2) through correspondent banks. A description of the method of collecting such items through the Federal reserve banks was given in Chapter VI.<sup>42</sup> The process of collecting such items through correspondent banks does not vary widely from the method of collecting cash items through correspondents.

Out-of-town notes and acceptances are collected by the country collection department of a bank. When such items are received they are prepared for collection in the same manner as are the city items of the same nature. By means of the tickler the

---

<sup>42</sup>See pp. 201-205.

due dates of the country items held are ascertained. They are sent to the country collection department about ten days before they mature, in order that this department may have opportunity to put them for collection in the hands of an out-of-town correspondent or send them through the proper Federal reserve bank by the time the date of maturity arrives. This department attends to all the details of effecting collection and making settlement with the owners. Coupons and maturing bonds collectible out of town are collected by this department in the same manner as are bills, notes, and acceptances.

#### Collection number, stamps, and record files for country items

A serial collection number is assigned to each incoming collection item, with the exception of foreign ones. This number is placed upon the face of the item by means of a stamp of a distinctive shape and the item is described and referred to by this number as it progresses through the collection work. In case it becomes necessary for the out-of-town collecting agents to return country collections unpaid, this stamp enables the clerks of the mail teller's department to recognize the incoming items as collection returns and to forward them promptly to the country collection department.<sup>43</sup>

Langston describes the record files kept in connection with the collection of country collection items as follows:<sup>44</sup> "With each country collection item comes the customer's letter of instructions. These letters are used in preparing quintuplicate record and bookkeeping tickets, after which they are returned to the mail teller for acknowledgment. On the tickets prepared by the country collection department is recorded such information as the date, owner's name and address, maker's name, drawee's name and address, where payable, date sent, due date, date of owner's letter, owner's number, the bank's collection number, amount, and instructions as to protest, wire fate, etc.

"One copy of the ticket serves as a letter of transmittal which is sent to the out-of-town correspondent along with the item to be collected. In case items to be collected consist of those payable to bearer, such as coupons, the remittance is enclosed in a special envelope which is prepared concurrently with the tickets and the letter is sent by insured registered mail. With each letter is enclosed a postal card which is to be returned by the correspondent

<sup>43</sup>Langston, I, p. 187.

<sup>44</sup>*Ibid.*

immediately after receipt of the letter as an acknowledgment of safe arrival.

"A second copy of the ticket is retained as a record of the transaction. Tickets representing outstanding collections for which advices of fate have not been received are filed separately from those for which such advice has been received. By means of this method of filing, the outstanding collections may be quickly examined and those which have been outstanding for an unreasonable period of time are brought to attention and followed up.

"A third copy of the ticket serves as an advice of payment to the owner. These are filed in the department and when an item has been collected the corresponding ticket is sent to the owner as advice of payment."

#### **Method of sending collections through Federal reserve banks**

Virtually any type of collection item may be handled through the Federal reserve banks, although bankers' acceptances are probably one of the most common types. Collection items may be collected through the local Federal reserve bank or by sending them direct to the Federal reserve bank or branch in the district of the debtor bank or customer. Direct sendings, however, are not authorized by the Federal Reserve Act, although the Federal Reserve Board authorized them in 1920.<sup>45</sup> Collection items usually are dispatched long enough before they are due to reach the drawees or makers on the date of maturity.<sup>46</sup>

#### **Methods of securing settlements for out-of-town collection items**

In securing a settlement for out-of-town collection items, whether collected through Federal reserve banks or through correspondents, it is understood that settlement will not be made until the items have been collected. This procedure is quite different from that followed in sending cash items to correspondents for collection. Cash items are generally charged to the account of the collecting agent to which they are sent without specific acknowledgment from that agent that collection has been effected. In other words, in collecting cash items the bank assumes that collection has been successfully made unless it has specific information to the contrary, while in handling collection items it makes settlement with the client only on the authority of definite knowl-

---

<sup>45</sup>*Federal Reserve Bulletin*, Vol. VI (1920), pp. 276, 949.

<sup>46</sup>See Langston, I, p. 184.

edge that collection has been effected by the correspondent.<sup>47</sup> One important exception to this general rule is to be noticed in the cases of items from the discounts of the bank and of bankers' acceptances. These are made payable either by or at a bank and they are charged to the accounts of the collecting agents upon maturity dates without waiting for letters of advice of payment from such agents.<sup>48</sup>

In effecting settlement for items sent to correspondent banks, the correspondents send advices that collections have been made and settle with the New York bank, for example, (1) by requesting that their accounts be charged or (2) by enclosing a remittance. If the first method of settlement is to be used the debit ticket is sent to the bookkeepers for posting to the debit of the correspondent's account. If the second method is used, the debit ticket is passed to the collection ledgers to be debited to the correspondent's special account contained in these books. The mail teller sends the remittance letter which he receives from the correspondent to the collection ledgers for credit, and thus the country collection department's charge is offset by the credit arising from the remittance.<sup>49</sup>

Where the Federal reserve bank has made the collections it sends an advice stating that the collection has been effected and that the account of the New York bank has been credited for the proceeds. Settlement with the Federal reserve bank is made therefore by passing the debit ticket covering the amount involved to the account Lawful Reserve with the Federal Reserve Bank of New York.

After effecting settlements with the collecting correspondents or the Federal reserve bank, the New York bank must then settle with the customer. This will be done according to his instructions. In case he has requested that the proceeds be placed to his credit, tickets crediting his account are sent to the bookkeepers and an advice of credit is mailed to him. In case he desires a remittance, a cashier's check is sent to him, the Cashier's Check account being credited.

Unpaid items go to the mail teller and are returned to the country collection department after protest fees have been taken care of by the city collection department. The country collection

---

<sup>47</sup>*Ibid.*, p. 186.

<sup>48</sup>*Ibid.*, p. 190.

<sup>49</sup>*Ibid.*, p. 189.

department then returns each item to the last indorser, together with an advice giving the reason for non-payment.<sup>50</sup>

### **Mechanism for handling telegraphic transfers**

The work of handling telegraphic transfers cannot be confined to any one department. Much of it is done in the transit department, some of it in the note teller's department, some of it by the telegraph and cable department, and some of it in other departments. The procedure varies from bank to bank. Description of the procedure in a large bank may be simplified by describing, first, the procedure when application is made for a telegraphic transfer, and second, the procedure in making payments under authority of a telegraphic order.

### **Application for and sending of telegraphic orders for transfer**

A person wishing to make a telegraphic transfer may make application to his bank in a variety of ways. He may apply in person at the window of his bank, he may write or he may telegraph, and instead of paying cash he may request the bank to charge his account for the amount involved. If he appears in person at the bank, the applicant is required to fill out a regular form which contains his name, the date, the place to which the funds are to be sent, the name of the recipient, and special instructions as to advising the transferee, etc. If the applicant writes or telegraphs his order this serves as the application form. When the customer telegraphs his order for a transfer the telegram comes to the bank through the telegraph and cable department from which it is passed to the test word department for verification, and then to the note teller's department which has a "hold" placed by the bookkeepers of the bank against the applicant's account.

Upon receiving the application the bank stamps the time of receipt upon it and prepares the necessary charge and credit tickets, letters of advice and telegrams. An advice of the transaction is mailed to the sender and in case his account is to be charged this advice is prepared in duplicate, one copy of which is sent to the customer and the other to the bookkeepers of the bank to serve the purpose of a debit ticket carrying authority for charging the customer's account. The bank also mails an advice to the transferee which serves the purpose of confirming the transaction effected by means of a telegram. The telegram is prepared in triplicate,

<sup>50</sup>*Ibid.*, p. 191.

signed by the proper officer of the bank, and sent to the test word department for the test word, which serves the purpose of a signature on the telegram. The copies are sent to the telegraph and cable department for transmission. This department despatches the telegram in code, stamps a copy of it with a time stamp, and returns it to the note teller's department, where it serves, along with the customer's application, as evidence that the transaction has been completed.<sup>51</sup>

### **Making payments under telegraphic transfers**

When a bank receives a telegraphic order from one of its correspondents to act as paying agent in making a transfer of funds, the telegram is received by the note teller's department. Payment may be made in cash or by crediting an account. Payment in cash may be made over the window or by messenger to some individual or bank including the Federal reserve bank. The individual or bank within the city may be paid by sending a cashier's check, or by having the payee call at the bank and upon proper identification receive the funds. If the bank is requested to make payment outside its messenger district but still within the city, the bank communicates, if possible, with the transferee by telephone, otherwise by mail, and requests him to call at the bank with papers establishing his identity and receive payment. If the bank is making a payment to the Federal reserve bank it will send a check drawn against its account with that institution. In recording payments made in funds, the Cashier's Check account, the Lawful Reserve account with the Federal reserve bank or cash is credited, according to the method of payment employed. When cashier's checks are issued in payment of transfers, duplicate receipts are obtained from the recipient of the check. One copy is kept as a record, the other is sent to the customer who ordered the payment to be made. This copy serves as an advice to the customer, showing that payment has been effected.

Where the bank makes payment by means of a credit to the deposit account of the transferee the note teller's department prepares a ticket crediting the customer's account. The transferee receives from the bank an advice of the credit either by mail or by telegraph, according to the instructions of the incoming telegram. Office copies of all advices are retained in the department

<sup>51</sup>*Ibid.*, pp. 169-170; Westerfield, III, pp. 698-701.

for the use of the auditors in checking the telegraphic transfer operations.<sup>52</sup>

Bills are rendered once a month by the telegraph companies for messages sent and received. These are checked by the telegraph operator and all differences adjusted before settlement is made. A clerk in the department allocates these charges, and, where the agreement with the client runs to that effect puts through tickets charging the account or prepares and sends a bill to him; otherwise they are charged to the Correspondents' Expense account.<sup>53</sup>

### The protest

Where a bank acts as collecting agent and holds indorsed checks and drafts, payment or acceptance of which has been refused, it is its duty, unless otherwise instructed, to have them protested. The purpose of the protest is to bind the maker and indorser and secure reliable evidence of dishonor. Formal protest, however, as distinguished from demand and notice of dishonor, is required only in case of foreign bills of exchange. Protest of notes and inland bills is permitted and it is customary for a collecting bank to protest all paper unless otherwise instructed. Official protest adds nothing in the way of protecting rights that presentment, demand for payment and notice of dishonor, will not give. Official protest merely affords a convenient means of proving dishonor. In case the holder is compelled to bring suit on the paper, the notary's certificate of protest is admitted as prima facie evidence to prove dishonor and obviates the necessity of calling witnesses and proving that fact by other evidence.<sup>54</sup>

Banks use their discretion in many cases in the matter of protest. Items are not sent to protest ordinarily if deposited and indorsed by its customers, since the bank wishes to save the customer from the expense of protest fees. Those sent from a distance, however, are protested unless there are instructions to the contrary. Banks are usually anxious to give payers every opportunity to save their paper from protest and protect their good names and credit, and in this way gain the favor of their customers.

When an item has been dishonored, it is turned over to a

<sup>52</sup>Langston, I, p. 171; Westerfield, III, 699-700.

<sup>53</sup>Westerfield, III, p. 699.

<sup>54</sup>See Thomas B. Paton, Jr., *Digest of Legal Opinions* (New York, 1922), Sections 2650-2719 on Presentment, Protest, and Notice.



notary who personally makes demand again and gets a refusal to accept or pay. The notary then certifies that he has presented the document at such a time and place and that acceptance or payment was refused, for such a reason, or for no given reason, and makes a formal protest under his signature and seal. He then gives notice of the facts to all indorsers in person or by mail and returns the item under protest to the bank. The bank returns it with the certificate of protest, to the bank from which it came, and this bank in turn returns it to the depositor, who is charged with the protest fees, postage, and other charges incurred by the collecting bank and its agent.<sup>55</sup> The depositor will then send the notice of protest to the maker or the indorser and look to him for payment. The notice may be verbal or written and may be sent by messenger or by mail. It is not conclusively determined in the courts whether the bank is obligated to give notice of dishonor only to the holder (its principal), or to the maker and all indorsers thereon, but it seems that notification of the principal is sufficient to acquit the bank.<sup>56</sup>

#### **The transit department of a Federal reserve bank**

In a description of the internal organization of a bank for purposes of clearing and collection of checks, drafts, and other items, it will be appropriate to give a description of the organization and work of the transit department of a Federal reserve bank as the procedure within other banks is closely connected with the procedure within the Federal reserve bank in handling the items that are sent to it for collection.

The principle underlying all transit departments is the same, whether in a Federal reserve bank or some other type of bank. Items are received for collection. They must be sorted, recorded, and sent out again in the proper manner. Remittances will be made by the drawee banks and these must be cared for in a systematic way. These duties are the main ones performed by a transit department. The description which follows must be, of necessity, a general one. No effort will be made to describe the transit department in great detail. Did space permit, a knowledge of the details would be of little value to the reader. The forms used are multifarious and the details to be cared for are almost endless.

---

<sup>55</sup>Westerfield, III, pp. 710-711.

<sup>56</sup>*Ibid.*

### The receipt of items by the transit department

In order to expedite the forwarding of checks to the Federal reserve bank and the obtaining of prompt credit therefor, member banks are requested, in the preparation of their letters, to sort their checks into certain classes and list each class on a separate sheet or total. Instructions on the time schedule of the Federal Reserve Bank of New York, which is sent out to all member banks, require that the items be classified into ten main classes, one of which is sub-divided into three classes. The classes are as follows:

- (a) Items drawn on members of the New York Clearing House (List A, page 4).<sup>57</sup>
- (b) Items drawn on other New York City banks (List B, page 6)<sup>57</sup> and on Brooklyn banks and bankers.
- (c) Items drawn on members of the Northern New Jersey Clearing House Association (List C, page 7).<sup>57</sup>
- (d) Checks and warrants on Treasurer of the United States, Washington, D. C.
- (e) Items drawn on one-day points.
- (f) Items drawn on two-day points, subdivided into
  1. A letter containing items drawn upon banks situated in the State of New York.

---

<sup>57</sup>These lists, as well as other instructions, are omitted here, but may be found in the time schedule sent out by the Federal Reserve Bank of New York. See pp. 184-185 above.

The New York schedule, among other things, includes the following instructions:

"Two-day items received by us in time to be forwarded Saturday will be available Tuesday.

"Four-day items received by us in time to be forwarded Thursday will be available Tuesday, and those received by us in time to be forwarded Friday and Saturday will be available Wednesday.

---

### "General Conditions Under Which Items Are Accepted

*"Every bank sending checks or other cash items to the Federal Reserve Bank of New York, or to another Federal Reserve Bank direct, for our account, will be understood to have agreed to the terms and conditions of our Check Collection Circular No. 515 and to have agreed that in receiving such items the Federal Reserve Banks will act only as the collecting agent of the sending bank; that the Federal Reserve Banks will be responsible only for due diligence and care in forwarding or presenting such items; that the Federal Reserve Banks are authorized to present or send such items, for payment in cash or bank draft, direct to the bank on which they are drawn, or, in their discretion, to forward them to another agent with authority to present or send them, for payment in cash or bank draft, direct to the bank on which they are drawn; and that the Federal Reserve banks are authorized to charge back the amount of any items (whether or not the items themselves can be returned) for which payment, either in cash or in the proceeds of the bank draft, has not actually been received."*

2. A letter containing items drawn upon banks situated in the portion of New Jersey that is in this district, and Fairfield County, Conn., and
  3. A letter covering all other items on the two-day points outside of this district.
- (g) Items drawn on three-day points.
  - (h) Items drawn on four-day points.
  - (i) Items drawn on five-day points.
  - (j) Items drawn on eight-day points.

All letters received, classified as above, are credited in full for the total shown, and errors in listing or footing are adjusted by a separate debit or credit. Checks received unsorted are made available for the longest period required to collect any item inclosed. Letters received from other Federal reserve banks and containing checks drawn upon banks within the district of the receiving Federal reserve bank are prepared in the same manner.

When the letters are received, credit is given from the letters containing the checks and not from the actual checks received. This procedure is necessary as the checks themselves are passed over to the outgoing sections of the transit department (as soon as the letters containing them are verified), assorted according to destination and to the banks upon which drawn. All checks drawn on a particular bank received in the course of the day are finally assembled into one letter, addressed and dispatched to the bank on which they are drawn, regardless of the sources from which they came. Much of this work of assorting and listing of outgoing letters is finished by the outgoing section of the transit department before credit slips are prepared for the accounts of the banks from which the checks were received. A second reason why credit is given from the letters received rather than from the checks, is because the number of credits is reduced to a minimum, since the total amount of a letter is credited to the sending bank, whether the letter embraces one or many items. This not only simplifies the work of the Federal reserve bank but greatly facilitates the verification of accounts by the member banks. In view of this explanation, the necessity for requiring that items be listed in accordance with the directions given in the time schedule is apparent.<sup>58</sup>

The incoming letters which accompany the checks are passed

---

<sup>58</sup>*Some Collection Problems*, Letter No. 15, Federal Reserve Bank of Richmond (March, 1924), p. 6. Hereafter cited as *Letter No. 15*.

by the receiving section of the transit department to a special section known as the distribution department. This department is charged with the duty of determining the availability date of each letter received and the preparation of an appropriate receipt and appropriate tickets, from which actual credit is finally made. Each receipt is addressed to the bank from which the items came and shows the date of receipt, total amount of the items in each letter or division of a letter, and the date upon which credit will be given in the reserve account of the member bank or payment to the other Federal reserve bank through the Gold Settlement Fund. These advice slips are written on specially designed machines, and at the same time (and as carbon copies) credit tickets are prepared for the use of the proper department of the Federal reserve bank. By means of the transit numbers of the banks on which the items contained in a certain letter are drawn, or the names and locations of these banks, the clerk in this department is enabled to determine whether immediate or deferred credit is to be given, and if deferred credit is given, the date upon which credit in the reserve account or payment through the Gold Settlement Fund to the other Federal reserve bank will be due. If the advice slip shows that the items covered by it are subject to immediate credit the carbon credit slip is passed to the bookkeeping department (in the case of a member bank) and credit is made in the reserve account of the member bank. If the credit slip indicates that another Federal reserve bank is entitled to the immediate credit the slip goes to another department and is included with all items due to that Federal reserve bank on that day, settlement for which is made through the Gold Settlement Fund. If the credit slip indicates that the amount is entered for deferred credit (of one, two, three, or more days, as the case may be) the amount is credited to a deferred credits account on the general ledger of the Federal reserve bank and remains in that account until the maturity date indicated on the slip, at which time (with all other credits maturing on the same day) it is charged to the deferred credit account and credited to the member bank or paid to the other Federal reserve bank, as the case may be.<sup>59</sup> As a part of the work of this department a total is made up of all credits divided into groups according to availability, and the total of all these totals must agree with the total of the letters received on that day, as previously determined by the incoming section of the transit department.

---

<sup>59</sup>Letter No. 15, pp. 7-8.

**The outgoing sections of the transit department**

In the meantime the actual checks have been sorted and turned over to the outgoing sections of the transit department and finally sorted as to the banks upon which they are drawn. One letter is addressed to each bank of the district, while separate letters, made up in accordance with time schedule requirements, are addressed to the other Federal reserve banks or branches. Checks drawn on or payable by the Federal reserve bank itself and checks drawn on banks in the same city with the Federal reserve bank and consequently payable through the clearing house are routed to appropriate sections of the transit department. The outgoing letters, however, are not charged to the accounts of the banks to which they are addressed but to appropriate deferred debit accounts, in which accounts they remain until their maturity dates. All letters maturing on a certain date are credited back to the deferred debit accounts and charged to the accounts of member banks or to the settlement accounts with other Federal reserve banks, which accounts are presumably balanced by the day's payments through the Gold Settlement Fund.<sup>60</sup>

**Principles followed in giving credit. The float**

Credit is given by the Federal reserve bank to member banks in the district on the dates determined from the incoming letters, and in like manner payment is made to other Federal reserve banks on the dates determined from incoming letters received from them. On the other hand, charges are made covering the amounts of outgoing letters on the basis of another time schedule, each item of which is determined by the actual transit time between the Federal reserve bank and the bank to which the items are sent, regardless of the transit time indicated in the time schedule from which credits have been made. In certain cases the actual collection time for items drawn upon distant and relatively inaccessible banks exceeds the transit time as indicated by the time schedule on the basis of which credits are made. For instance, checks drawn upon some banks are credited two days after receipt, while in some cases three days and in other cases four days are required to actually make collections. In such cases the Federal reserve bank carries whatever amount of float is involved in the plan of credit and collection.

In case outgoing letters to banks in the district or to other Federal reserve banks are delayed in transit no change is made in

---

<sup>60</sup>*Ibid.*

the credits previously determined and advised, as to the time at which credit will be given. Therefore, such delays involve the carrying of additional float by the Federal reserve bank. As a matter of fact, provision is made in the rules governing the collection system by which any member bank receiving a cash letter and ascertaining from the date of the letter and the date upon which charge is to be made in its reserve account that the letter has been delayed in transit, can immediately advise the Federal reserve bank of that fact and have an allowance covering the delay made in its reserve account.

While the connection between the credit given to the bank from which a check is received and the debit to be made against the bank on which the check is drawn, is necessarily lost in the enormous maze of debit and credit transactions which pass through the transit department daily, the Federal reserve bank is enabled to know with exactness the amount of float which it is carrying each day. This is indicated by the difference between the deferred credit accounts on the one hand and the deferred debit accounts on the other hand which appear upon the books of the bank at the close of each day's business.<sup>61</sup>

#### **The problem of handling checks on non-member par banks**

Every member bank carries its reserve account with its Federal reserve bank and every non-member clearing bank carries an account with the Federal reserve bank of its district to care for its collections. But there are other non-member banks which are carried on the par lists—that is, they agree to remit at par for all checks sent to them by the Federal reserve bank—which do not carry deposits with the Federal reserve bank. In the case of these non-member non-clearing par banks there is no reserve account against which a charge can be made for checks sent to them. This presents a problem quite different from that facing the Federal reserve bank when it sends items to member and non-member clearing banks who carry accounts with the Federal reserve bank and whose accounts are charged at the proper time. Therefore letters addressed to non-member banks are sent out for collection and remittance, and payment is obtained by the Federal reserve bank only at such time as a remittance check is received and collected. For this reason, therefore, each non-member bank whose name appears on the par list of the Federal Reserve System is required to enter into an agreement with the Federal reserve bank

---

<sup>61</sup>*Ibid.*, pp. 8-9.

of the district in which it is located, and the usual terms of this agreement are as follows:

First: That the non-member bank will remit at par upon the day of receipt for all items drawn upon it and forwarded to it by the Federal reserve bank.

Second: That remittances will be made in funds acceptable to the Federal reserve bank or by the immediate shipment of currency at the expense of the Federal reserve bank.

Third: That shipments of currency will be made in accordance with the regulations of the Federal reserve bank, which regulations are framed with a view to obtaining adequate insurance protection at a minimum cost of transportation and insurance on the currency.<sup>62</sup>

The question of remittance on the part of these banks raises the question as to what constitutes satisfactory funds. In some of the Federal reserve districts, such as those of Boston, New York, and Philadelphia, this has never been a serious question, since virtually every bank in those districts carries funds in those centers and can remit by means of checks drawn upon correspondents in those cities, which checks are quite acceptable, since they are collectible immediately upon receipt by the Federal reserve banks. In some of the other districts, however, the situation is quite different. In the fifth district, for example, there are sections in which there is no single collection center conveniently available to all banks, and the Federal Reserve Bank of Richmond has found it necessary to accept remittances in some other form than checks drawn upon banks located at Richmond. In some cases the Federal Reserve Bank of Richmond has agreed to accept checks drawn upon the New York, Philadelphia, and Baltimore correspondents of some of its non-member banks, although in each case one day is required after receipt for the collection of these checks. This means additional float is carried by the Federal Reserve Bank of Richmond in addition to the volume already assumed with respect to banks requiring more than the average time for collection and the adjustments necessary to equalize and simplify the time schedule.

Although the Federal Reserve Bank of Richmond has felt that the line should be drawn at funds collectible one day after receipt, there are a number of small non-member banks in the southern part of that district which have never found it necessary to open accounts with correspondents either in New York, Philadelphia,

---

<sup>62</sup>*Ibid.*, p. 9.

Baltimore, or Richmond, and the problem of obtaining from them remittances in satisfactory funds, that is to say, drafts which can be collected by the Federal Reserve Bank of Richmond on the day of receipt or at most one day after receipt, has been an exceedingly difficult one, to the solution of which much thought and effort has been given. To require the Federal reserve bank to accept funds that require more than one day to convert into cash seemed unwise. On the other hand, to require these banks to carry funds in designated centers would be a real hardship for some of them, since many have been operating quite successfully in their communities without feeling the necessity for opening such accounts. In all fairness, therefore, it was incumbent upon the Federal reserve bank to at least try to work out some plan by which these institutions could be enabled to remit to the Federal reserve bank in satisfactory funds without too much hardship on them and without requiring the reserve bank to class as acceptable funds bank drafts requiring more than one day for collection after receipt by the Federal reserve bank.

The Federal Reserve Bank of Richmond has apparently solved this problem by developing what is known as the Immediate Credit Symbol System which places member banks not located in Federal reserve or branch bank cities and which serve as correspondents for some of the remote non-member par banks, on an equality so far as possible with member banks located in such cities. Under specified agreements and regulations these remote non-member par banks are permitted to use the immediate credit symbol on their checks which are drawn on the outlying member banks and used in making remittances to the Federal reserve bank in payment for checks received from it as collecting agent. When the Federal reserve bank receives these checks drawn upon the correspondent member banks, it charges the accounts of the member banks at once, even though some time must elapse before the immediate credit symbol checks can reach the drawee correspondent member banks. This arrangement places the remote non-member par banks in possession of satisfactory funds without the necessity of changing their established bank connections.<sup>63</sup>

---

<sup>63</sup>*Some Collection Problems (Continued)*, Letter No. 16, Federal Reserve Bank of Richmond (April, 1924). This system is described in some detail on pp. 545-547 below.



## CHAPTER XII

### BANK CLEARINGS AS A BUSINESS BAROMETER

Before becoming involved in the difficult question of the effectiveness of clearings as a business barometer, certain simple but fundamental questions demand an answer. The first questions that come to one's mind are: "What is a barometer? Does a barometer indicate conditions as they are or have been without serving as a basis for judging future changes? Or must an indicator always serve as a basis for judging future changes in order to be termed a barometer? Considerable confusion on these elementary points is found in the literature which deals with business indices and barometers.

In considering the sense in which the word "barometer" was originally used, that is, as an indicator of the atmospheric pressure, it is learned that a barometer is an instrument for determining the weight or pressure of the atmosphere, and hence for judging the probable changes of weather. Consequently, if the term is used in the proper sense, any indicator, to be a barometer, must serve not only as a measure of conditions as they are but as a basis for judging future changes. A thermometer, on the other hand, measures the prevailing temperature without serving as an indicator of future temperature. In the same manner, many indices of business are thermometers rather than barometers.

With a correct idea of the meaning of the term barometer in mind, the next important question to be answered is: What is meant by a business barometer? Out of this apparently simple question arise three other questions that are far from simple: (1) Just what is meant by general business conditions? (2) Is there a single barometer of general business conditions? (3) Of what importance are bank clearings as a barometer of general business conditions? These important questions will be considered in the order mentioned.

#### What is meant by general business conditions?

By general business is meant the total volume of trade, that is, the aggregate exchange of goods and services. Men speak of gen-

eral business as being good or bad. This implies some standard for measurement, some sort of a norm. Is there such a thing as a normal trend or basis which serves as a criterion for measuring the goodness or badness of general business? There seems to be, but it also seems safe to say that for most persons considerable vagueness attaches to the terms "good" and "bad". The business man, in using the terms "good," "poor," "abnormal," etc., is usually thinking in terms of profits and not in terms of actual volume of goods handled. Consequently, it is necessary to have a clear understanding of the criterion used in speaking of normal or abnormal business.

### Estimate of the total volume of trade

The attempts to compute the aggregate exchange of goods and services are comparatively recent. Indeed, there are few statistical subjects of greater current interest than the problem of measuring the total volume of trade. Professor Kemmerer was one of the first to make such a study, the results of which appeared in 1907<sup>1</sup>. Professor Irving Fisher followed in 1911 with a similar study.<sup>2</sup> Since that time various bureaus and statistical organizations have undertaken to solve this problem. Some of the most outstanding studies will be described below.

Efforts have been made also in a somewhat narrower field to develop indices of the physical volume of production in contrast to the pecuniary value of the aggregate production, due to the distorted ideas resulting from inflation and increased book values. The Price Section of the Division of Planning and Statistics of the War Industries Board, under the direction of Professor Wesley C. Mitchell, compiled such an index in 1919. It covered the volume of production of raw materials during the years 1913-1918. Professor Edmund E. Day, in 1921, published an index of the physical volume of production for the period, 1879-1920, in Agriculture and Mining, and for Manufacturing covering the period 1899-1910<sup>3</sup>

<sup>1</sup>E. W. Kemmerer, *Money and Credit Instruments in Their Relation to General Prices* (New York, 1907), Chap. VI.

<sup>2</sup>Irving Fisher, *The Purchasing Power of Money* (New York, 1911), pp. 290-291; 478-486. Dr. B. M. Anderson makes a vigorous attack on the methods used by these writers in computing the total volume of trade. See B. M. Anderson, *The Value of Money* (New York, 1918), especially Chap. XIII.

<sup>3</sup>E. E. Day, *An Index of the Physical Volume of Production*, reprinted from *The Review of Economic Statistics* (Sept., 1920-Jan., 1921). For an additional discussion of the problems involved in developing such an index, see Walter W. Stewart, "An Index Number of Production," *The American Economic Review*, Vol. XI, No. 1 (March, 1921), pp. 57-69.

Computation of the total volume of trade presents a more complicated problem than the computation of the volume of production. The materials for any dependable measure of our vast wholesale and retail trade, and such varied activities as amusements, life insurance, telephone service, advertising, etc., have been available only within the last four or five years.<sup>4</sup> Most of the present methods of measuring the total volume of trade are conceded to be tentative only, are incomplete in many respects, and doubtless will be revised in the future. The important thing to understand is that strenuous efforts are being made to secure accurate data on the total volume of trade. Such data always will be incomplete to some extent.

Assuming that there are in existence measures of the total volume of trade at any particular time, even though conceded to be approximate only, the next important question to be considered is whether there is a *single* index of general business conditions. Should it be found that there is such an index, it will then be necessary to determine whether this single index serves as a barometer or a mere thermometer. This is necessary in order to have some criterion by which to estimate the goodness or badness of clearings as a business barometer. Else by what standard are clearings being condemned or approved as an index or barometer of general business conditions? In the past it has been a common practice to condemn these or those data, including clearings, as barometers of general business conditions, while at the same time it was conceded that there was in existence no definite measuring rod by which to measure the value of any particular "barometer" as a good or bad forecaster of general business conditions. Deductive reasoning and economic analysis have been the methods by which such conclusions have been reached.

Some of the most outstanding indices of general business conditions which are to be examined below are also considered business barometers. As a result, it may not be inappropriate to pause for a brief consideration of the prevailing opinions as to whether it is possible to have such an instrument as a single barometer of general business conditions.

—Is there a single barometer of general business conditions?

It has been said very generally in the past that there is no single barometer for general business conditions. Professor

<sup>4</sup>Carl Snyder, "A New Index of the Volume of Trade," *Quarterly Publication of the American Statistical Association*, Vol. XVIII (December, 1923), pp. 949-963. Reprinted separately in pamphlet form. Hereafter cited as Snyder, *A New Index*.

David Jordan, for example, insists that there is not, and cannot be, a single barometer which can be accepted as definitely indicative of coming events. He says that the factors in our economic development are innumerable and there is no one with the mental capacity to ascertain and to weigh properly these innumerable forces which are constantly affecting business conditions. As a result, accurate commercial forecasting must always remain a relative concept.<sup>5</sup> He does point out, however, that in view of the large variance in the significance and the relative importance of the different indices of business conditions, a logical development would be the construction of a single barometer which would show the composite effect of the influencing factors, although he thinks the obstacles to such an achievement are almost insurmountable.<sup>6</sup>

In the last few years, however, there has been a pronounced tendency in the opposite direction. Mr. Carl Snyder, in his studies made for the Federal Reserve Bank of New York, believes that he has established not only a good single index of the total volume of trade, but perhaps has found a fairly good single barometer of general business. In his opinion either velocity of deposit currency or bank clearings (used in the sense of debits to individual accounts) will serve as a business index and to a large extent as a barometer. This work is probably too recent to have secured anything like universal acceptability among good authorities, but, in the writer's opinion, this can serve as no effective basis for criticism of the work or the results. It has been done by experts and subjected to all the tests that correct analysis and previous experience along similar lines naturally would dictate as wise and necessary. Writers and investigators of today who agree that there is a single barometer of general business conditions are not agreed, by any means, as to what constitutes the best business barometer. Some maintain that bank clearings, and especially clearings outside of New York City, are the best single barometer. Indeed, for a long time, such clearings have been looked upon by some persons as the best index and perhaps the best barometer which we possessed. Some of the most outstanding thinkers in this field, however, agree that clearings lost their barometric value with the enormous rise and fall of prices during and after the War.

<sup>5</sup>David F. Jordan, *Business Forecasting* (New York, 1921), pp. 226-227. Leonard P. Ayres takes much the same position. See Leonard P. Ayres, *Business Recovery Following Depression*, a pamphlet published by the Cleveland Trust Company (May, 1922), p. 29.

<sup>6</sup>Jordan, *op. cit.*, p. 236.

No effort will be made to do more than point out the nature of a few of the most outstanding business barometers used today. In addition to the important special research agencies, like the Harvard Bureau of Economic Research, which have developed business barometers, some 300 business houses over the country have established bureaus of business research which have developed a miscellaneous assortment of indices and barometers. Some barometers are of a specialized type in that their makers select a few specific business conditions, study the relationship which exists between these specific conditions and the general business trend of the past, and then make forecasts based on the assumption that similar relationships will show themselves in the future. Most of the forecasting done by financial writers for trade and financial journals and for brokerage houses and market letters is of this type. Stock market quotations are frequently used for this purpose, the common assumption being that the principal advances in the level of general prices and the activity of trade are foreshadowed by similar movements in the stock markets some months previous.<sup>7</sup> Bank reserves and pig iron production are also favorites.<sup>8</sup>

A second type of barometer is the so-called composite type in which the data are drawn from a large number of business activities and reduced to some common basis with the general growth and seasonal variations eliminated. The resulting average or index is assumed to be a good basis for forecasting the future. The methods of computing such indices are complex and elaborate, and the amount of labor involved is beyond the individual business man. Such indices are developed by the Harvard Bureau of Economic Research, the Babson Statistical Organization, the Brookmire Economic Service, the New York Times Annalist, and the Federal Reserve Bank of New York.

---

<sup>7</sup>Mr. W. P. Hamilton, in his book, *Stock Market Barometer* (New York, 1922), *passim*, but especially pp. 56, 127, and 157, maintains that the trend of the stock market as shown by the Dow-Jones averages is a better barometer of general business conditions than any forecasting service which takes other factors into consideration. He insists that the best knowledge and brains of the country are concentrated in forecasting the fundamental movements of the market and consequently all possible influences on conditions are contained in the price of stocks. Mr. Hamilton says (p. 157): "We have seen that the stock market barometer does predict. It shows us what will happen to the general volume of business many months ahead. It even goes further and warns us of the danger of international events which could upset all ordinary calculations based on the course of business as inferred from the records. It cannot be too often repeated that the stock market barometer is acting upon all the knowledge available."

<sup>8</sup>See C. O. Hardy, *Readings in Risk and Risk-Bearing* (University of Chicago, 1924), p. 44. Hereafter cited as Hardy, II.

A third method of forecasting employed is that of economic analysis. Followers of this method pay very little attention to the evidence of rhythm in the movement of business, preferring to treat each situation as a new one, and seek to forecast the next situation by study of the causes at work in the present situation. Professor Hardy,<sup>9</sup> who is responsible for this classification of barometers into three main types, says, in brief, that this is the most scientific way of attacking any problem although perhaps too complex to be used alone. He insists, however, that economic analysis is indispensable as a corrective to the other methods.

It is with the second type of barometer that we will concern ourselves primarily, since we wish to know if there is a single index of business conditions which will forecast the future trend of business. It is the prime purpose of this chapter to discover whether clearings (debits to individual accounts) serve as a single index and business barometer, and if not, just what importance is attached to them as a partial barometer.

Before becoming involved in an account of the various important attempts that have been made to secure a single index of general business conditions and an analysis of these as business barometers, it will be necessary, first of all, to give brief consideration to the nature of bank clearings, as these are involved to some extent in each of the indices to be described below.

#### **The question of clearings versus debits to individual accounts**

It has been the general practice in this country, when using clearings as an index of business conditions, to use those reported by the leading clearing houses of the country. Only since the latter part of 1918 has there been a widespread move to discard this practice in favor of debits to individual accounts. Clearings as reported by leading clearing houses have been considered defective for several good reasons: (1) Many checks and drafts do not pass through the clearing house. A great proportion are deposited in or cashed at the banks upon which they are drawn. Moreover, the custom prevails in many large industrial centers of drawing one "cash" check for the entire payroll of a plant. Such checks do not reach the clearing house and, as a rule, the employees receiving the proceeds of those checks do not maintain checking accounts.<sup>10</sup> (2) There are many duplications. Checks of good size sometimes, in going from bank to bank, are debited in

<sup>9</sup>Hardy, II, p. 45.

<sup>10</sup>See the *Federal Reserve Bulletin*, Vol. IV (1918), p. 823.

the final clearings every time they move from a bank and thus are figured more than once in the clearing statements. (3) They are often distorted and rendered non-comparable by consolidations among banks and by the increase and decrease in the membership of clearing houses. (4) The plan of settling balances and handling the exchanges in the various clearing houses has not been uniform. In some cases the clearings include duplications in the form of cashier's checks issued in lieu of items cleared and returned direct to members, because of payment thereon being refused; also checks drawn against members by the clearing house managers in settlement of balances which are not collected, but are carried over and recleared on the following day.<sup>11</sup>

Another criticism of clearings as an index of business conditions may be added, although it is equally applicable to debits to individual accounts and must be discounted in using debits as an index. Both are augmented by factors having little or no bearing upon business conditions. This happens during periods of tax payments, subscriptions to government bonds and certificates, interest payments and other governmental disbursements of a purely public finance nature and having little to do with general business conditions. Changes in price level likewise affect both debits and clearings. It also has been the general practice to treat speculative transactions in the same manner, and for this reason clearings outside of New York have been used, in preference to those including New York clearings, as an index of business conditions.<sup>12</sup>

The first important step taken in the direction of securing a better type of reports from banks on the total check transactions<sup>13</sup> was in 1908. At its annual meeting, May 4, 1908, at Lakewood, N. J., the Clearing House Section of the American Bankers' Association adopted the following resolution:

"Whereas the present method of reporting the volume of clearing-house transactions does not accurately represent the volume of business transacted, now therefore be it

"*Resolved*, That we recommend that each bank report weekly to the manager of the clearing house in its own city the total of all

---

<sup>11</sup>*Ibid.*, p. 826.

<sup>12</sup>B. M. Anderson insists that the great bulk of trade in the United States is speculation, rather than that sort of trade which is determined by physical capacities and technique. See his *Value of Money*, p. 241.

<sup>13</sup>Mr. Jerome Thralls, one-time Secretary of the Clearing House Section of the American Bankers' Association, estimated that 95 or 96 per cent. of the total business transactions were affected by means of checks. See *Federal Reserve Bulletin*, Vol. IV (1918), p. 286.

checks on itself charged on its books, excepting cashier's checks given in payment of clearing house balances."

Since 1908 the Section has encouraged this idea continually, but until 1913 was not able to get any clearing house to accumulate and report these statistics regularly, and not until the year 1916 did the Section get a sufficient number of clearing houses to make the reports to warrant publishing the data. About 100 clearing houses at different times attempted the compilation of such data, yet only 29 clearing houses made reports regularly and in such shape as would permit their being published quarterly.<sup>14</sup> These reports represented debits against all accounts covering individual, bank, general, and savings deposits. Member banks reported on Thursday of each week to the clearing house manager, the data covering the figures for the week ending Wednesday.

In August, 1918, the Federal Reserve Board began the preparation of periodical statistics of the volume of the nation's banking business based upon debits to individual, bank, and government accounts as reported by banks in clearing house cities. As there were at that time about 250 such associations in the United States, the Board wished to make every effort to enlist their co-operation. With this purpose in mind the Board, on August 1, sent out a circular letter to each Federal reserve agent outlining the method to be pursued in obtaining the desired statistics. This letter was supplemented by another on August 30, designed to clarify instructions and to secure greater uniformity in method. Each Federal reserve agent was requested to communicate with each clearing house manager in his district and request him to report weekly the total of checks drawn on and paid by each reporting bank, separating these into two classes:

(1) The total debits charged by it to accounts of individuals, firms, corporations, and the United States government. Checks against all accounts, including savings and trust accounts, with such banks, cashier's checks, expense checks, and certificates of deposit were to be included, while corrections or like charges were to be excluded.

(2) Total charges to accounts of banks and bankers, exclud-

---

<sup>14</sup>According to Mr. Jerome Thralls, bank transactions in the sense of debits to deposit accounts, "are a true and dependable barometer of business conditions, growth, and development." *Federal Reserve Bulletin*, Vol. IV (1918), p. 827. See also *Commercial and Financial Chronicle*, Vol. CVII (August 10, 1918), p. 554; and *Indices of General Business Conditions*, Harvard University Committee on Economic Research (1919), pp. 40-41.



ing debits to account of Federal reserve bank,<sup>15</sup> and debits in settlement of clearing house balances and corrections or like charges. Drafts and checks drawn by reporting bank on other banks were to be excluded.

The first report was for the week from Friday, August 9, to Thursday, August 15, inclusive. Thereafter the reports were to close with business each Wednesday evening so as to avoid conflict with the reports obtained by the American Bankers' Association. The first report was made by about 100 clearing houses only; by September of the same year reports were being made by clearing house banks in about 125 cities. After this the number of clearing houses reporting steadily increased until 250 were reporting in May, 1922, although but 166 were included in the summary reported by the Federal Reserve Board.<sup>16</sup> Clearing house managers report by telegraph to their respective Federal reserve banks which, in turn, report at once to the Federal Reserve Board. The cost of all telegrams sent by clearing house managers to the Federal reserve banks is borne by the Federal reserve banks.

The Federal reserve banks also began reporting two classes of debits to the Board: (1) Debits to bank accounts. These were all debits to accounts carried by the Federal reserve bank or branch, exclusive of government account, and created either by checks or written or telegraphic order. In March, 1919, the Federal Reserve Board ruled that the debits should include debits to members' reserve accounts and non-members' clearing accounts only. Debits on account of transactions with other Federal reserve banks were not to be included. Debits to special depository banks shown on the books of the Fiscal Agent Department were not to be included with debits to either government or bank accounts.<sup>17</sup> (2) All debits, including checks paid, on United States Treasurer's account. These data also covered the weekly period ending Wednesday evening.<sup>18</sup> All reports were telegraphed by each Federal reserve bank to the Division of Analysis and Research<sup>19</sup> of the Federal Reserve Board.

The necessity for the continuance of the general practice of excluding New York City clearings from the total, because the

<sup>15</sup>See *Federal Reserve Bulletin*, Vol. V (1919), p. 259.

<sup>16</sup>*Ibid.*, Vol. VIII (1922), p. 1132. There have been such variations in the number of centers reporting that the Board has found it necessary to compile its tables on the basis of 141 leading clearing centers in order to make data comparable. Such data are comparable since 1919.

<sup>17</sup>*Federal Reserve Bulletin*, Vol. V (1919), p. 258.

<sup>18</sup>*Ibid.*, Vol. IV (1918), pp. 822-823.

<sup>19</sup>Now known as the Division of Research and Statistics.

speculative transactions of the New York Stock Exchange tended to distort the real significance of clearings as an indicator of business conditions, was removed, to some extent, with the creation of the Stock Exchange Clearing Corporation on April 26, 1920. This has made possible the clearing of the bulk of the Stock Exchange transactions without affecting bank clearings. It was estimated in 1921 that 60 per cent. of the check payments formerly required no longer went through the bank clearings.<sup>20</sup> Mr. J. E. Meeker estimated in 1922 that through the combined functioning of the day and night clearing branches a saving of about 80 per cent. in bank accommodation was effected.<sup>21</sup> It has been estimated also that probably not more than 5 per cent. of the New York clearings at the present time represent stock exchange transactions.<sup>22</sup> As a result, the effect of speculative transactions on New York clearings perhaps no longer justifies the exclusion of New York bank clearings from the total in using bank clearings as a business barometer.<sup>23</sup>

#### Debits to bank accounts versus debits to individual accounts

It will be noticed that the Federal Reserve Board, in August, 1918, called not only for reports on debits to individual accounts but also for reports on debits to bank accounts. A year later the Board called for reports on debits to individual accounts only. A brief review of the reasons for this change in the method of reporting debits will not be inappropriate at this point.

Debits to individual accounts represent the volume of business transactions, while debits to banks' and bankers' accounts represent the volume of inter-bank transactions. The former give rise to and are partially represented in the latter. A check passing in settlement of a business transaction between two individuals carrying accounts with the same bank does not appear in the figures of debits to bank accounts. On the other hand, a check passing between two individuals carrying accounts with separate banks

<sup>20</sup>Jordan, *op. cit.*, p. 190.

<sup>21</sup>J. E. Meeker, *The Work of the Stock Exchange* (New York, 1922), p. 267.

<sup>22</sup>See B. H. Beckhart, *Are Bank Clearings a Barometer of Business?* A special bulletin published by the Bankers Economic Service (Sept. 12, 1922), p. 154.

<sup>23</sup>It must be remembered, however, that even though the Stock Exchange Clearing Corporation eliminates an enormous volume of business from the bank Clearing House, this concerns only the transactions among brokers. It still leaves customers' checks given in payment for purchases on the Exchange, and brokers' checks given to customers in payment for sales, to be cleared by the banks.

may pass through a number of other banks in its course from the payee's bank to the drawer's bank, giving rise to a debit to bank accounts on the books of each of the banks through which it passes, until it reaches the bank on which it is drawn. As a result, figures of debits to bank accounts are not inclusive of all business transactions, and, on the other hand comprise duplications and reduplications of such transactions whenever the checks in settlement of such transactions pass through more than one bank. Debits to bank accounts as an index of business transactions are thus subject to the same objections as are generally raised against figures of clearings when used as a like index. Debits to bank accounts have their specific use, however, as they show the volume of interbank transactions as distinct from debits to individual accounts, which represent the volume of business transactions.<sup>24</sup>

#### **Debits to individual accounts as reported by the Federal Reserve Board**

Beginning July-August, 1919, the Federal Reserve Board instituted the plan of reporting debits to individual accounts only. At present, the reports, as submitted by about 250 clearing house centers each week, are consolidated by the Board into monthly reports based upon the reports of 141 of the leading clearing house centers as these data alone are really comparable for the entire period. The reasons for substituting debits to individual accounts only, for a combination of debits to individual and bank accounts, were set forth by the Federal Reserve Board as follows: "While the former figures are of value as indicating changes in the volume of inter-bank transactions, it is thought that a picture of the relative volume of commercial transactions handled through the banks of the country is adequately reflected in the figures of debits to individual account. Comparisons of figures of debits to bank account as reported by different centers brought out the fact that because of difference in methods of handling items in the various centers the figures were not strictly comparable and moreover that a large amount of duplication and reduplication inevitably results whenever a check or draft on its way to the drawee bank is handled by one or more intermediary institutions. Furthermore, since debits to Federal reserve banks were not included in debits to bank account, these figures had a tendency to decline as new banks joined the Federal Reserve System and availed

---

<sup>24</sup>*Federal Reserve Bulletin*, Vol. IV (1918), p. 1002.

themselves of the facilities offered for clearing checks through Federal reserve banks, thereby decreasing the amount of checks sent to their city correspondents."<sup>25</sup>

The Federal Reserve Board looks upon debits to individual accounts as an indicator of the volume of the nation's business.<sup>26</sup> In 1922, the Board said: "These figures are now generally recognized as the best available single measure of changes in the volume of business, reflecting the combined effect of changes in the physical output, in rapidity of turnover, and in the price level."<sup>27</sup> Debits to individual accounts are used as a basis of computing index numbers of the total volume of trade, using three months' moving averages.<sup>28</sup> While the Board looks upon debits to individual accounts as the best available measure of changes in the volume of business, it cannot be said that the Board looks upon this index as a barometer in any very definite sense. The Board is not prone to hazard guesses as to future prospects, and careful search has failed to reveal any case in which the Board has used debits as a basis for prognosticating the future. The data are frequently two months old when reported by the Board, and it merely compares the conditions represented by the reported figures with conditions existing at some preceding date. It should be noted, also, that the Board does not include the debits for New York City, when reporting the debits to individual accounts for the banks of the country.

Table XXXIV shows the trend of monthly debits to individual accounts, after adjustment for seasonal variations, since January, 1919, for each Federal reserve district and for the United States. The index for the United States is obtained by aggregating the dollar figures of the twelve districts and adjusting these totals for seasonal variations. In these national totals debits at New York City have been omitted by the Board on the ground that they generally are considered to be largely influenced by changes in the volume of transactions on the Stock Exchange. Chart I shows debits to individual accounts in 140 cities (not including New York) situated in all parts of the United States, for the years 1919-1924.

<sup>25</sup>*Ibid.*, Vol. V (1919), p. 878.

<sup>26</sup>*Ibid.*, Vol. VII (1921), p. 750.

<sup>27</sup>*Ibid.*, Vol. VIII (1922), p. 105.

<sup>28</sup>For such an index, covering the years 1919-1921, see *Eighth Annual Report of the Federal Reserve Board* (1921), p. 11. This index is compared with the wholesale price indices of the United States Bureau of Labor Statistics and with the indices of the volume of manufactures as reported by the Harvard Committee on Economic Research.

TABLE XXXIV.  
DEBITS TO INDIVIDUAL ACCOUNTS, ADJUSTED FOR SEASONAL VARIATIONS  
[Monthly average for 1919=100]

	United States (140 centers)*	Boston (11 centers)†	New York (7 centers)	Philadelphia (10 centers)	Cleveland (13 centers)	Richmond (7 centers)	Atlanta (15 centers)	Chicago (21 centers)	St. Louis (5 centers)‡	Minneapolis (9 centers)§	Kansas City (14 centers)	Dallas (11 centers)	San Francisco (18 centers)
1919													
January	90	87	83	93	90	88	90	92	98	108	92	82	87
February	89	86	83	90	89	89	89	89	97	90	94	80	87
March	87	85	80	92	83	81	83	85	91	93	91	78	83
April	90	85	86	91	93	87	87	80	94	100	94	87	86
May	97	95	97	97	97	91	96	97	95	100	100	100	96
June	99	102	101	98	102	100	99	99	98	94	92	106	93
July	107	109	113	106	106	109	101	106	111	101	108	115	106
August	107	109	113	105	104	108	102	106	106	100	107	106	109
September	106	105	110	109	107	109	101	107	101	104	103	98	109
October	107	110	114	106	105	112	115	107	101	102	102	106	113
November	108	109	112	107	104	112	115	111	103	99	106	117	111
December	111	117	109	108	107	111	118	111	104	105	110	118	117
1920													
January	117	116	108	116	113	121	128	118	117	111	117	123	123
February	115	112	102	112	113	118	123	115	117	113	116	117	123
March	119	113	107	115	121	117	125	123	116	112	117	120	122
April	120	118	105	118	120	119	129	119	114	111	112	125	125
May	115	112	94	111	114	113	119	114	106	107	110	122	122
June	115	108	93	112	118	111	117	116	104	106	109	120	128
July	120	113	97	114	122	115	119	122	106	111	108	127	135
August	114	109	98	116	116	108	115	114	104	101	106	123	122
September	116	113	96	112	118	110	113	119	104	107	112	117	123
October	111	103	96	110	107	105	103	114	85	111	108	114	119
November	111	100	98	115	120	106	101	110	94	115	108	109	122
December	105	98	98	110	115	103	94	107	90	98	97	101	119
1921													
January	97	90	92	98	108	98	89	99	84	90	91	97	110
February	95	87	86	98	102	97	90	94	84	90	89	99	107
March	94	84	83	98	97	96	87	92	81	84	86	95	110
April	94	86	81	99	95	93	87	93	81	85	86	93	108
May	90	84	83	93	91	90	81	90	79	80	79	91	100
June	89	83	84	95	86	92	81	88	79	86	80	94	109
July	88	81	83	94	80	93	83	88	79	81	81	93	97
August	90	85	85	92	82	99	84	94	80	85	82	94	100
September	91	84	87	96	83	97	89	91	82	84	82	95	104
October	89	83	83	93	83	97	84	91	80	79	77	94	103
November	91	85	84	96	86	98	81	92	80	76	78	93	107
December	90	83	90	97	85	98	79	92	79	77	76	94	108

BANK CLEARINGS AS A BUSINESS BAROMETER 491

TABLE XXXIV—(Continued)

	United States (140 centers)*	Boston (11 centers)†	New York (7 centers)‡	Philadelphia (10 centers)	Cleveland (13 centers)	Richmond (7 centers)	Atlanta (15 centers)	Chicago (21 centers)	St. Louis (5 centers)§	Minneapolis (9 centers)¶	Kansas City (14 centers)	Dallas (11 centers)‡	San Francisco (18 centers)
1922													
January	86	84	87	93	83	84	77	86	74	73	75	92	101
February	92	87	94	101	90	86	82	94	77	85	82	98	103
March	94	86	98	99	86	88	83	101	80	87	82	101	103
April	93	84	102	99	90	90	80	96	80	80	82	99	105
May	95	86	104	101	92	94	85	98	87	84	85	101	107
June	97	90	103	101	95	92	87	99	86	85	87	99	108
July	95	88	100	103	95	89	84	93	84	86	85	95	107
August	96	85	102	104	99	89	88	96	85	88	84	95	108
September	97	89	104	105	98	88	89	98	89	86	85	100	110
October	98	89	106	111	99	92	88	100	90	86	88	97	109
November	97	88	92	107	98	90	94	98	90	86	85	98	111
December	101	88	93	107	110	93	94	101	94	91	91	99	114
1923													
January	106	96	101	112	111	99	99	110	101	96	95	106	121
February	110	102	108	117	113	102	100	117	99	95	94	105	124
March	111	103	108	117	114	105	106	111	103	94	97	105	129
April	111	101	101	117	115	99	100	115	101	93	97	102	126
May	113	101	99	123	120	100	103	117	102	97	94	101	130
June	110	98	99	123	113	101	100	110	102	97	93	96	129
July	105	92	94	112	111	95	94	105	95	93	88	92	127
August	105	94	91	113	112	97	94	102	95	91	88	97	125
September	101	91	92	107	104	97	93	101	92	84	86	100	122
October	105	92	91	113	110	97	100	105	100	86	88	104	129
November	105	95	97	110	105	96	102	107	99	90	85	103	128
December	105	95	97	110	105	99	107	107	98	85	83	101	127
1924													
January	105	95	101	113	108	98	104	107	97	84	80	99	132
February	114	102	108	117	112	100	110	107	98	93	84	101	143
March	109	100	103	113	113	99	105	111	99	92	83	95	133
April	112	101	102	123	117	98	110	113	100	87	87	102	132
May	109	97	103	116	112	94	102	113	100	91	82	97	129

\*Federal Reserve Bulletin, Vol. X (1924), pp. 556-567. Chart I is from same source, p. 555.

†Base used for Boston district adjusted for all months after January, 1921, to allow for large increase in number of reporting banks.

‡Base not include figures for New York City, which were, however, used in constructing relatives for the New York district.

§Base used for St. Louis district adjusted for all months after February, 1921, to allow for increase in number of reporting banks in the city of Boston.

¶Base used for St. Louis district adjusted for all months after February, 1921, to allow for increase in number of reporting banks at St. Louis and Louisville.

‡Base used for Minneapolis district adjusted for all months after January, 1922, to allow for increase in number of reporting banks at St. Paul.

We are now ready to examine some of the most outstanding attempts to devise a single index of general business conditions and to observe in what respects these indices are looked upon as business barometers. The indices to be examined are composite in nature and some of them represent the best thought in arriving at a single business index. There are competent investigators today who feel very strongly that most of the commercial barometers are worthless and deserve no space in a serious treatment of

Debits to Individual Accounts in 140 Cities as a Measure of the Dollar Volume of Business in the United States

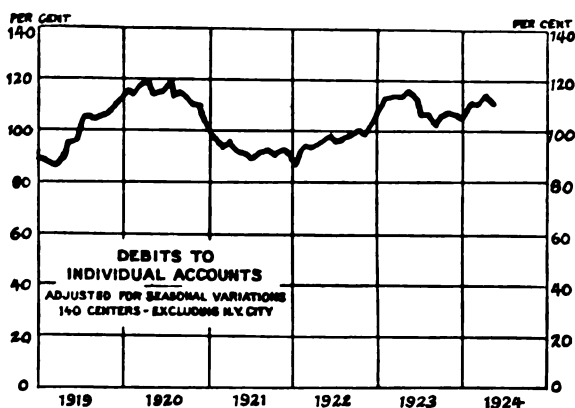


CHART I.

barometrics; they look upon such "barometers" as not only questionable in value but as designed primarily for sale to a more or less gullible public. Some feel that there is no barometer in existence, the value and infallibility of which has been definitely established, and that the best and most scholarly investigations, like those made by the Harvard Committee on Economic Research—to mention but one example—constitute little more than a serious beginning in the field of barometrics. There are some who regard the average commercial barometer as little, if anything, above a mere fake, and, in addition, feel that the extremely refined mathematical methods applied by some statisticians have added little of permanent or practical value to barometrical theories. They argue that refinements and re-refinements of incomplete and inaccurate data will not make the data reliable, and that, after all, the business man and even the most mathematical

or abstract economist probably secures his best information from the study of the trends in the stock market, pig iron production, or bank clearings. Regardless of what the future may determine as to the merits of the controversy, it nevertheless remains true that certain so-called "barometers" have attracted enough attention to deserve a brief examination here in order to determine the importance attached to clearings<sup>29</sup> in each index or barometer as well as to note the claims made for the index as a business barometer.

In examining the typical so-called barometers one observes considerable vagueness in the use of the term "barometer". Although some are designated barometers, analysis fills one with doubt as to whether they are more than a fair index of general business conditions of the immediate past. Nor do those who insist that they have developed a good index of general business pause to show carefully that such an index really is a barometer. Such indices as we are about to describe pass under the name of barometers, but it is well for the reader to be aware of the general looseness with which the term, unfortunately, is used.

### The Babson Compositplot<sup>30</sup>

The idea of a composite barometer is not new. The earliest barometers in the United States of this type were developed first by commercial organizations whose business was the sale of statistics and advice to business men for their aid in deciding questions of business policy and especially investment questions. Among the best known is the "Babson Compositplot,"<sup>31</sup> published by the Babson Statistical Organization as one feature of an extensive business, investment, and speculative service.<sup>32</sup>

This composite index number is based upon the following groups of twelve series :

<sup>29</sup>Always used in the sense of debits to individual accounts unless otherwise indicated.

<sup>30</sup>For a full description of the Babsonchart see R. W. Babson, *Business Barometers for Anticipating Conditions*, 16th ed. (Wellesley Hills, Mass., 1923), Chap. IV; see also Ray Vance, *Business and Investment Forecasting* (New York, 1922), *passim*, but especially Chap. V.

<sup>31</sup>Commonly known as the Babsonchart. The method of constructing the Babsonchart is described in Hardy, II, pp. 46-53.

<sup>32</sup>See Professor C. O. Hardy, *Risk and Risk-Bearing* (University of Chicago, 1923), pp. 103-106, for a description of the Compositplot. Hereafter cited as Hardy, I. See also Roger W. Babson, "Factors Affecting Commodity Prices," *Annals of the American Academy of Political and Social Science*, Vol. XXXVIII (Philadelphia, 1911), pp. 473-506.



1. Mercantile conditions
  - (1) New building
  - (2) Failures
  - (3) Check transactions (substituted for clearings in 1921)
  - (4) Immigration
2. Monetary conditions
  - (1) Commodity prices
  - (2) Total foreign trade
  - (3) Foreign money rates
  - (4) Domestic money rates
3. Investment conditions
  - (1) Yield of leading crops
  - (2) Railroad earnings
  - (3) Stock market conditions
  - (4) Canadian conditions

The figures in each group are combined into the "Compositplot" which consists of a line drawn on a chart to represent the average of certain business items for successive periods, beginning with 1904, through which line is drawn another representing the normal growth of business for the same period, the area between the line of normal growth and the line of actual growth being shaded. The principle underlying the Compositplot rests upon the assumption that action equals reaction, that the area above the line of normal growth forecasts the formation of an area of similar size below the line of normal growth, and vice versa. This principle is sometimes known as the area theory. If the assumption is correct that these areas tend to be equal, the Compositplot is assumed to aid business men in forecasting future conditions by showing whether the next area may be expected above or below the line of normal growth and about how long before it will come. While it is assumed that the areas are equal, the assumption does not apply to the shape of the areas. It is believed, in other words, that business can continue with the "throttle one-fourth open" about four times as long as with the throttle wide open. For example, if prices increase 25 per cent. above normal, it is not reasonable to think that they will continue to go up until they reach the last high price of 100 per cent., irrespective of the time consumed, but it is reasonable to suppose that after prices have held this increase of 25 per cent. for a period of four times as long as they had when selling at the

previous high advance of 100 per cent., that the time has arrived when logically they should fall.

The interesting if not significant fact, so far as the question of bank clearings is concerned, is found in the method used in computing the line of normal growth in the Compositplot. No attempt is made to subtract the growth factor from the figures used in the chart; rather, the growth is represented by the X-Y line. This is assumed by the Babson Statistical Organization to have certain advantages: (1) It permits everyone to see what allowance is being made for normal growth. (2) It makes it possible for one to compare the figures of his own business with the Babsonchart without first correcting them to eliminate the growth factor. (3) In times of sudden change, such as occurred during the recent War, mathematical methods of subtracting growth from the original data all fail.<sup>33</sup>

To locate the X-Y line presents something of a problem while the areas of over-expansion and readjustment are being completed as no one can foretell the size of the area of over-expansion, and it is assumed in the so-called law of action and reaction that the area of depression will equal approximately the area of the previous over-expansion. To find a method of locating this line, experiments were made with several series of statistical data comparing them with the trend of growth in past years as shown by the Census figures. "Of all the barometer subjects available we found the trend of Bank Clearings, excluding New York City, coincided most closely with the trend of the Census reports. In other words, Bank Clearings in the years past have formed the most reliable index of the net growth of the country's business in terms of dollars. They have the advantage of representing both the effect of price changes and of changes in the actual volume of business."<sup>34</sup>

At the beginning of a new year there is no basis upon which the X-Y line for that year can be calculated. Therefore, it is carried as a horizontal line from the point established at the end of the preceding year. As soon as clearings for the year are reported, the position of the X-Y line is established. In 1921 check transactions (debits to individual accounts) were substituted for bank clearings and adjusted to the bank clearings as used previously.

The conclusions based upon the trend of check transactions

---

<sup>33</sup>Hardy, II, p. 50.

<sup>34</sup>*Ibid.*, p. 51.

are checked at the end of each year by all the important indices which are reported annually and again at the close of each area of depression on the Babsonchart. Thus far, the line located in accordance with the trend of clearings and check transactions has coincided very closely with the other indicators of business growth. Some areas were divided almost exactly which was considered an interesting testimonial for the use of bank clearings. The merit of the X-Y line, however, does not depend upon bank clearings or check transactions, but rather upon the fact that it does divide the areas of business expansion and depression equally. If, at the close of an area of depression, it were found that the area below the line did not balance with the preceding area above it, the X-Y line would be raised or lowered to make them balance.<sup>35</sup>

Professor Hardy raises some important questions as to the value of the Babson Compositplot. He points out that there is a lack of satisfactory proof of the fundamental principle that "action equals reaction" and consequently, the theory, at present, cannot be regarded as more than an interesting hypothesis. Further, it appears to him that the so-called line of normal growth does not represent merely the normal growth of the country, irrespective of temporary conditions of prosperity and depression, but is itself in part an expression of the prosperous or depressed state of business at a particular time. This, he thinks, throws some doubt on the propriety of using the X-Y line as a base from which to measure areas representing the extent of prosperity or depression.<sup>36</sup>

In this barometer check transactions are but one of twelve series which compose the barometer. The fact that bank clearings outside New York City were used to determine the X-Y trend line would seem to add little significance to their importance as a business barometer.<sup>37</sup> They are looked upon, rather, as an index of the past growth of the country's business and their virtue in this respect is measured with the Census figures as a criterion. Just how good the criterion is, is not clear. While the Babsonchart may have some value as a business barometer, it cannot be said that much importance is attached to clearings as a barom-

<sup>35</sup>*Ibid.*, p. 52.

<sup>36</sup>*Ibid.*, pp. 105-106.

<sup>37</sup>Mr. Babson excludes New York City clearings (debits) because they represent such a large proportion of the entire figure that they hide the true industrial conditions shown by the remaining cities. This would seem to be a much more valid reason for separating outside clearings from those of New York City than the assumption that New York clearings are affected seriously by speculative transactions.

eter, although considerable importance is attached to them as an index of the growth of past business conditions in terms of dollars.

### The *Annalist* Barometer and Business Index Line

Another well-known barometer, but of moderate importance as a composite type, is that published by the *New York Times Annalist*. It is published weekly and covers the years 1903 to date. Only five indices are included: (1) Bradstreet's commodity prices, (2) pig iron production, (3) the interest rate on 60-90 day commercial paper, (4) bank clearings in New York City, and (5) bank clearings outside New York.<sup>38</sup>

An index number is obtained for each of these factors monthly, showing the variation of each from its own normal base. Using the percentage deviation from normal as a common denominator, these factors are combined to form a single index number. Moving averages of these monthly percentages of deviation from normal are kept for each of the five factors, and the averages of all the factors of any given month are combined to give *The Annalist Business Index* for that month. The theory of the line as a business index is the economic theory that the movement of the stock market discounts the movement of business by from four to ten months. The index as computed is assumed to forecast the movement of the stock market. Actual movement in the stock market is assumed to lag a month or more behind changes in the index line; consequently, it is claimed that a forecast is obtained of the actual occurrence.

In this index, clearings are used only as a partial indicator of business conditions to follow. They are looked upon as a barometer, but alone do not stand as a barometer capable of forecasting business conditions.<sup>39</sup>

### The Standard Statistics Company's Barometer

Another general business barometer is that published in the *Standard Daily Trade Service*. This barometer is based upon an index of the country's available credit supply which is assumed to

<sup>38</sup>See *The Annalist*, Vol. XVII (March 28, 1921), pp. 376-377; Vol. XXII (October 29, 1923), p. 566; Hardy, II, pp. 65-68; Jordan, *op. cit.*, p. 238.

<sup>39</sup>For a more complete explanation of this barometer, see *The Annalist*, Vol. XVII (March 28, 1921), p. 377. In 1923 certain changes in the method of computation were made, the changes being carried back to include 1919. At the same time debits to individual accounts were substituted for clearings. See *The Annalist*, Vol. XXII (October 29, 1923), p. 566.

forecast the broad movements in the stock market and business.<sup>40</sup> It is insisted that the limiting force behind all movements in the stock market and business is the available supply of credit. Sustained recoveries in the stock market following depression precede actual business recovery, it is pointed out, and usually continue until, in the final stage of a bull market, the competing demand for business credits encroaches on the supply available for stock market speculation. The point is reached ultimately where business demand forces a sustained contraction of speculative security loans and that point usually marks the high level of stock prices. The major bear movement begins, as a rule, months before business expansion has reached its peak. This movement is a precursor of business reaction later on when credit resources, released from stock speculation, have been absorbed fully by business, and complete exhaustion of the credit supply is experienced in consequence. As a result, it is thought that an approximately accurate index of the supply of bank credits available to be loaned should furnish a true barometer of the trends of stock prices and business.

The index of the credit supply for the years 1901-1914, inclusive, was published in the form of a single "red line" based upon the ratio of deposits to loans of the New York Clearing House banks. From 1914 to 1918 the old index was abandoned. From 1918 to date the index of credit supply has been published in the form of a "red line" based upon two factors, equally weighted: (1) The ratio of deposits to loans in some 800 reporting member banks of the Federal Reserve System (depicting the actual available credit supply); (2) the ratio of reserves to deposit and note liabilities of the twelve Federal reserve banks (depicting the potentialities of credit expansion beyond the limits imposed by the lending resources of the member banks themselves). As published at present in the *Standard Daily Trade Service* the heavy red line depicts the ratio of deposits to loans only. A second light red curve is used to indicate the ratio of reserves of the Federal reserve banks to deposit and Federal reserve note liabilities. These two lines cover the period since 1918.<sup>41</sup> There are thus four indices depicted: (1) The credit supply shown by two

---

<sup>40</sup>The *Standard Daily Trade Service* is published by the Standard Statistics Company, Inc., of New York City. The barometer in its present form has been published regularly since 1921. It was preceded by the *Standard Financial Digest Service*.

<sup>41</sup>For example see the *Standard Daily Trade Service* (August 15, 1923), pp. 298-300.

curves, (a) a heavy red line showing the actual credit supply, and (b) a light red line showing the reserve credit supply; (2) the average rediscount rate of the twelve Federal reserve banks for 60-90 day commercial paper, shown by a heavy black line plotted on an inverted scale which is assumed to show the disposition of the Federal reserve authorities to allow the reserve credit supply to be utilized; (3) stock prices, represented by a heavy black line showing the average price of 25 railroad and 25 industrial stocks; and (4) business, the trend of which is shown by a broken black curve. This trend of business is supposed to be reflected by debits to individual accounts outside New York City.

The soundness of the principles underlying this barometer is open to question in the mind of the writer, for the reason that it seems impossible to determine even approximately what proportion of credit will be available for speculation and what proportion will go for commercial purposes. It is left with the individual banker to determine what proportion of his assets he will tie up in loans secured by stock-exchange collateral which is not eligible for rediscounting. Further, it cannot be determined how far rediscounting will be carried on or, indeed, be permitted by the Federal Reserve Board. The important factors involved are so highly uncertain, that it seems impossible to arrive at definite conclusions from such a barometer. It must be said in behalf of the Standard Statistics Company, however, that it does not claim that its index will indicate when the *exact* high or low level of stock prices has been reached. It is claimed, rather, that the "red line" shows, on the one hand, when credit conditions have become so strained that it is dangerous to hold stocks any longer and, on the other hand, when credit conditions are so easy that stocks can be bought for the long pull with minimum risk of further decline. The company points out that its data are not sufficiently extensive to warrant acceptance without some reservation.

The point of prime importance for the question under discussion is the place assigned to bank clearings or debits to individual deposits. Debits are used as an indicator—the sole indicator—of business as it exists. They are looked upon as a thermometer, not a barometer. The only debits used are those outside New York City.<sup>42</sup>

<sup>42</sup>For a fuller discussion of this barometer see Hardy, II, pp. 70-73, which is an adaptation from a special supplement to the *Standard Daily Trade Service* (August 21, 1923).

### The Brookmire Barometers

Notice should be taken of the Brookmire barometers, although it cannot be said that the *Brookmire Economic Service* combines its data into a single barometer. At one time it published a chart called "The United States Barometer Chart," which contained the following three factors plotted separately: (1) The index of banking funds, (2) the index of security prices, and (3) the index of general business. It was claimed that these three graphs moved in chronological order, the banking index rising first, followed by the stock-market index, and finally by the business index. A great rise in the business index, in turn, produced a fall in the banking index, and this was followed in turn by the stock market index, and the business index, and the cycle was ready to start again. The index of general business was based on bank clearings, railroad earnings, pig-iron production and prices, commodity prices, imports, building, and immigration. This chart is important only as a forerunner of the chart now published by the Harvard Economic Service, which, in most respects, supports the sequence of events as set forth in the Brookmire chart.<sup>43</sup>

The theory of forecasting followed by the *Brookmire Economic Service* at present does not rest upon the combination of all statistical data into a single index. Instead, the Service postulates a chronological sequence of business events and combines only those which tend to fluctuate at the same time. This Service claims that its contribution to the science of business forecasting is the conception that changes in financial and business conditions do not all occur at one time but do occur in chronological sequence. As a result, the data for most of their barometric indices have been selected because movement in them occurs in point of time prior to some price index or other statistical factor which it is desired to forecast, rather than in an attempt to portray the entire field of business conditions in a single picture.<sup>44</sup>

Two barometer charts are issued by the *Brookmire Economic Service*: Barometer No. I deals with industrial stocks and commodity prices; Barometer No. II with bonds and railroad stocks. A study of past experiences has proved to the *Brookmire Economic Service* that industrial stock prices move either upward or downward at an earlier date than the corresponding movement of commodity prices. Consequently in Barometer No. I a forecast-

<sup>43</sup>For a further discussion see Hardy, I, pp. 107-108; Ray Vance, *op. cit.*, Chap. V.

<sup>44</sup>Hardy, I, p. 106.

ing line is developed which seeks to forecast the stock price movement. Six fundamental tests or factors are analyzed and combined into the composite forecasting line. The six factors are: (1) Average prices of a combination of industrial and railroad stocks, (2) physical volume of commodities coming into the market, (3) ratio of import to export values, (4) turnover of bank deposits, (5) the commercial paper rate of the United States, and (6) the three months' open market rate in London. These factors are weighted in the light of past experience.

It is with the importance of the fourth factor that we are primarily concerned. The *Brookmire Economic Service* remarks that any one of the factors alone is a useful forecaster, but no one alone is broad enough in scope to be relied upon under all conditions. The particular significance of the turnover of bank deposits is set forth as follows: "There are times when financial conditions cause a temporary shortage of purchasing power or a temporary excess of purchasing power, so that for months and even for years at a time the population of any country may live somewhat above or somewhat below their average standard of living. This factor is tested by the speed with which bank deposits are checked out or, as it is sometimes called, 'turnover of bank deposits'. When this factor is high it indicates that money is being spent faster than it is earned, and a recession, first of stock prices and later of business, may be expected. Conversely, when it is low, rising stock prices and later rising business activity and commodity prices may be expected."<sup>45</sup>

Barometer No. II differs from Barometer No. I principally in the fact that a seventh factor is added—the direction of the movement of commodity prices. This factor is added because a sustained upward tendency in commodity prices has an unfavorable effect upon the prices of all classes of bonds and on the prices of railroad stocks. A sustained downward movement has the opposite effect. We are not concerned with a further analysis of this chart.<sup>46</sup>

### The Harvard Index of General Business Conditions

This index, like the Brookmire, can hardly be classed as a *single* index serving as a barometer of general business conditions.

<sup>45</sup>Hardy, II, p. 56. Adapted from service letters issued by the *Brookmire Economic Service, Inc.* The method of using the forecasting line as a guide in buying and selling industrial stocks, or as an indicator of changes in commodity prices which are supposed to follow six months later, is described fully by Hardy, *op. cit.*, pp. 57-60.

<sup>46</sup>For additional information, see Hardy, II, p. 60.



Rather, it follows the Brookmire methods and classifies the data into chronological indices. The forecasts of the Harvard Committee on Economic Research are not based upon the theory that every cycle runs its course in the same length of time. This index is the result of an ambitious effort to establish a relationship between the coming and going of prosperity and is based on minute statistical analysis. The Brookmire system, on the other hand, was based apparently on observations and economic analysis.

The index as originally published in 1919, consisted of five groups of indices. Group I was composed of three indices, Group II of three, Group III of five, Group IV of four, and Group V of five. The indices for the different groups were thought to move consecutively, not simultaneously. The series of Group II was reported to lag behind the series of Group I by two to four months. In Group II was placed New York clearings. The series in Group III, which included clearings outside of New York, was thought to lag behind Group II by two to four months. Group IV lagged behind Group III by two to four months, and Group V lagged behind Group IV by four to six months.<sup>47</sup> These synthetic indices interpreted with reference to each other and to the series composing each group were believed to constitute an index of general business conditions for the period 1903-1918, the period covered by the study.

At the same time, the data were combined into three groups (A, B, and C) which were supposed to give a clearer picture of the time relationship of the cyclical movements than was given by the five groups of series. The latter was composed of monthly items, the former of bi-monthly items. Group A consisted of four series and afforded an index to speculation. In this group were New York bank clearings. Group B consisted of five series, and afforded an index of physical productivity and commodity prices combined. Clearings outside of New York were placed in this Group. Group C consisted of four series, and afforded an index to the financial situation in New York.<sup>48</sup>

The Harvard Bureau thus placed in one group those items which tend to move ahead of changes in the volume of general business, into a second those which serve as thermometers reporting the activity of business at a given time, and into a third those

<sup>47</sup>See Warren M. Persons, *Indices of General Business Conditions*, Harvard University Committee on Economic Research (1919), pp. 110-113; 128-139; see also Ray Vance, *op. cit.*, Chap. V.

<sup>48</sup>For a more complete description, see Persons, *op. cit.*, p. 114.

which generally lag behind; then they combined those which were thought to move together, into a composite index, so that the effect of accidental variation in one item might be reduced or eliminated. The movement of one index was regarded as a forecaster of the next. This three-group classification appeared to be more useful than the more minute classification into five groups.

The choice of the data used was limited to those items for which comparable data over a long period of time were available. For comparison involving annual data, only those items were used which could be traced back in comparable form to 1879, while monthly data running back to 1903 were considered sufficient. Seventeen series of annual data for the years 1879-1913 and twenty-three series of monthly data for the years 1903-1916 or for longer periods were included.<sup>49</sup>

Thus it will be noticed that bank clearings fell within the first two groups. Bank clearings in New York were placed in Group A, those outside of New York City were placed in Group B. Those outside New York City, in the past, have been looked upon as one of the best single indices of general business conditions and the fact that the Harvard Bureau placed them in Group B forces one to conclude that they are looked upon by that Bureau more as a thermometer than as a barometer. While it was the first purpose of the Index of General Business Conditions to provide a record of fluctuations of economic activity, it was claimed that the index was designed also to serve as a basis for forecasting business conditions. However, most of the interpretation had to do with the value of the index as an indicator of prevailing or past business and virtually no attention was given to the question of barometrics.<sup>50</sup>

Professor Hardy concludes regarding these general indices that ". . . the confidence to be placed in such a mechanical forecaster is a question which as yet cannot be answered, except from the standpoint of theory; there is not evidence enough to prove or disprove its pretensions."<sup>51</sup> Nor does the Harvard Committee maintain that it is infallible.

The index constructed in July, 1919, was published in the *Harvard Economic Service* until May 19, 1923. Since that date a revised index has been published currently. The new groups

<sup>49</sup>See Hardy, I, pp. 108-114 for an excellent account of this index.

<sup>50</sup>See W. M. Persons, *The Index of General Business Conditions: A Non-Technical Explanation*, Statistical Service of the Harvard University Committee on Economic Research (1921), *passim*.

<sup>51</sup>Hardy, I, p. 113.

remain three in number, but include only six series. The groups and the series included are as follows:<sup>52</sup>

**Group A. *Speculation.***

1. Bank debits of New York City.
2. Dow-Jones index of industrial stock prices.

**Group B. *Business.***

1. Outside bank debits of 140 cities.
2. Index of prices of ten sensitive commodities (base: 1890-1899)

**Group C. *Money.***

1. Rate on 60-90 day paper.
2. Rate on 4-6 months' paper.

Here again we find bank debits of New York City placed in Group A, and bank debits outside New York City in Group B. It seems, from a study of the Harvard indices, that bank clearings<sup>53</sup> are looked upon only as one of several good indicators of business conditions at any particular time; that is, as a thermometer, not a barometer. Dr. Persons speaks of outside bank debits as the best single index of general business activity, but makes no statements as to their worth as a business barometer.<sup>54</sup>

### **Carl Snyder's Index of the Volume of Trade**

One of the most outstanding attempts to develop a single index of general business conditions is that recently made by Mr. Carl Snyder and his staff at the Federal Reserve Bank of New York. Mr. Snyder believes that the last four or five years have witnessed the development of dependable reports in a sufficient variety of activities to make it possible to develop a representative index number.

Better reports have been appearing on both wholesale and retail trade as well as on various other activities. The practice of reporting actual debits to individual accounts in the banks of leading cities has been developed, thus giving a more accurate account of check transactions and permitting the computation of the velocity of bank deposits in those cities. In 1922, Mr. Snyder and his staff undertook the compilation of all the available series.

---

<sup>52</sup>For a more complete discussion see Warren M. Persons, "The Revised Index of General Business Conditions," *The Review of Economic Statistics* (July, 1923), pp. 187-195. It will be observed that "bank debits" have been substituted for bank clearings. It is unfortunate that the more exact term "debits to individual accounts" is not used as this is obviously what is meant.

<sup>53</sup>Meaning debits to individual accounts.

<sup>54</sup>Warren M. Persons, "Review of the Second Quarter of the Year," *The Review of Economic Statistics* (July, 1923), p. 180.

The result was a new single index of the volume of trade.<sup>55</sup> There have been three main divisions of the work and these will be reviewed briefly in the order done: (1) The development of a new index of the volume of trade which, in nature, is a composite index, (2) the determination of the fact that the turnover or velocity of deposits (*V*) is a sensitive barometer of general business, and (3) the determination of the fact that clearings, in the sense of debits to individual accounts, serve as an independent measure of business activity.

Twenty-eight different series are included in developing this new composite index number, some of the series like those for the production of consumers' and producers' goods, are, in turn, composites of more primary data; on the whole, the new index includes fifty-six different lines of industrial and commercial activity.<sup>56</sup> The series in groups, with the weighted values assigned to each, are as follows:

<i>Productive Activity</i>	Weight	Weight
1. Consumers' Goods.....	8%	4. Motor Cars and Trucks... 2%
2. Producers' Goods.....	9	5. Building Construction.... 4
3. Factory Employment.....	6	—
		29%
<i>Primary Distribution</i>		9. Exports .....
6. Merchandise Car Loadings	5%	10. Imports .....
7. Other Car Loadings.....	2	11. Panama Canal Traffic.....
8. Wholesale Trade.....	8	12. Grain Exports .....
		—
		22%
<i>Distribution to Consumers</i>		17. New Life Insurance.....
13. Department Store Sales...	8%	18. Amusement Receipts.....
14. Chain Store Sales.....	3	19. Advertising .....
15. Chain Grocery Sales.....	6	—
16. Mail Order Sales.....	3	26%
<i>General Business Activity</i>		22. Postal Receipts .....
20. Outside Debits .....	8%	23. Communication .....
21. New York City Debits....	5	24. Electrical Power Produc-
		tion .....
		—
		17%

<sup>55</sup>For a detailed account of this index, including the table of monthly indices of the volume of trade for the years 1919-1923, inclusive, see Carl Snyder, "A New Index of the Volume of Trade," *Quarterly Publication of the American Statistical Association*, Vol. XVIII (December, 1923), pp. 949-963; reprinted separately in pamphlet form. Hereafter cited as Snyder, *A New Index*. A revised table of the indices of the volume of trade will be found in the same publication, Vol. XX (September, 1925). This new material was not available for the writer at the time this chapter went to press.

<sup>56</sup>See also Carl Snyder, "A New Measure of Business," *Journal of the American Bankers' Association*, Vol. XVI (December, 1923), pp. 351-353; Carl Snyder, "Turnover of Deposits a Measure of Business Activity," *Journal of the American Bankers' Association*, Vol. XVI (February, 1924), pp. 471-473, 482; Carl Snyder, "New Measures in the Equation of Exchange," *The American Economic Review*, Vol. XIV, No. 4 (December, 1924), pp. 699-713.

*Financial Activity*

25. Shares Sold on New York Stock Exchange.....	2%	
26. New Corporate Financing .....	2	
27. Grain Future Sales in Chicago .....	1	
28. Cotton Future Sales in New York and New Orleans..	1	
		—
	6%	100%

After choosing what was conceived to be the proper weights, computation was made to discover whether such a thing as a normal line of growth was ascertainable. The concept of a normal and characteristic rate of growth had been familiar enough in dealing with the problems of population, life insurance, birth statistics, and other activities, but when proposed for matters of industrial growth and production about 1918, the idea seemed novel. For example, it is known from long experience extending now over a century that the population of the country has grown at an extremely even, but steadily diminishing rate. In like manner it has been learned that over the last forty or fifty years the characteristic, or normal, rate of expansion in our basic industries, for which definite statistics are available, has ranged around 3 and 3½ per cent. per annum. In some lines at least, for example, railway traffic or postal receipts, or pig iron production, or bituminous coal mined, the rate of growth has been very characteristic and even. Very much the same thing is true of our agricultural products measured in bushels, barrels, and bales. If there were no changes in the general average of farm prices the average relative value of these crops could be predicted at any time ten or twenty years ahead.<sup>57</sup>

Since there are normal rates of growth in these lines of industrial activity, there is justification for speaking of a given volume, in any of these lines, as being a certain percentage of this computed "normal". For example, if the indicated normal production of pig iron for a given year were 40 million tons and the actual product were 25 million tons, then it may be said that this actual product was but 62½ per cent. of the amount which might normally be expected from the previous rate of growth.<sup>58</sup>

It was found possible to calculate a normal trend in developing this new composite index. Although some of the newer industries presented some problems in its computation, it was found possible to compute it satisfactorily in the majority of cases. In any case it was thought that the probable error would be reduced to a minimum because of the large variety of data.

<sup>57</sup>Snyder, *A New Index*, pp. 958-959.

<sup>58</sup>Snyder, *op. cit.*, p. 959.

After computing the characteristic rate of growth, the seasonal trend was computed in a similar manner, since seasonal changes are a part of the "normal" and must be computed. For example, if the wheat flour production in July is usually about 80 per cent. of the average monthly production for the year, then a drop in production to 60 per cent. of the monthly average does not mean that the production is 40 per cent. below normal. It is but 25 per cent. below. As a result, where a sufficiently strong seasonal movement was observed, the index figure for the computed percentage of normal for any month was adjusted by this seasonal index, and the resulting index number thus made strictly comparable with those of any other month.

The next step was to deflate the data. In dealing with material like bank clearings, store sales, building construction, etc., which are in dollar values, the figures reported are deeply affected by the respective price and wage levels. These factors had to be eliminated in order to make the index figures comparable in relative volume or value. As an example, it might happen that the fall in merchandise prices in 1921 was greater than in the amount of merchandise sales reported, which means that the actual amount of goods shipped and sold was higher in many cases in 1921 than in 1920.

The problem of the proper method of deflating has been a difficult one. To deflate a composite index number with an index of the price level based primarily upon wholesale prices was obviously unsound. To meet this problem a new weighted average of different price indices was developed. It was based not only upon commodity prices at wholesale, but also upon wages, retail prices, rents, and the various factors entering into the cost of living. Each series thus was deflated separately and all parts of the composite index number placed upon a comparable basis.

The final composite index of the volume of trade forces one to draw conclusions somewhat different from those usually drawn from such price index numbers as those given by the Bureau of Labor. According to the composite index number of trade, trade activity during the 1919-1920 boom reached its peak in July, 1919, and thereafter showed a declining tendency, although prices continued to rise until June, 1920. From these facts the conclusion was drawn that the great rise of prices following July, 1919, was almost pure inflation. A second important fact shown by this new index number was that general business was back to the computed normal by March, 1922, although most of the "barometers"

did not show this until the latter part of the year. On this point Mr. Snyder remarks: "Yet, in spite of this, great pessimism still prevailed, and there was widespread belief that there was no recovery in sight; another illustration of the curiously unreliable information prevalent in almost every line of business where no definite figures are obtainable. Apparently business men think of business chiefly in terms of profits and not of the volume of goods handled or the social service they perform."<sup>59</sup>

A third important conclusion reached from this index number was that the percentages of variation in the total volume of trade, are the outside limits, and quite probably far outside, since there is no measure for the contributions of an immense body of the population. The data in this index number give little information as to the month-to-month activities of the farming population, or of that vast element of professional, domestic, mechanical, and public service performed by teachers, lawyers, doctors, dentists, government employees, servants, traveling salesmen, and a multitude of small lines of manufacture. But these are affected relatively little by the ups and downs of trade, although they probably represent about a full third, and possibly more, of the whole industrial activity of the nation. Consequently, this one-third of the total would probably tend to reduce the variations of the total activity from the computed normal to something considerably less than 10 per cent. Mr. Snyder believes that the total variations for the country are much nearer to a probable 5 per cent. above and 5 per cent. below normal than seems generally the impression.<sup>60</sup>

A fourth conclusion that should be pointed out, perhaps, is that the period of duration of the cycle, as depicted in this index, covers about three and one-half years, that is, from the high level of 1919-1920 to the return to the same level in the earlier part of 1923. This corresponds closely to the results obtained by Persons, King, Ayres, and others from much more extended studies. According to Snyder's index number the computed volume of trade appears to have been above normal continuously for some sixteen months in 1919-1920, and then continuously below normal for nineteen months. Then came a see-saw period for about six months, after which time the line was at or above normal for about ten months.<sup>61</sup>

---

<sup>59</sup>*Ibid.*, p. 962.

<sup>60</sup>*Ibid.*, p. 963.

<sup>61</sup>To the date of Mr. Snyder's writing.

The graph below is the result of an attempt to provide a general index of the price level. This index is assumed to represent approximately the price changes which are reflected in the

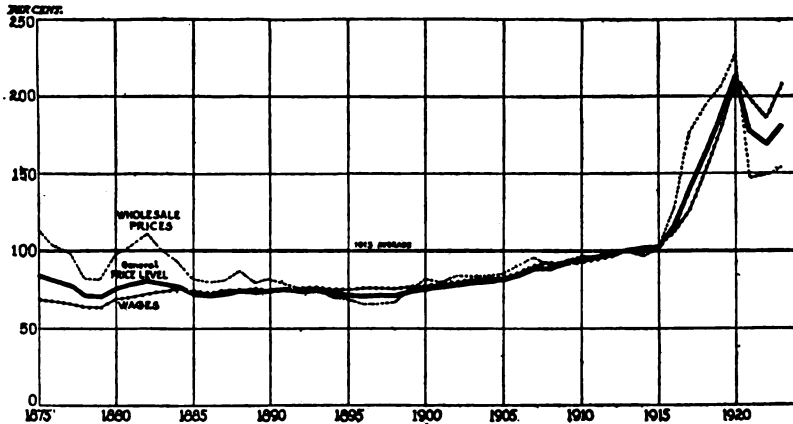


CHART II.

volume of credit or bank clearings. To secure this index, the indices of commodity prices, cost of living, rents, and wages were worked back for half a century, weighted in accordance with their estimated relative importance in the sum total of expenditures, and combined.<sup>62</sup> This graph shows the movement of this index by years, and compares with it the changes in two of its component groups, namely, wholesale commodity prices and wages.

If, in the future, Mr. Snyder's new index is demonstrated to be properly constructed, it can be said that he has made one of the greatest contributions to economic science and has provided business men with an excellent guide in the development of their future policies. But Mr. Snyder was not content to stop with this new composite index number; he conducted two other studies with important results, both of which are vital to the subject under consideration. The second investigation had to do with the turnover of deposits as a measure of business activity; the third with clearings as a business barometer.

<sup>62</sup>For a more complete description see the *Monthly Review of Credit and Business Conditions*, Federal Reserve Bank of New York (April 1, 1924), p. 8, from which the above graph is taken. See also Carl Snyder, "A New Index of General Price Level From 1875," *Journal of the American Statistical Association*, Vol. XIX (June, 1924), pp. 189-195.



**The velocity of deposits as a measure of business activity**<sup>63</sup>

This second investigation conducted by Mr. Snyder resulted in the important conclusion that the ups and downs in the rate of turnover of average deposits are probably not only a good measure of the variations in the volume of trade between boom and depression, but a sensitive barometer of general business.

The fluctuations in debits to individual accounts, in the opinion of the Federal Reserve Board, have no necessary relation to the credit or "money" situation. Debits, the Board holds, are essentially figures showing a "turnover" of credit, or constitute a factor in what is called "velocity of circulation". They indicate not the total amount of credit which is available for the use of the individual or business establishment, but the decrease or increase in the activity with which such credit has been used by its owners.<sup>64</sup>

The material required for such an investigation has been lacking until recently. Although we have had reports of bank clearings for over half a century as well as reports on banking conditions, resources, deposits, etc., most of the reports have been belated. Such data are not extremely serviceable to the business man. It was not until the Federal Reserve Board began the publication of weekly reports from about 800 leading banks in 100 selected cities that the making of such an index really became possible. In 1918 the Federal Reserve Board made valuable information available when it undertook the compilation of bank clearings in the form of actual amount of debits to individual accounts in each reporting bank rather than just the amount of checks passing through the clearing houses.

Since the weekly reports from the 800 member banks were from 100 cities while the compilation of debits to individual accounts was made up from 141 cities, it seemed unwise and unsound to attempt any comparison of average deposits and the amount of checks drawn against them. As a result, the Federal Reserve Bank of New York began the compilation of the reports

---

<sup>63</sup>See Carl Snyder, "Turnover of Deposits a Measure of Business Activity," *Journal of the American Bankers' Association*, Vol. XVI (February, 1924), pp. 471-473, 482. Reprinted in pamphlet form. Hereafter cited as Snyder, *Turnover of Deposits*. See also W. Randolph Burgess, "Velocity of Bank Deposits," *Journal of the American Statistical Association*, Vol. XVIII (June, 1923), pp. 727-740, also reprinted in pamphlet form. Hereafter cited as Burgess, *Velocity of Bank Deposits*. The results of the work of Dr. Burgess on computing the velocity of bank deposits served as a basis for Mr. Snyder's work on the question of the turnover of deposits as a measure of business activity.

<sup>64</sup>See *Federal Reserve Bulletin*, Vol. VI (1920), pp. 1259-1260.

from eight selected cities, stretching straight across the country. The aim was to secure a good sampling or cross section, both geographically and as to the size of the cities. These eight cities were Boston, New York, Syracuse, Albany, Buffalo, Rochester, Chicago, and San Francisco.<sup>65</sup> The total debits for each month in each city were taken and divided by the average amount of demand deposits in the reporting banks. This gave the monthly rate of turnover or velocity of demand deposits.<sup>66</sup> In developing this index, New York City was weighted one-third as against the other seven cities, since it has been estimated that the total debits to accounts reported from the 140 clearing cities represent something like two-thirds the total amount of checks drawn against all the deposits in all the banks of the United States. This makes New York about one-third of the total. Assuming the seven cities, other than New York, to be fair samples, they were weighted two to one for the country as against New York City alone.

The composite line showed that, for the five years for which the figures were obtainable, there was no perceptible secular trend, that is, no steady increase or decrease.<sup>67</sup> Consequently, it was and compute the deviation, month by month, from this five-year average base, or "normal". The figures revealed a strong seasonal swing in most of the cities.<sup>68</sup> The rate of activity rose appreciably in the spring, fell somewhat throughout the summer months, and then rose still higher in the fall. This swing was so characteristic and regular that it was possible to compute an index of seasonal variations, by means of which allowance could be made for the seasonal influence. It was then possible to deter-

---

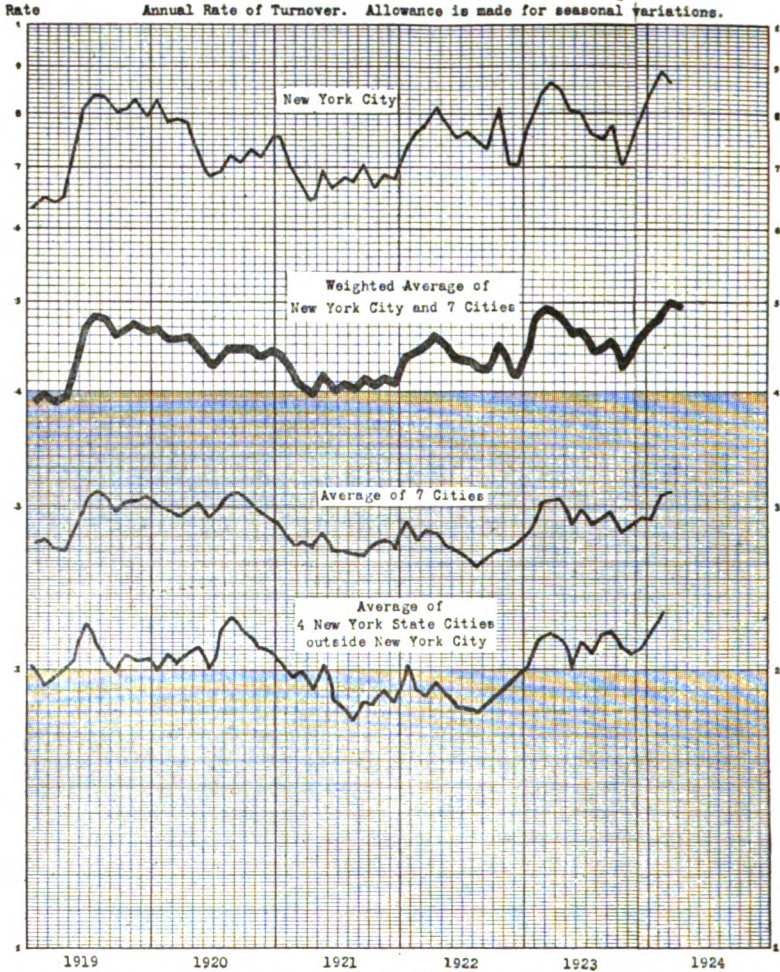
<sup>65</sup>These compilations have been published from time to time in the *Monthly Review of Credit and Business Conditions*, by the Federal Reserve Bank of New York.

<sup>66</sup>Allowance was made for the slow turnover of time deposits, and for the influence of the "float," the amounts due to and due from other banks, although this did not affect the result appreciably.

<sup>67</sup>Dr. Warren M. Persons supports Mr. Snyder in this conclusion. See Persons, "The Revised Index of General Business Conditions," *The Review of Economic Statistics* (July, 1923), p. 189.

<sup>68</sup>According to Dr. Burgess, seasonal changes in bank clearings (the term "clearings" being used to mean debits to individual deposits) are largely accounted for by large seasonal variations in the velocity of deposits. He further points out that variations in velocity due to seasonal and other causes are smaller in New York than in a number of other centers, and that there appears to be reasonable ground for questioning the common assumption that New York City transactions are largely distorted by speculative influences. See Burgess, *Velocity of Bank Deposits*, p. 740.

mine just what were the variations due to changing business conditions.<sup>69</sup>



It was learned, as a result of this investigation, that the rate of turnover was much higher in 1919 and the early part of 1920, and very much reduced throughout 1921, with a sharp recovery through 1922 and into 1923. Using the composite index as a

<sup>69</sup>For a more complete account of this investigation see Snyder, *Turnover of Deposits*.

Chart III, through the courtesy of Mr. Snyder, was taken from one constructed by his research staff.

basis of comparison, and assuming that such a remarkable variety of series as are included in that index number affords a fine sampling of the total business activity of the country, the data relative to the velocity of deposits should show a close correspondence if the turnover of deposits has any great value as an indicator of general business conditions. This must be true since over 90 per cent. of the total payments of the country are made by means of checks. The results were astonishingly close. When the variations in the turnover of bank deposits in the eight selected cities were plotted in percentages of change from the five-year averages, it was found that the highest rate of turnover in the 1919-1920 boom also came in July of 1919, exactly as in the composite index of the volume of trade, and thereafter showed a steadily sagging tendency, just as did the other index, even though prices continued to rise and bank deposits and bank clearings went on expanding for ten months or more thereafter, at an enormous rate. The low point in the rate of turnover did not come in the same month as in the index of the volume of trade, but it was not far away, and the line was back to the normal or five-year average, at the beginning of 1922, in just the same manner, and then reached a new peak in March of 1923, exactly as did the index of trade. Such correspondence could scarcely have been closer. Moreover, both in percentage of rise above and fall below the five-year average, the rate of turnover was the same as the variation in the volume of trade, that is, about 10 per cent. above and 10 per cent. below the normal or average rate. At its peak in 1923 it went a little higher, again exactly as did the index of trade. See Chart III.

As a check on these results an additional experiment was made. The reported debits for the 141 cities were taken and divided by the demand deposits in the 800 reporting banks. The seasonal swings were eliminated in the usual way and the percentages of variation from the five-year average computed, just as in the eight selected cities. For the most part, alike in time and in the per cent. of deviation, the two results were so close that the two lines often coincided. A further curious result which was more or less accidental was that the actual average rates of turnover in the weighted average of the eight cities and the average for the 141 cities were very nearly the same. See Chart IV.

Mr. Snyder thinks it safe to conclude from these results: "First, that the original eight cities were an excellent sampling of the whole country, and secondly, that the index so obtained is an

excellent index of business activity, or state of trade, and that, having these two mutually confirmatory indexes or 'barometers', the rate of deposit turnover and the index of the volume of trade,

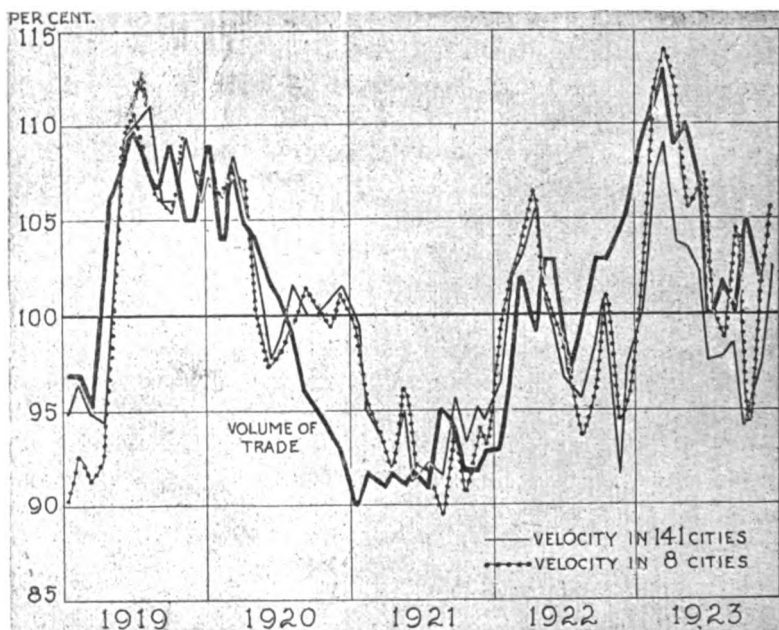


CHART IV.

we are now in a position to describe the state of business in terms of percentages of normal growth, and not merely in vague, often conflicting and generally quite unreliable general phrases."<sup>70</sup> A further support to this conclusion was secured in a study of bank clearings (debits to individual accounts) as a barometer of general business conditions, Mr. Snyder's third study, to which we will now turn our attention.

#### Bank clearings as a business barometer<sup>71</sup>

Theoretically, bank clearings should serve as a good index to the volume of trade. But with the great inflation of prices which

<sup>70</sup>Snyder, *Turnover of Deposits*, p. 473. Chart IV from Snyder, *op. cit.*, p. 473.

<sup>71</sup>In discussing bank clearings as a business barometer it is to be borne in mind that the term is used in the sense of debits to individual accounts. This is the refined method by which clearings are now reported although the customary term "clearings" is still used.

came with the recent War and the usual methods of war financing, bank clearings lost their significance as a business index. With prices of every kind rising to over 100 per cent. above the pre-war level, the nominal amounts of clearings rose correspondingly; and when the bubble of inflation was pricked and the general level of prices fell to nearly half the extreme point reached, the figures for bank clearings fell correspondingly. To use these data as an index necessitated deflation. In order to deflate such data properly it was necessary to construct a new index of prices, as an index number based to a large extent on wholesale prices could not be used to deflate bank clearings which represent payments for many other things. As a result, a crude analysis of the payments entering into bank clearings was made, and a weighted average of different price indices, for commodity prices at wholesale, wages, retail prices, rents, etc., was constructed. With this new index the line for clearings was corrected, with the result that the variations from the trend corresponded very closely with the composite index of the total volume of trade.

In anticipating criticism that this third "barometer" is not really an independent index it was pointed out by Mr. Snyder that in correcting bank clearings in the manner described above, a line is obtained showing a trend or growth which continues without a break straight through the War and the years since the War, in the same even curve of growth that is obtained for clearings for the preceding thirty or forty years.<sup>72</sup> The rate of this growth corresponds very closely through this period with the known average rate of growth in all kinds of production and industrial activity, that is, an average increase of very close to 3½ per cent. per year. "Further," he says, "correcting by this index, we obtain a line for bank clearings whose variations correspond with those of the volume of trade, not only in time, that is, by months, but likewise in percentages of deviation from the base line or normal. This can scarcely be an accidental result."<sup>73</sup>

Thus, in the opinion of Mr. Snyder, there are three independent indices all pointing to the same tendencies, and one of these independent indices is bank clearings. As a result, he insists,

---

<sup>72</sup>Snyder, *Turnover of Deposits*, p. 473. Mr. Snyder points out, *loc. cit.*, p. 471, that the total amount of debits to individual deposits has been found to differ but little, generally, from ordinary bank clearings, although at times there are quite notable differences between the two sets of figures. The data from which his trend line was computed were composed of debits to individual accounts for the period since 1919, and of the old type of clearing reports for the period prior to that time with proper adjustments.

<sup>73</sup>Snyder, *op. cit.*, p. 473.

there is no longer any necessity for guessing, or supposing, or trusting in vague reports and gossip. "We can measure trade as we measure rainfall, population, births and deaths, crops, the production of pig iron or butter and cheese."<sup>74</sup> Groping in the dark will be necessary no longer if this optimistic view proves itself correct. In Mr. Snyder's opinion, we now have definite knowledge that the total volume of trade rarely fluctuates more than 10 per cent. above or below the normal trend of growth. With such knowledge business concerns, during a depression, may build with

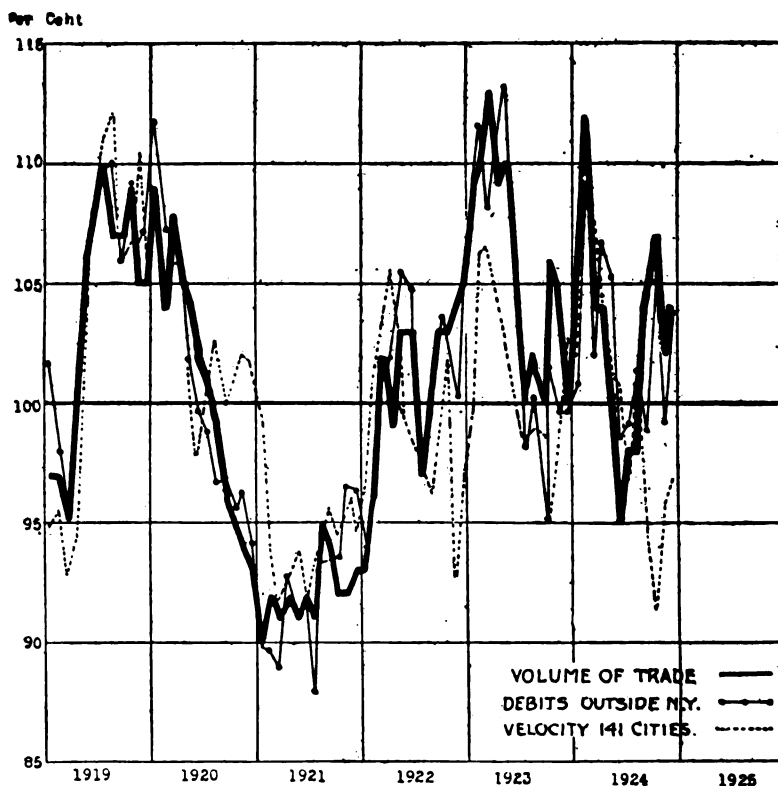


CHART V.

greater assurance of a prompt recovery. In a similar manner, if the fact can be definitely established, or is established, that a rise in the index of much more than 10 per cent. above this normal

<sup>74</sup>*ibid.*

curve means an unhealthy boom and an inevitable collapse, then active measures to control and prevent such an unhealthy expansion can be taken with a definite knowledge of the exact situation.

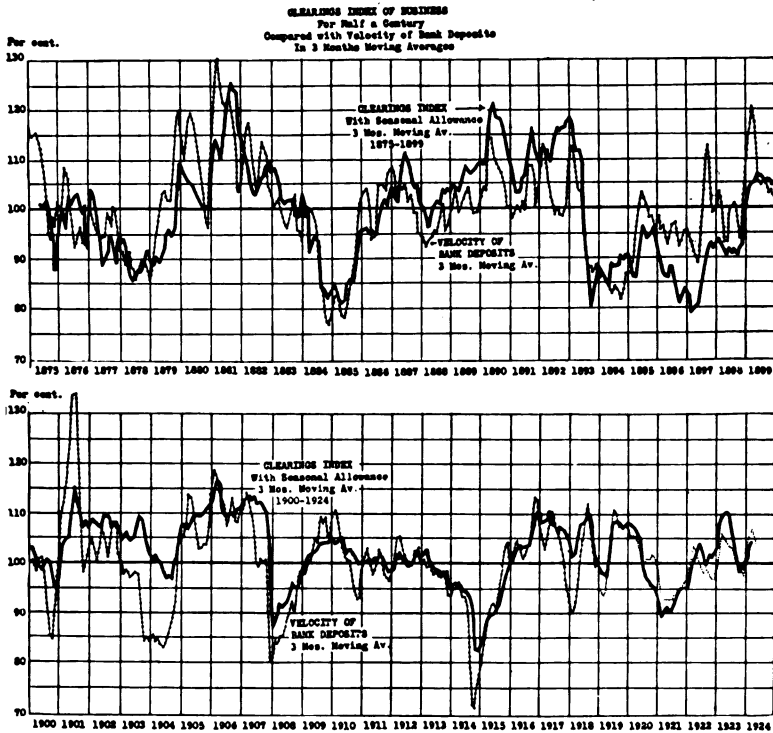


CHART VI.

Captains of industry, according to Mr. Snyder, will have a better guide in shaping their policies; business men will no longer need to be misled by rising or falling prices, or with the idea that things like the production of pig iron, or the stock market, are good "barometers" of business, or good indicators, necessarily, of the trend.

The closeness with which the three indices conform to each other is shown in Chart V. Chart VI shows the business activity extending over fifty years, as reflected in clearings outside New York City, compared with the velocity of bank deposits. Chart VII shows the clearing's index compared with pig iron produc-



tion for the same period.<sup>75</sup> Allowing for the price element in the clearing figures, it has been possible to produce a line, the movement of which, from year to year, corresponds with other statis-

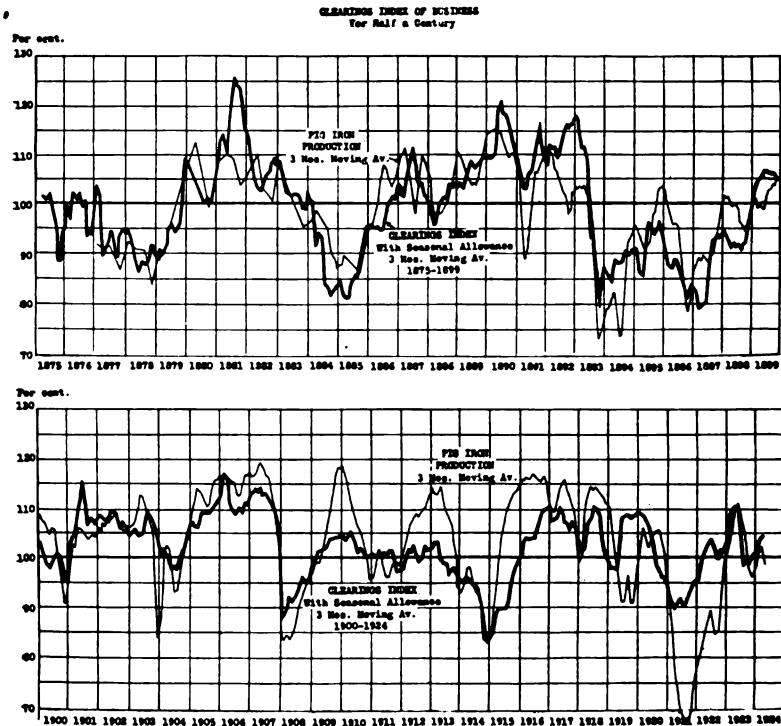


CHART VII.

tical evidence of the country's industrial life. The diagram shows by months for the past 50 years the deviations in the clearing figures from the line of regular increase. The figures allow not only for price changes, but for seasonal variation, and "therefore reflect the recurrent swings upward and downward in the physical volume of the country's business activity. It will be noted that there has been a gradual tendency for these swings to become less and less violent, reflecting the country's increased

<sup>75</sup>Charts V, VI, and VII were developed by the research staff of the Federal Reserve Bank of New York, which kindly permitted the writer to use them. The chart showing the clearing index only will be found in *Monthly Review of Credit and Business Conditions*, Federal Reserve Bank of New York (May, 1924), p. 8, and in *The Literary Digest*, Vol. LXXXI, No. 12 (June 21, 1924), p. 64.

industrial stability due to growth in wealth and resources and greater diversification of industries."<sup>76</sup>

### Conclusion

It is safe to say that in most of the cases mentioned above bank clearings have been looked upon more as an index of business conditions in the immediate past than as a business barometer. The one important exception is found in the conclusion of Carl Snyder.

There are those who look upon clearings as but one of several "barometers" and while they may show how business has been in the immediate past, offer but little assistance in determining how it will be in the immediate future. In other words, clearings may be a thermometer, but not a barometer.<sup>77</sup> It is insisted, also, that clearings could not anticipate business developments, that, in fact, they could not logically forecast business conditions as they rise only as business picks up, which, itself, is the cause of a more rapid rate of turnover of deposit currency and increased clearings. Nor do they reflect general business except in a general way, it is insisted, as an increase in clearings now is apt to be the result of goods produced or sold one, two, or three months earlier.<sup>78</sup>

*The Commercial and Financial Chronicle* of New York has repeatedly taken the position that bank clearings (including New York clearings) are one of the best indicators of present business conditions, but are almost valueless as a means of forecasting the future. In other words, they serve as a thermometer, not as a barometer.<sup>79</sup> Mr. Roger W. Babson takes the same position as

---

<sup>76</sup>*Monthly Review of Credit and Business Conditions*, Federal Reserve Bank of New York (May, 1924), p. 8.

<sup>77</sup>Jordan, *op. cit.*, pp. 193, 225.

<sup>78</sup>B. H. Beckhart, *Are Bank Clearings a Barometer of Business?* Bankers Economic Service (Sept. 12, 1922), p. 158. Dr. Beckhart uses the term "clearings" in the original sense. He points out, however, that the fluctuations in debits are quite as pronounced as fluctuations in the clearing figures, but are likely to take place later. If clearings are a poor index of prevailing business conditions because of their tardiness, debits must be much poorer if Beckhart's conclusions are valid. He used the Bureau of Labor index numbers of wholesale prices to deflate his clearing data, while Mr. Snyder developed a mixed or composite type of index number with which to deflate his clearings. Mr. Snyder's method is theoretically sounder, although much depends upon how representative of debits the Snyder deflating index proves to be.

<sup>79</sup>See especially "Bank Clearings in 1923 and the Course of Trade Speculation," *Commercial and Financial Chronicle*, Vol. CXVIII (1924), pp. 352-359. The Chronicle takes the position that New York clearings reflect the change in business in advance of those of the rest of the country. *Loc. cit.*, p. 355.

the *Commercial and Financial Chronicle*. He points out that check transactions might serve as an aid in forecasting business conditions, but taken by themselves they are of little value as they refer only to present-day conditions.<sup>60</sup> In the Babsonchart, as described above, it cannot be said that any particular significance is attached to clearings (debits) as a business barometer. Check transactions constitute but one of twelve series which compose the composite barometer. Significance is attached to them primarily as a good indicator of the past growth of the country's business.

*The Annalist* occupies somewhat of a middle ground. Clearings are looked upon as a barometer, but only as a partial indicator of future business conditions. They do not stand alone as a barometer capable of forecasting business conditions. In the *Standard Daily Trade Service*, debits are considered an indicator of business as it exists, that is, as a mere thermometer. Only debits outside New York City are used. In the *Brookmire Barometer* (No. I) it cannot be said that any particular importance is attached to clearings. Instead, the turnover of deposits is used as one of six series composing the forecasting line. The *Harvard Index of General Business Conditions* places New York debits in a speculative group which is presumed to forecast business conditions. Debits outside New York City are placed in the business group and consequently assume more the nature of a thermometer than of a barometer. The fact that the index is composed of three groups moving successively makes it difficult to say that any particular importance is attached to clearings as a barometer. They are placed in the first two groups, but constitute only half of the series included within these groups. In any event, they do not stand alone as a barometer of general business conditions. The Federal Reserve Board treats debits to individual accounts as one of the best single indices of the total volume of trade, but lays no stress upon their barometric qualities. Debits outside of New York City are considered a better indi-

---

<sup>60</sup>R. W. Babson, *Business Barometers for Anticipating Conditions*, 16 ed. (Wellesley Hills, Mass., 1923), p. 242. See also Fred R. Macauley, "Bank Clearings and Security Prices," *Moody's Magazine*, Vol. XI (1911), pp. 401-407. Mr. Macauley, in this article, insisted that clearings, when correctly analyzed, were of paramount importance as a guide to the future and should be watched by the careful speculator only less closely than such factors as the conditions of the New York Associated Banks and the Reports of the Comptroller of the Currency. This position was taken in 1911 and is of little, if any, importance now.

cator of general business conditions than are those in New York City and are reported separately.<sup>81</sup>

Professor Charles O. Hardy takes a conservative position on the value of clearings (debits) as a barometer of general business conditions. "Credit," he says, "is the life-blood of modern business and the banking system constitutes the circulatory apparatus through which credit is made available for the more directly productive parts of the industrial organism. Hence, irregularities in the operation of the banking system are as significant to the student of industrial ills as are irregularities in the pulse beat to the physician."<sup>82</sup> He points out that barometers fall into three principal classes: (1) Indices of the volume of business transacted, of which the clearings and the checks cashed are the most important, (2) statements of the condition of the banks, including the weekly reports of the Federal Reserve System, the reports of the Comptroller of the Currency on the condition of national banks, and the reports of State banks and trust companies, and (3) rates of interest on the various classes of loans.

Of these three indices, Professor Hardy thinks that the rates of interest on the various classes of loans are the most valuable index of business conditions. He insists that this is true partly because of the abundance and accuracy of the data, partly because of the consistency with which changes in the money market precede changes in general business, and partly because the part played by money-market conditions in *causing* changes in prosperity is great enough to make it possible to make allowance for exceptional conditions more readily than is possible in using forecasters whose relationship to the phenomena forecast is purely empirical.

Professor Hardy assigns to bank clearings and check transactions the second place of importance among the three banking barometers mentioned. For comparisons extending over a considerable period of time, he thinks the record of clearings is the best index of the volume of payments. He considers debits to individual accounts a better index of the volume of payments than are clearings, but points out that there appears to be little difference in the direction and relative amount of the changes indicated

---

<sup>81</sup>The Federal Reserve Board consistently takes the position that New York debits should be separated from those of other cities and that speculative transactions have a very pronounced effect on New York debits. See for example, *Federal Reserve Bulletin*, Vol. VI (1920), pp. 603-604.

<sup>82</sup>See C. O. Hardy, I, pp. 96-98.

by the two barometers. Clearings outside of New York, he thinks, give a fairly consistent picture of the changes in the volume of business transacted, but do not anticipate changes in such a way as to give them any marked superiority over the other standard indices like pig-iron production, wholesale prices, and business failures. One also infers that he considers it advisable to omit the clearings for New York City because of the influence exerted by the volume of speculation at the Stock Exchange.

The most advanced, or perhaps one should say the most pronounced, stand taken by any competent investigator on the importance of clearings as a business barometer, is that taken by Mr. Carl Snyder of the Federal Reserve Bank of New York. He has developed an elaborate composite index of the volume of trade which appears to be the most representative and comprehensive one in existence. He has correlated with it the velocity of deposits which he finds to be a good index of the total volume of trade. Finally, he has made a study of debits to individual accounts and finds that the correlation is so close to the other two indices that clearings or debits may be considered as a good single index and barometer of general business conditions. It must be pointed out, however, that Mr. Snyder is conservative in emphasizing the value of clearings as a business barometer; he lays emphasis, rather, upon their value as a good index of business conditions. The more accurate our knowledge of business trends, the better able are we to judge or prognosticate the future. In that sense only does he think clearings are an excellent barometer. He does not contend that they will show just when a turn upwards or downwards in business will take place, although he thinks they will fulfil this function probably better than any other index or barometer that has been devised thus far.

If the findings of the composite of 56 different series combined into the index of the volume of trade is really a reliable measure of business and trade, then, obviously, it is the first time that we have had a test for any other kind of index or barometer. Previous judgments as to the value of bank clearings as a barometer could be little more than mere conjecture. Those giving such opinions had no objective test as to whether bank clearings were a measure of business or not, for the simple reason that we had no reliable measure of business. For aught they or anyone else could know, bank clearings might be the best or the worst of business barometers. There was no criterion by which to judge.

DEBITS TO INDIVIDUAL ACCOUNTS AS REPORTED BY BANKS IN 141 OF THE COUNTRY'S LEADING CLEARING HOUSE CENTERS

TABLE XXXV<sup>1</sup>

Summary by months for the years 1919-1924  
[In thousands of dollars]

	I. All reporting centers					
	1919	1920	1921	1922	1923	1924
January	34,439,266	44,727,408	37,560,002	34,936,967	41,752,913	41,499,264
February	27,884,150	35,281,239	29,357,695	30,585,310	35,925,212	37,397,792
March	31,724,629	42,835,300	33,486,648	33,932,274	42,185,143	40,739,481
April	32,269,932	41,056,553	31,812,024	36,388,040	39,294,408	39,518,669
May	36,554,735	38,694,519	32,109,798	37,976,008	40,071,906	40,044,454
June	38,675,563	39,777,946	33,172,200	39,236,177	40,573,595	40,229,841
July	40,489,894	39,298,795	31,088,539	36,055,788	36,504,275	40,131,173
August	37,458,128	35,783,432	29,719,041	34,136,129	33,485,567	38,691,819
September	38,089,029	36,861,477	31,226,647	35,768,453	34,059,868	38,971,985
October	43,880,753	40,207,186	33,652,717	40,745,186	38,899,337	43,417,983
November	41,968,685	39,165,046	32,997,184	36,159,896	38,503,870	41,892,997
December	45,916,261	42,399,554	37,541,699	40,436,981	42,448,051	49,157,166
	449,350,045	476,088,475	393,924,194	439,337,209	463,714,145	491,691,623

	II. New York City					
	1919	1920	1921	1922	1923	1924
January	18,118,628	23,636,058	20,032,528	19,064,575	22,087,156	22,113,958
February	14,616,795	18,058,546	15,129,775	16,543,428	19,019,491	19,886,015
March	16,698,459	22,285,024	17,353,179	20,397,109	22,541,298	21,546,482
April	17,323,393	21,319,573	16,348,754	20,716,594	20,478,562	20,653,978
May	20,330,058	19,581,047	17,170,760	21,653,679	20,703,871	21,405,560
June	21,570,135	19,806,128	17,754,821	22,003,382	21,011,296	21,925,659
July	22,426,574	19,163,103	16,339,685	19,713,134	18,320,626	21,468,874
August	20,275,651	17,370,880	15,186,093	18,287,224	16,188,613	20,915,784
September	20,446,280	17,589,597	16,102,523	19,215,296	16,799,454	20,734,467
October	24,226,286	20,137,084	17,610,321	22,322,276	19,151,902	22,505,693
November	23,351,121	20,170,643	17,492,224	19,026,750	19,982,927	23,046,934
December	24,859,994	22,407,837	20,574,899	20,831,135	22,081,149	27,327,223
	244,243,474	241,430,519	207,095,562	239,854,582	238,396,345	263,531,627

TABLE XXXV—(Continued)  
DEBITS TO INDIVIDUAL ACCOUNTS AS REPORTED BY BANKS IN 141 OF THE COUNTRY'S LEADING CLEARING HOUSE CENTERS

Summary by months for the years 1919-1924		[In thousands of dollars]					
		III. All other reporting centers					
		1919	1920	1921	1922	1923	1924
January	.....	16,319,658	21,091,550	17,527,474	15,879,392	19,665,757	19,384,506
February	.....	13,267,355	17,237,693	14,927,920	14,041,882	16,904,911	17,511,777
March	.....	15,026,170	20,550,276	16,138,469	16,535,165	19,643,845	19,192,999
April	.....	14,946,539	19,736,980	15,463,270	15,671,446	18,185,846	18,864,690
May	.....	16,924,677	19,113,472	14,939,038	16,322,329	19,368,445	18,638,794
June	.....	17,105,428	19,971,816	15,417,379	17,179,795	19,532,299	19,304,183
July	.....	18,063,390	20,235,692	14,746,854	16,342,654	18,183,649	18,662,199
August	.....	17,182,477	18,412,572	14,532,948	15,848,905	17,308,264	17,776,035
September	.....	17,642,749	19,261,980	15,123,124	16,553,157	17,260,780	18,237,518
October	.....	19,654,367	20,070,102	16,242,396	18,422,910	19,747,435	20,912,280
November	.....	18,617,564	19,094,404	15,504,960	17,133,146	18,520,953	18,846,083
December	.....	21,056,267	19,991,717	16,966,800	19,585,946	20,366,903	21,929,943
		<u>205,106,571</u>	<u>234,757,956</u>	<u>186,827,633</u>	<u>199,502,627</u>	<u>224,689,086</u>	<u>228,160,796</u>

<sup>1</sup>Compiled from the *Annual Reports of the Federal Reserve Board and Federal Reserve Bulletins*. The table cannot be extended back of 1919 due to the changed method in reporting bank clearings. Many discrepancies will be found in this table, due presumably to the frequent revisions of the data by the Board. For example, the totals as given for all centers for the years 1919-21, inclusive, in the *Eighth Annual Report of the Federal Reserve Board* (1921), pp. 24-25, do not agree with those given in the *Ninth Annual Report of the Federal Reserve Board* (1922), p. 175. It is useless to attempt to revise the table throughout as the Board does not give the necessary information. The Board should revise all the tables up to date in a systematic manner. Unfortunately, this table must be taken as tentative only. In the main, it will be near enough to the truth to show the general trends.

While the writer has pointed out frequently the discrepancies which exist in the data published by the Federal Reserve Board, he does not wish to appear to be criticizing the Board unduly, as it has done everything in its power to secure reliable information, much of which is secured only with the greatest difficulty. For an interesting and enlightening account of the difficulties and disagreements facing the Board in this respect see H. P. Willis, "Ten Years' Experience in Business Statistics," *Journal of the American Statistical Association*, Vol. XIX (June, 1924), pp. 206-217.

The investigations conducted at the Federal Reserve Bank of New York are too recent to have been subjected to mature or searching criticism. The passing of time will correct this. At present, the methods used, and the conclusions arrived at, seem logical and sound, and if future investigations support the findings or theories, it can be said without exaggeration, that a real contribution has been made in the field of barometrics.



## CHAPTER XIII

### RÉSUMÉ OF THE PRESENT SYSTEM

It is the purpose of the present chapter to give a summarized view of the methods used in the clearing and collection of checks and drafts as found in the United States today. Many readers will have neither the time nor the desire to read through the historical, theoretical, and controversial subjects treated in the preceding chapters in order to secure a picture of the clearing and collection system as it exists in this country at present. It is for these readers, as well as for the purpose of binding together into a unified whole the material which precedes, that this chapter is written.

It seems safe to say that in all the literature on banking, none carries with it so much vagueness and mystery, not only to the layman but to a great number of persons connected directly with banks, as the literature which attempts to describe the methods used in clearing and collecting checks, drafts, and other items. It will be conducive to clearness to give a skeleton picture or outline of the framework of our present system before becoming involved too deeply in the subject. This will aid the reader in securing and maintaining a proper perspective of what appears to most readers to be a complicated mechanism that scarcely deserves to be called a system.

The present system may be discussed conveniently under two principal heads: (1) The Federal Reserve System, and (2) the practices among banks not connected with the Federal Reserve System, directly or indirectly. These two principal divisions will now be set forth in outline form which will be followed closely in the subsequent discussion.

#### I. The Federal reserve clearing and collection system.

##### A. The intra-district system.

1. Where banks are in the same town or city, but have no clearing house association.

2. Where such banks are members of a clearing house association.
3. Where some banks in the same city are members of the clearing house association while others are not.
4. Where banks are not in the same city, but are within the same Federal reserve district. These banks may be (a) member banks, (b) non-member clearing banks which carry accounts with the Federal reserve bank of their district in order to avail themselves of the privilege of collecting their out-of-town checks through the Federal reserve bank, and (c) the non-member banks which agree to remit at par for checks presented to them by the Federal reserve bank of that district, but which do not carry accounts with the Federal reserve bank or seek to use it as a medium through which to collect their out-of-town checks. The first two classes of banks, that is, classes (a) and (b), may collect their out-of-town checks in any one or all of three ways: (1) Through their Federal reserve bank or its branches, (2) directly, with settlement through their Federal reserve or branches, and (3) through correspondents. Banks in class (c) collect their out-of-town checks through correspondents only. Cash items, such as checks and drafts, and collection items, such as maturing notes, bills, and drafts may be cleared and collected through any of the channels mentioned.

**B. The inter-district system.**

1. The nature and operation of the Gold Settlement Fund which serves as a central daily clearing agency for the Federal reserve banks and their direct-settling branches.
2. The types of items and transactions for which settlement may be effected through the Gold Settlement Fund:
  - (1) Cash items, such as checks and drafts. These may be collected and settled for through three main channels:
    - (a) Member and non-member banks may collect them through their own Federal reserve bank or branch.

- (b) They may send the items direct to the Federal reserve bank or branch in the district of the drawee bank provided the parent Federal reserve bank has granted them permission to do this.
  - (c) Federal reserve banks or branches, in a few instances, may send the items direct to the drawee banks in other districts.
- (2) Collection items, such as maturing notes and bills.
  - (3) Federal reserve transfer and exchange drafts.
  - (4) Telegraphic transfers.
  - (5) Rediscounting among Federal reserve banks.
  - (6) Special transfers by one Federal reserve bank to another for the account of the Treasury Department.
  - (7) Settlements resulting from the redemption of Federal reserve notes.
  - (8) Transfers from the Gold Settlement Fund to the Federal Reserve Agents' Fund and vice versa.
- II. The practices of banks not connected with the Federal Reserve System, directly or indirectly.
- A. Where the banks are in the same city.
1. Where the banks have no clearing house association.
  2. Where such banks are members of a clearing house association.
  3. Where some of the banks are members of the clearing house association while others are not.
- B. Where the banks are not in the same city.
1. The use of correspondents.

### The meaning of clearing and collection

A clear distinction should be drawn between the clearing and collection of checks and other items before proceeding further with the discussion. A check is said to be collected when it reaches the bank on which it is drawn and arrangement is made to remit the proceeds. The actual payment of the debt is designated as collection. Legally, payment may be effected by the charging of the check to the drawer's account.<sup>1</sup> Where by custom or agreement the drawee bank is authorized to credit the collecting bank

<sup>1</sup>T. B. Paton, Jr., *Digest of Legal Opinions* (New York, 1922), p. 263; *Planters' Mercantile Co. v. Armour Packing Co. of Louisiana, Limited*, 69 So. (Miss.) 293 (1915); *Smith Roofing and Contracting Co. v. Mitchell*, 45 S. E. (Ga.) 47 (1903).

and remit or settle at stated periods, the debiting of the check to the drawer and crediting the collecting bank, constitutes payment.<sup>2</sup> Likewise, charging the check to the depositor, marking it "paid" and surrendering it to him constitutes payment.<sup>3</sup> This does not imply, necessarily that the payee will receive his funds. The collecting bank, or any of the intermediate collecting agents, may have failed before payment is finally made, in which case the payee—the depositor of the check with the collecting bank—in some States merely has a legal claim against the collecting agent. In other States the payee has no legal claim against the collecting bank, but must suffer the loss.<sup>4</sup>

The clearing of checks and drafts, as carried on through clearing houses, is merely an offsetting of claims. The representatives of the member banks meet at the clearing house, present their claims to each other and pay or receive payment for the net differences. After the checks and drafts are cleared in this manner, they still remain to be collected; that is, they are taken by messengers to the proper drawee banks where they are examined and if found to be regular in every respect are charged to the drawers' accounts. They are now collected as well as cleared. If found to be irregular or forged, or if payment has been ordered stopped by the drawer, the check or checks will be returned to the depositing bank. Although the checks were cleared they were not collected.

**I. The Federal reserve clearing and collection system. A. The intra-district system. 1. Where banks are in the same town or city, but have no clearing house association**

In towns or cities too small to boast of a clearing house association, banks collect checks and drafts on one another by simply presenting the items over the counter for payment through the media of messengers. This is the practice followed in the main, although there may be variations from city to city. Messengers may be sent frequently during the banking hours and may receive cash upon each presentation of items for payment, or they may

<sup>2</sup>*Pinkney v. Kanawba Valley Bank*, 69 S. E. (W. Va.) 1012 (1910); *John F. Briggs et al., Respondents v. The Central National Bank of the City of New York, Appellant*, 89 N. Y. 182 (1882).

<sup>3</sup>*Winchester Milling Co. v. Bank of Winchester*, 111 S. W. (Tenn.) 248 (1908); *Harmon et al. v. Barber et al.*, 89 S. E. (S. C.) 636 (1916).

<sup>4</sup>See Paton, *op. cit.*, p. 262. The judicial decisions upon nearly all phases of the law of bank collections are in hopeless conflict. There is great need for statutory enactment of a uniform code of rules simplifying and making uniform the law governing collections.

go with the day's collections but once during the day. In some instances arrangements are made by which one-half of the banks supply the messenger service (say) for six months, while the other half supplies it the next six months. Under such arrangements, the messengers, in making presentments of items to the drawee banks, also receive items from them drawn on their own banks. Settlements are made usually at stated intervals, such as once each week, semi-weekly, or at any other period agreed upon. These methods of collection and settlement are adopted by all local banks similarly situated whether or not they happen to be members of the Federal reserve clearing and collection system. Consequently, it will not be necessary to repeat this brief description when later we reach the discussion of the practices of banks similarly situated which have no connection with the Federal reserve clearing and collection system.

When banks in the same city collect their own checks by presentation over the counter, the question of exchange charges, that is charges for remittance, does not arise. Court decisions under common law have established the principle that when such checks are presented for payment at the drawee bank, the bank cannot deduct exchange charges. Exchange is the cost of transmitting funds from one place to another; where the bank is not called upon to transmit the funds, but only pay the amount upon demand, there is no ground for charging exchange. The contract of the bank with its depositor is to pay his checks in money at the counter. It does not include sending the money to a distant payee to whom the depositor has mailed his check.<sup>5</sup>

Until the adoption of the Negotiable Instruments Law by all the States, much confusion prevailed among the courts as to whether the bank's obligations to pay in full and in legal tender for checks presented at its counter extended only to the depositor (the drawer) or to the holder as well. Courts have ruled both ways on the question. The adoption of the Negotiable Instruments Law by all the States apparently has settled the question since that law makes the bank liable to the depositor only, not to the holder.<sup>6</sup> The United States Supreme Court, in harmony with this law, has ruled recently that a bank's

---

<sup>5</sup>Paton, *op. cit.*, pp. 199, 257-259; *In re Brown*, 2 Story, 502, 517 (1843); *Story on Promissory Notes*, Section 489; *Bochin v. Sterling*, 7 Term. Rep., 429, *The English Reports*, Vol. CI (1797); 3 *Kent's Commentaries*, 104, note c; *Senter v. Continental Bank*, 7 Mo. App. 532 (1879); *Fogarties and Stillman v. The State Bank—David A. Ambler v. the Same*, 12 Richardson (S. Car. L. Rep.), 518 (1859). See also pp. 77, 103.

<sup>6</sup>See pp. 1-3 above.

contract is with its depositor only who may consent to have his checks paid by draft, and that this does not violate the rights of the holders who present the checks for payment. In 1921, North Carolina passed a law authorizing State banks to pay for checks presented over their counters, by means of drafts on reserve deposits.<sup>7</sup> The United States Supreme Court, in upholding this statute, insisted that the debt of the bank is solely to the depositor and that the statute does not authorize the bank to discharge its obligation to its depositor by an exchange draft, but merely provides that, unless the depositor in drawing the check specifies on its face to the contrary, he shall be deemed to have assented to payment by such drafts. Further, the Court held that there is nothing in the Federal Constitution which prohibits a depositor from consenting, when he draws a check, that payment may be made by draft, and, as the statute is prospective in its operation, there is no constitutional obstacle to a State's providing that in absence of dissent, consent shall be presumed.<sup>8</sup>

## 2. Where banks in the same city have a clearing house association<sup>9</sup>

Banks in the larger cities find it advantageous to form clearing house associations for the purpose of clearing their checks in the most effective manner known. Today there are 362 clearing house associations in the United States, most of which are unincorporated institutions.<sup>10</sup> The main function of a clearing house association, commonly called a "clearing house," is to provide a simple and effective method of exchanging such items as checks, drafts, bills; and notes, and to facilitate the settlement of balances among the banks.

Most clearing houses have assumed many special functions, all of which are designed to promote the common welfare of all the members. Some of the more important special functions are the extending of loans to the government, fixing uniform rates of interest on deposits, fixing uniform rates of exchange on collections, fixing reserve requirements, examination of member banks, the issue of public statements relative to clearings and conditions of

<sup>7</sup>*Public Laws of North Carolina, 1921, Chap. 20, Sec. 2.* This law was aimed at the presentation of out-of-town, not local, checks by the local banks.

<sup>8</sup>*Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 262 U. S. 649 (1923); *Federal Reserve Bulletin*, Vol. IX (1923), pp. 789-793. See especially pp. 269-276 above.

<sup>9</sup>For a fuller discussion of the clearing house see Chapter X.

<sup>10</sup>In Mississippi banks are prohibited from becoming members of unincorporated clearing house associations. (Code Sec. 3628 et seq.) See also Paton, *op. cit.*, p. 225.

member banks, rendering assistance to members, participation in annual conferences, and the issue of clearing house loan certificates in times of stress.<sup>11</sup>

A clearing house is administered according to its constitution and by-laws. Officers and standing committees are chosen to administer the rules and regulations. Banks are admitted upon terms specified in the constitution, pay certain fees, and support the association through the payment of assessments. Withdrawals, suspension, or expulsion are provided for in the interest of all members. Ordinarily, arrangements are made by which qualified non-member banks may clear through members by conforming to clearing house regulations and by paying certain fees.

The most important departments which may be or have been found in clearing houses are: (1) The city department, (2) the city collection department, (3) the country department, and (4) the examination department. The city department is the one which conducts the daily exchange of the city items among the members and clearing non-members. The city collection department undertakes to collect items for the members which are drawn on non-member banks in the same city. The country department has disappeared almost altogether. Its purpose was to collect out-of-town checks for members, but the coming of the Federal reserve banks has rendered such a department unnecessary. The examination department, as its name implies, examines the member banks with the idea of promoting sound practices and the general safety of all the members. It supplements—does not replace—the examinations made by State and national bank examiners. Since we are concerned with the clearing and collection of checks among banks within the city which are members of the clearing house, our chief interest is in the city department. The description of the city department of the clearing house will follow the practice found in the New York City Clearing House. What it does is fairly typical of what is done in other clearing houses.

All cash items, with certain exceptions, are eligible for clearing. The items generally include checks, clean drafts and bills of exchange, all certified items, notes and acceptances which are due and which are drawn upon or payable at clearing house banks. Each clearing house specifies the items eligible for clearing and there is no uniformity. In New York, certain items to be returned for indorsement or because of informality may be returned

<sup>11</sup>See Chap. V for a discussion of the special functions of clearing houses.

through the exchanges on the following morning. Items which are to be returned because they are not good or because they are missent must be returned by messenger the same day to the bank which sent them through the clearing house. Documentary instruments are not proper items for exchanges. Such items are collected by messenger.

In New York, there are three clearing sessions, one at nine o'clock, one at ten o'clock, and the other at three o'clock. The nine o'clock session is a preliminary session to permit the banks to meet together and exchange whatever items they may have been able to prepare for clearing at that time in order to relieve the congestion at the ten o'clock session, which is the principal session. No settlement is made until the ten o'clock clearing. At the three o'clock session in the afternoon certain irregular and missent items up to a certain size may be returned to the banks which presented them.

Banks which have items drawn on other members or clearing members of the association send these items by messenger to the clearing house at the proper time. These items are made up in bundles according to the banks on which drawn. Two clerks or sets of clerks represent each bank at the clearing house. One is the delivery clerk who delivers the checks to the representatives of the banks on which they are drawn; the other is the settling clerk who receives the items drawn on his bank presented by the delivery clerks of the other banks. Each settling clerk takes his place at the proper hour in the cage assigned to his bank and is ready to receive the bundles of checks from the other delivery clerks. Each delivery clerk at the same time places himself in front of the cage occupied by the settling clerk of his bank with his bundles of checks ready for the delivery. At a signal given by the manager or his assistant, the delivery clerks march by the different cages, deliver their bundles of checks, secure receipts for their deliveries, and return to their original starting points. There they gather up the bundles received by their respective settlement clerks and return to their banks where the items are examined and charged to the proper accounts. The settling clerks remain to effect the final accounting. The process of making the exchange does not occupy more than five or ten minutes. The settling clerks complete their statements and a final proof is struck by the proof clerk of the clearing house in at least three-quarters of an hour. Banks which have a debit balance expect to make payment to the clearing house; those with a credit balance look to the clearing



house for payment. After settlement has been made the clearing house will have paid out all it received.

Since the establishment of the Federal Reserve System, many of the clearing house associations have arranged to make the final settlements through the Federal reserve banks. In New York, for example, all members of the clearing house association carry balances with the Federal Reserve Bank of New York. All members of the Federal Reserve System are required by law to keep their reserves with their respective Federal reserve banks; other members of the clearing house association are required by the clearing house to carry balances with the Federal Reserve Bank of New York for the purpose of settling clearing house balances. Consequently, settlement is effected with the maximum speed, convenience, and economy, through the books of the Federal reserve bank. At the close of the ten o'clock session the clearing house manager sends to the Federal reserve bank a certified list of the day's balances in accordance with which the Federal reserve bank debits the accounts of all clearing house debtors and credits the accounts of all the creditor banks for the amount of their respective balances. Several clearing house associations have arranged to make settlements through their respective reserve banks regardless of the distance they may be from the banks. When at a distance, the manager certifies by telegraph the balances due from and due to the clearing banks. When the clearing houses are located in cities in which a branch of the Federal reserve bank is located, settlements are made through the branch bank. When clearing houses do not settle through the Federal reserve bank, settlements may be made by the payment of actual money, by the use of clearing house certificates, or clearing house loan certificates, by borrowing and loaning balances, by use of the manager's check, or by means of drafts on certain financial centers. The last is probably the most common device used by clearing houses today. According to this plan debtor banks pay creditor banks by drawing drafts on some financial center like New York. This method is common among the small clearing houses. The ultimate settlement of balances in such cases is among the correspondent banks in New York which is by book entries at the Federal Reserve Bank of New York.<sup>12</sup>

Collection items are not sent through the clearing house of New York, but are handled by the city collection departments of

---

<sup>12</sup>See pp. 402-406 above.

the member banks.<sup>13</sup> These matured notes and drafts are sent out by messengers who secure payment from the proper banks. Certain large cash items are collected in the same manner in order to save the loss of interest that might result if the items were sent through the clearing house. The collection work conducted by large banks in New York City is sometimes divided among the bank's city collection department, the note teller's department, and the coupon department. The primary function of the note teller's department is to collect notes and acceptances just as it is the prime function of the coupon collection department to collect matured bonds and coupons. The city collection and coupon collection departments are really offshoots of the note teller's department. The degree to which the collection work is divided among different departments of a bank is determined by the size of the bank.

### **3. Where some banks in the same city are members of the clearing house association while others are not**

The function of the city collection department of the clearing house is to connect the member banks of the clearing house association with banks and other institutions in the same city which are not members. In New York City this department collects checks and clean drafts on banks, financial houses, insurance, steamship, railroad, mercantile, and other companies south of 59th street, which desire to have checks and drafts drawn on them presented at once by this department, rather than be inconvenienced by having runners from each member of the clearing house come to them at various hours during the day with checks and drafts. The city collection department of the clearing house thus delivers at one time to the messengers from each concern on the list all the items on it which all the clearing house members might choose to collect in this manner. In the same manner each drawee concern can pay all by means of one check or cash payment to the city collection department. Messengers from the outside institutions which are listed, appear at the clearing house at ten o'clock to receive the items drawn on them. These institutions agree to pay by certified check to the order of the clearing house by 1:30 o'clock. Items to be returned are brought at the same time and then delivered to the clearing house members before three o'clock. The clearing house settles with all members on the following day.

The transactions just described are one-way transactions

---

<sup>13</sup>See Chap. XI for a fuller discussion, especially pp. 439-448.

primarily for the benefit of the members of the clearing house. If the outside concerns which are listed wish to collect on the member banks they must use messengers. The use of this department by clearing house members is entirely optional, although practically all of them choose to collect their items on these concerns in this manner.

There are at least three other means that may be used to collect city items on banks outside the clearing house. The banks may send messengers direct to the drawee institutions and this is usually done with large items. A second method is to employ the Federal clearing division of the Federal reserve bank. This division is quite similar to the city collection department of the clearing house, although it covers a much larger territory—Manhattan, Bronx, and Brooklyn. This division does much to eliminate a great network of messengers and offers to member banks (of the Federal reserve bank) in Greater New York a convenient means of converting their checks and drafts into Federal reserve funds without delay. Banks and other important institutions which wish to have checks and clean bills on them presented to them in bulk are placed on the list according to routes. Items on these concerns are delivered by member banks to this division and then sorted into batches according to the institutions on the list which totals about 116. Those presented before nine o'clock are credited the same day; those coming later are deferred for one day. Each morning messengers from the concerns on the list are sent to the Federal reserve bank where the items which have been sorted into batches are delivered to them. Remittance is made before three o'clock in Federal reserve funds which are credited at once to the accounts of the member banks. It is to be observed that when items are presented to this division before nine o'clock one day's time is saved as compared with the time required for collecting such items through the city collection department of the clearing house where settlement is deferred one day.<sup>14</sup>

The third method which may be employed in New York City is to use the city collection department of the Federal reserve bank. This department handles only hand-presented items and is designed to collect items through messengers from the Federal reserve bank on any bank or concern that is not a member of the New York Clearing House, the city collection department of the clearing house, or the Federal clearing division of the Federal reserve bank. Messengers are sent anywhere in Greater New York.

---

<sup>14</sup>See Chap. X, p. 410 above.

The items are usually left with the payee banks or other houses and the messengers return for remittances later in the day. Payment is made, ordinarily, by certified checks.

**4. Where banks are not in the same city but are within the same Federal reserve district**

The most important problems in connection with the collection of checks arise when banks endeavor to convert checks on out-of-town banks into acceptable funds. It is customary for banks to give immediate credit to the depositor of such checks even though some time must elapse before they can convert the checks into actual funds. The chief problem of the banks is to convert such checks into funds with the least delay and expense possible. The fact that banks give immediate credit for checks deposited on out-of-town banks, while they, themselves, must wait to secure the funds, justifies them in making a charge for collecting out-of-town checks. This charge is in the nature of an interest charge, for the bank is really making a loan to the depositor. These collection charges must not be confused with remittance charges which are sometimes made by banks in remitting. The par collection controversy is concerned with remittance charges, not collection charges. Most clearing houses require their members to make certain charges for collecting out-of-town checks. Failure to do so in New York City subjects the member bank to the liability of a fine or expulsion from the clearing house. The Federal Reserve Act does not prohibit the exaction of collection charges. If a customer takes out-of-town checks to his bank and asks that his account be not credited until the checks are collected, the bank is not justified in exacting a collection charge. The clearing-house rules may require it, however.

Banks within the same Federal reserve district which are connected with the Federal reserve clearing and collection system directly or indirectly may be divided into three classes: (a) Member banks of the Federal Reserve System, (b) non-member clearing banks which carry accounts with the Federal reserve bank or branch of their district in order to avail themselves of the privilege of collecting their out-of-town checks through the Federal reserve bank or branch, and (c) the non-member banks which agree to remit at par for checks presented to them by the Federal reserve bank or branch of that district, but which do not carry deposits with the Federal reserve bank or branch or seek to use it as a direct medium through which to collect their out-of-town

checks. Such banks frequently use the Federal reserve clearing facilities indirectly by collecting through some member bank. Most of the banks on the so-called par list probably do this. The first two classes of banks may collect their out-of-town checks in any one or all of three ways: (1) Through the Federal reserve bank or its branches, (2) directly, with settlement through their Federal reserve bank or branch, and (3) through correspondents. Banks in class (c) collect their out-of-town checks through correspondents only, although they remit at par to the Federal reserve bank or branch for checks presented to them through those channels. These correspondents may or may not be members of the Federal reserve clearing system.

Each Federal reserve bank serves as a clearing house for all the banks in its district provided the banks meet certain legal requirements and wish to use the Federal reserve bank as a collection agent. No bank in any district is required by law to use the Federal reserve bank or branch as a collection agent, but all member banks in the Federal Reserve System are required to remit at par for all checks presented to them by their respective Federal reserve banks. This is also true for non-member clearing banks and all banks on the par list. In this sense only is the Federal reserve clearing and collection system compulsory. Any bank in this country may collect its checks in any method it sees fit to adopt.

All member banks are required to carry their lawful reserves with their respective Federal reserve banks or designated branches and for this reason it is to their advantage to use the Federal reserve bank or branch as a collecting agent. If other agents are used deposits need to be scattered among several important banks, which is expensive, indeed, since the deposits cannot be counted as lawful reserve and since they must be carried in several banks rather than in one. It also involves less effort and expense to send all items for collection to one center rather than to several centers, especially since the Federal reserve banks assume virtually all the expense involved. The Federal reserve banks assume all cost of postage, expressage, insurance incident to shipments of currency to and from member banks, not including silver and silver coin, also the cost of telegrams between the Federal reserve banks and member banks in connection with currency exchange and transfers, and deposit transactions. These advantages are but a few of the many that banks receive when they become members of the Federal reserve clearing system. They secure the

advantages of the use of transfer and exchange drafts, the use of the telegraphic transfer system where again the Federal reserve banks absorb the expense, and they may use the Federal reserve banks as media through which to collect their maturing bills and notes.<sup>15</sup> Non-member clearing banks secure the same advantages as members by becoming clearing members. Non-member banks on the par list secure their greatest advantage through the fact that their customers' checks circulate widely and at par. This means that such banks can build up their deposits more rapidly and compete more effectively with other banks which are members of the par system.

Non-member clearing banks and trust companies which agree to remit at par for all checks drawn upon them and presented to them by the Federal reserve bank may use the Federal reserve bank as a collecting agent provided they maintain balances with the Federal reserve bank sufficient to offset items in transit held for their account by the Federal reserve bank. The number of non-member clearing banks is not large. These banks seem to have found it more convenient to use the Federal reserve collection system through their member bank correspondents. Some of the non-par banks which still insist upon charging exchange for remittance, adopt the parasitical position of attempting to collect checks through correspondents which are members of the Federal reserve system. Consequently, it is probably true to say that there are few, if any, banks which are not indirectly, if not directly, connected with the Federal reserve clearing system.

#### **The time schedule in intra-district collections**

When a member or non-member clearing bank sends cash items to its Federal reserve bank to be collected, credit is given to the sending bank according to a time schedule based upon the average time required by the Federal reserve bank to send the items to the drawee bank and receive a remittance from that bank. The task of devising a time schedule based upon the actual mail time to and from every city or village on which checks may be drawn is almost insurmountable and such a schedule would be too detailed, lengthy, and complicated for practical use. Simplicity is secured by using average time; that is, all the towns in a State may be placed in the same division of the schedule, although it may require two days to send checks to and receive a reply from some of the banks, while others may be reached and heard from only in three or more days.

---

<sup>15</sup>See Chap. VI for a fuller discussion of these advantages.

If the average is really a good one and banks remit at once, the Federal reserve bank should be carrying little, if any, float. As a matter of fact, however, member banks that can be reached in a shorter time than that given in the schedule frequently are not required to remit until the scheduled time has elapsed. Two-day banks, for example, would not remit or reply in less than three days, if they are in the three-day zone. This practice forces the Federal reserve bank to carry some float as the schedule really ceases to be one based upon average time. Those banks on the three-day schedule which cannot remit or reply within three days do not have their accounts charged at the Federal reserve bank until they are actually heard from, or more accurately, until a sufficient amount of time has elapsed for the Federal reserve bank to have heard from them. Thus, it is to be observed that the published time schedules are for the benefit of sending banks only and are for the purpose of indicating to them when the checks sent to the Federal reserve bank for collection are converted, presumably, into reserve funds.

The time schedule according to which drawee banks have their accounts charged is based upon the actual mail time involved in sending letters to such banks, plus a reasonable amount of time for them to examine the items and to prepare a reply acknowledging receipt or, if necessary, to enclose a remittance in time to catch a convenient train, and then time for the letter to reach the Federal reserve bank. These schedules, which are not published, are kept up to date, and are the basis for the average-time schedules which are published for the benefit of the public and the sending banks. When a Federal reserve bank dispatches letters to the drawee banks it stamps the date on which the letter is sent and another date indicating the time at which a charge will be made against the reserve account of the member bank to which the letter is addressed. An acknowledgment from the drawee bank should be received by the Federal reserve bank at that charge date, but should trains be delayed or any other circumstance intervene to cause delay, the account of the drawee bank is charged on the date specified. This permits the drawee bank to know how its reserve account stands at all times.<sup>16</sup>

When banks send checks to their Federal reserve bank or branch for collection they are required to assort them into groups

---

<sup>16</sup>No description will be given here of the work of the transit departments in a member bank or a Federal reserve bank. For such a description, see Chap. XI.

in accordance with the time schedule.<sup>17</sup> Banks are supposed to prepare a separate letter for each group, but in the case of a small member bank sending a small number of checks, one letter may be prepared embracing all checks. Checks received unassorted are made available for the longest period required to collect any item inclosed.<sup>18</sup>

#### **Federal reserve banks present items direct to the drawee banks**

Every bank sending checks or other cash items to the Federal Reserve Bank of New York or to another Federal reserve bank direct, for the account of the Federal Reserve Bank of New York, is assumed to have agreed that in receiving such items the Federal reserve banks act only as the collecting agents of the sending bank; that the Federal reserve banks are responsible only for due diligence and care in forwarding and presenting such items; that the Federal reserve banks are authorized to present or send such items, for payment in cash or bank draft, direct to the bank on which they are drawn, or at their discretion to forward them to another agent with authority to present or send them, for payment in cash or bank draft, direct to the bank on which they are drawn; and that the Federal reserve banks are authorized to charge back the amount of any items (whether or not the items themselves can be returned) for which payment either in cash or in proceeds of the bank draft, has not actually been received.

When checks are sent through the mails direct to the drawee banks, the drawee banks, legally, become agents collecting upon themselves. It long has been an established principle in law that no firm, bank, corporation, or individual can be deemed a suitable agent to enforce in behalf of another a claim against itself. A suitable agent, from the nature of the case, has been held to be some other than the person who is to make the payment.<sup>19</sup> Legally, then, a bank cannot send checks direct to the banks on which drawn without assuming the liabilities attached; they must send the items to another bank or agent in the same town as the drawee bank and let the agent present them over the counter for

<sup>17</sup>The time schedule as used in the New York district will be found in Chap. VI.

<sup>18</sup>*Some Collection Problems*, Letter No. 15, Federal Reserve Bank of Richmond (March, 1924), p. 6. Hereafter cited as *Letter No. 15*. See also pp. 471-475 above.

<sup>19</sup>See Chap. IV, especially pp. 103-105. See also the following cases: *Merchants' National Bank of Philadelphia v. Goodman et al.*, 109 Pa. St. 428 (1885); *Drovers' National Bank v. Anglo-American Packing and Provision Company*, 117 Ill. 107, 108 (1886).



cash. The fact that member and non-member clearing banks permit the Federal reserve banks to send the items direct without incurring liability is thus an important change in collection procedure. It makes possible greater speed in collection and simplifies cases where it might be inconvenient for the Federal reserve bank to find suitable collecting agents.

### **Deferred debits and credits**

One of the outstanding characteristics of the Federal reserve collection system is the use of the principle of deferred debits and credits. Prior to the introduction of the Federal Reserve System it was customary for sending banks to count as reserve at once checks mailed for collection, leaving it to the collecting agent to carry the float. Such practices resulted in unreal or paper reserves. Banks sending items for collection under the Federal reserve clearing and collection system do not have their deposits credited with the amounts represented by the checks until collected. Nor do drawee banks have their deposits debited until they have received the items drawn on them and have had time to acknowledge receipt or make a remittance. It might seem that the deferred credits should equal the deferred debits, but as we have pointed out above, there are virtually two sets of time schedules in use, one for the sending banks, which is published, and one for the drawee banks, which is not published. Because of the discrepancies in the two schedules, as well as the fact that items other than checks and drafts are included in uncollected items, deferred credits and debits are not exactly equal. Consequently, when the deferred debits exceed the deferred credits, the Federal reserve bank may be carrying a float.

When member banks and non-member clearing banks send their cash items to the Federal reserve bank for collection, the items are sent in separate letters according to whether credit is to be given immediately, in one day, two days, three days, or any number of days up to nine days. When these letters reach the transit department of the Federal reserve bank, credit slips are made out for the amounts that are to become available on certain dates. These amounts are credited to the deferred credits account on the general ledger of the Federal reserve bank and remain in that account until the maturity date indicated on the slips, at which time (with all other credits maturing on the same day) they are

charged to the deferred credit account, and credited to the member banks' reserve account.<sup>20</sup>

After the checks have passed through the transit department, they are entered in letters and addressed to the drawee banks. Items payable by the Federal reserve bank or checks payable in the same city are sent through appropriate channels and charged to proper accounts on the same date or collected through the local clearing house in which the Federal reserve bank is a member. The outgoing letters are not charged to the accounts of the drawee banks, but to deferred debit accounts, in which accounts they remain until their maturity dates. All letters maturing on a certain date are credited back to the deferred debit accounts and charged to the accounts of the member banks. Thus, all items in the process of collection may be at once deferred credit items and deferred debit items.

It is unnecessary to devote any additional space to methods used by non-member clearing banks. The procedure is identical with that just described for member banks. But non-member par banks which carry no accounts with Federal reserve banks present a different problem. They do not endeavor to use the Federal reserve bank as a collecting agent, although the Federal reserve banks do collect checks on them and the problem is to secure satisfactory funds in payment, as they have no accounts which can be charged.

#### **The problem of collecting checks on non-member par banks**

Collection letters sent by a Federal reserve bank to non-member par banks which do not carry accounts with the Federal reserve bank call for remittance rather than a mere acknowledgment of receipt with authority to charge the account of the drawee bank, for the simple reason that there is no account to be charged. Thus, payment is obtained by the Federal reserve bank only at such time as a remittance is received, and if in the form of a draft, only after the draft is collected. As a result, such non-member par banks are required to enter into an agreement with the Federal reserve bank to remit at par upon the day of receipt for all items drawn upon them and forwarded to them by the Federal reserve bank. They must agree to remit in funds acceptable to the Federal reserve bank or make an immediate shipment of currency at the expense of the Federal reserve bank. Finally, they must agree that shipments of currency will be made in accord-

---

<sup>20</sup>Letter No. 15, p. 8.

ance with the regulations of the Federal reserve bank, which regulations are framed with a view of obtaining adequate insurance protection at a minimum cost of transportation and insurance on the currency.<sup>21</sup>

Some Federal reserve banks are confronted with a problem in attempting to secure remittances in satisfactory funds from some of these par banks. This is due to the fact that some of these banks do not have correspondents in Federal reserve or branch bank cities. In remitting, these banks draw drafts upon their deposits in certain other cities, and this compels the Federal reserve banks to wait for their funds until the drafts can be collected. This may involve considerable time. Such a problem cannot arise where the par banks carry funds in Federal reserve or branch bank cities. Virtually, all banks do this in the Boston, New York, and Philadelphia districts, and consequently these Federal reserve banks are not confronted with the problem for the reason that par banks in those districts remit by means of checks drawn upon their correspondents in those cities, which checks are collectible immediately upon receipt by the Federal reserve banks.

The case is not so simple in some of the other Federal reserve districts, as, for example, in the fifth district (Richmond). In that district some of the non-member par banks do not carry deposits in Richmond and the Federal Reserve Bank of Richmond has found it necessary to accept remittances of an undesirable nature. For many years banks located in all parts of the district have maintained accounts with correspondents in New York, Philadelphia, or Baltimore, and the Federal Reserve Bank of Richmond agreed to accept drafts drawn upon these correspondents from its non-member par banks, although in each case one day is required after receipt for the collection of these drafts. This means that where checks upon these Virginia banks are accepted for two or three days' deferred credit and where returns could not be expected in less than two or three days, an additional day must be added to the deferred debits because remittance is in drafts which require an additional day to collect. This results in the Federal Reserve Bank of Richmond carrying an additional day's float.

There are other banks in the fifth district, however, which are unable to remit in drafts collectible in one day, as they have no accounts in important centers. The Federal Reserve Bank of Richmond was anxious to make all the concessions possible to

---

<sup>21</sup>Letter No. 15, p. 9.

these banks in order to make it inviting for them to become a part of the Federal reserve collection system, but felt that it should not accept drafts which could not be collected in at least one day's time. To accept drafts requiring two or three days to collect would force a considerable float on the Federal reserve bank. At the same time the Federal reserve bank realized that it would constitute a real burden to some of these banks if they were required to carry deposits in any of the important financial centers, as their business was primarily local in nature.

### **The Immediate Credit Symbol System in the fifth Federal reserve district**

The Federal Reserve Bank of Richmond has devised a plan which it is offering to these non-member par banks that makes it unnecessary for the Federal reserve bank to accept drafts requiring more than one day to collect, and which is quite advantageous to the non-member par banks.<sup>22</sup> This new plan worked out by the Federal Reserve Bank of Richmond is called the Immediate Credit Symbol System. The object of the plan is to place member banks not located in Federal reserve or branch bank cities on an equality, so far as possible, with member banks located in such cities with respect to the availability of checks drawn upon those member banks by their customers. Where their customers are non-member par banks, the purpose of the system is to enable them to furnish

<sup>22</sup>Described in detail in *Some Collection Problems (Continued)*, Letter No. 16, Federal Reserve Bank of Richmond (April, 1924). Hereafter cited as *Letter No. 16*. See also *Letter No. 15* for a description of the problem facing the Federal Reserve Bank of Richmond.

An interesting experiment was tried in the fifth district by several member banks in an effort to build up their bank deposits and at the same time provide the non-member par banks with an acceptable means of settlement for checks drawn on them. In order to secure the deposits of non-member par banks, these enterprising member banks made a proposal to the Federal Reserve Bank of Richmond by which they agreed to have all checks drawn on them, and sent to the Federal Reserve Bank of Richmond for collection, charged to their accounts on the day the checks were received and dispatched by the Federal Reserve Bank rather than on the second day after the receipt, as would have been the case had the usual custom been followed. As a result, every check drawn upon these banks was receivable for immediate credit by the Federal Reserve Bank of Richmond, and consequently, checks drawn upon them by their non-member bank correspondents were regarded as acceptable funds when used in remitting for checks sent to the non-member par banks by the Federal Reserve Bank of Richmond. This plan was found advantageous and profitable to the member banks who participated in it, even though they paid a heavy price for the advantage in providing funds at the Federal reserve bank to pay all checks drawn upon them and forwarded through the Federal reserve bank two days sooner than payment would have been required under ordinary circumstances. This plan continued in successful operation until the Federal Reserve Bank of Richmond worked out its Immediate Credit Symbol System.

satisfactory funds without the necessity of changing their bank connections.

The system involves the use of a symbol copyrighted and controlled by the Federal Reserve Board and the Federal Reserve Bank of Richmond under rules and regulations which are embodied in two formal contracts, one to be used between the member bank and the Federal reserve bank, and the other between the member bank and its customers, to whom the privilege of using the Immediate Credit Symbol upon checks drawn by them is granted. Briefly, the Federal reserve bank, according to the terms of the contract with the member bank, and with the consent of the Federal Reserve Board, may grant permission to the member bank to authorize any of its depositors to use the Immediate Credit Symbol on the face of checks drawn by such depositors upon the member bank, provided certain definite requirements are observed. The member bank is required to furnish the Federal reserve bank with a list of such depositors. All immediate credit checks must be sent to the Federal reserve bank in properly written letters showing plainly that they are intended for immediate credit. The Federal reserve bank gives credit to the bank for whose account they are received subject to final payment by the member bank according to the following schedule: If the reserve account of the member bank is kept with the Federal Reserve Bank of Richmond, immediate credit checks upon the member received at Richmond are credited upon the day of receipt; those received by a branch are credited on the next succeeding business day. If the reserve account is kept with the branch of the Federal reserve bank, credit is given on the day such checks are received at the branch, while, for those received in Richmond, credit is given on the next succeeding business day. As soon as the checks are credited, as described above, they are charged to the reserve account of the member bank.

If the checks are not forwarded in properly written letters, they are credited as checks intended for deferred credit according to the published schedule of the Federal reserve bank, but are charged to the member bank as if they had been received in properly written letters and credited as mentioned above.<sup>23</sup> The agreement also binds the member bank to keep on deposit with the Federal reserve bank an excess of reserve sufficient to cover all such checks received, so that its required reserve, at all times, is kept

---

<sup>23</sup>The reason for this practice is the fact that in the transit departments of the Federal reserve banks, credits are made from incoming *letters*, while charges are made from outgoing *items*.

intact. Otherwise penalties for deficient reserves become effective. The agreement can be terminated by either party under specified conditions. Member banks granting the privilege to their depositors of using the Immediate Credit Symbol upon their checks, are advised to require each customer to inform them by mail each day of all immediate credit checks drawn upon them that day in order to enable the member banks to determine in advance the approximate amounts of the charges which will be made against them by the Federal reserve bank on account of these checks.

The Federal Reserve Bank of Richmond believes that a country member bank can use this system just as effectively and economically as a reserve city member bank located in Richmond can use the ordinary system. A member bank in Richmond will solicit outside bank deposits and offer to the outside banks the strong argument that checks upon the Richmond bank will be acceptable funds because such checks are acceptable for immediate credit by the Federal Reserve Bank of Richmond. The Richmond member bank is required to maintain with the Federal reserve bank a reserve of 10 per cent. against its demand deposits.<sup>24</sup> A country member bank, for example, a member bank in Norfolk, Va., can make the same offer to the remote non-member par bank only by using the Immediate Credit Symbol System. The Norfolk bank then must maintain with the Federal Reserve Bank of Richmond a surplus reserve sufficient to cover all of the immediate credit checks drawn upon it. To offset this excess balance the Norfolk bank is required to maintain a reserve of but 7 per cent. against its demand deposits as compared with 10 per cent. required of the Richmond bank. Briefly, and all things considered, the Federal Reserve Bank of Richmond concludes, that by the use of the Immediate Credit Symbol System, the member banks outside of Richmond and the branch bank city, Baltimore, and consequently their depository non-member par banks, are placed on a level equal to, if not superior to, the member banks in Richmond and Baltimore.<sup>25</sup>

#### **Federal reserve bank branches as collecting agents**

Intra-district clearings and collections may be effected through branches of the Federal reserve banks in much the same manner as through the Federal reserve banks. All branches act as clearing centers and collection media to some extent, but the powers,

---

<sup>24</sup>All cities in which Federal reserve branches are located are classed as reserve cities also.

<sup>25</sup>See *Letter No. 10, passim.*

duties, and functions of Federal reserve branches divide them into two classes which require a word of explanation.

In one class, which, for convenience, will be designated as Class I, are those branches which render practically the same services for, and have the same direct relations with, member banks in the territory assigned them, as do the parent banks in other parts of the districts. These banks have certain territory and capital assigned to them. They carry the reserves of those member and non-member clearing banks assigned to them. The correspondence of the member banks is with these branches rather than with the parent bank. However, any such member bank, under arrangements to be approved by the head office, may remit to or draw upon the head office or other branches for account of its respective branch. These branches rediscount for member banks of the branch district, but may not engage in open market transactions except under orders from and for the account of the head office.

It must be understood, however, that no branch of a Federal reserve bank has a separate corporate entity and its operations are in effect the operations of the the Federal reserve bank. Reserve deposits carried by member banks upon the books of the branch are actual reserve carried with the Federal reserve bank, and where such deposits are made in a branch by an agent of the government and are charged to that branch on the books of the Treasurer of the United States, the Board understands that this is done merely as a matter of bookkeeping convenience. The deposit liability rests with the Federal reserve bank.<sup>26</sup>

These branches are authorized to clear and collect checks for member and non-member banks in the territory assigned to them or in other parts of the district on the same plan followed by the head office.<sup>27</sup> They participate in the daily clearing through the Gold Settlement Fund maintained by the Federal Reserve Board at Washington. As a result, these branches often are called direct-settling branches. What has been said for checks and drafts is equally true for collection items.<sup>28</sup>

The second type of Federal reserve branch which will be designated as Class II, is characterized by the fact that no distinct ter-

<sup>26</sup>*Federal Reserve Bulletin*, Vol. IV (1918), p. 256; *Eighth Annual Report of the Federal Reserve Board* (1921), p. 80.

<sup>27</sup>The by-laws for this type of branch are given in the *Federal Reserve Bulletin*, Vol. III (1917), p. 587.

<sup>28</sup>All branches are direct-settling branches except those at Buffalo, Nashville, Birmingham, Jacksonville, Oklahoma City, Cincinnati, and Pittsburgh.

ritory or theoretical capital is assigned to it. No member bank in any specific territory is required to deal with it. Such branches are established upon the theory that they are offices of the Federal reserve bank of the district, opened for the convenience of such member banks as may desire to use them. These branches do not rediscount for member banks, but may receive applications for rediscount and transmit them to the head office with their recommendations. They confine their operations largely to the clearing and collection of checks, and to supplying currency, both paper and coin, to member banks. No reserve is assigned to these branches. The balance appearing to the credit of a member bank on the books of the head office constitutes its reserve, but member banks depositing with the branch may charge the Federal reserve bank with all items on the day of deposit unless drawn against banks for which allowance is provided in the collection schedule, in which case such banks may obtain credit at the expiration of such time allowance.<sup>29</sup>

These branches make daily reports to the head office showing (a) amounts received on deposit for credit with the head office, (b) checks paid for the head office, (c) discounts recommended, and (d) items received for collection and forwarded, and for which credit should be given by the head office at the expiration of the time allowed in the collection schedule.<sup>30</sup> A collection zone is allotted to each branch of this type, and checks drawn upon banks located in this zone may be sent to the branch by any member bank in order to save time in transit and to reduce the float. The resulting credit is reported by the branch to the Federal reserve bank. This type of branch does not settle directly through the Gold Settlement Fund.

According to the by-laws, this type of branch is authorized to receive from any member bank within the collection zone assigned to it, and from the United States, for credit with the head office, deposits of current funds in lawful money, national bank notes,

---

<sup>29</sup>Member banks may likewise take credit for the proceeds of discounts recommended by the local board of the branch on the date that the local board or its discount committee recommends the granting of such discounts, provided, the notes, drafts, or bills of exchange offered for rediscount, or the note of the applying bank secured by eligible collateral, have been actually received by the branch. The head office reserves the right to return through the branch any items which may be determined to be ineligible or which, for any reason the head office is unwilling to accept, in which case items so returned will be charged to the reserve account of the bank receiving credit therefor.

<sup>30</sup>By-laws for this type of branch may be consulted in the *Federal Reserve Bulletin*, Vol. III (1917), pp. 935-936. See also *Loc. cit.*, p. 923 for a discussion of this type of branch.



Federal reserve notes or checks and drafts payable upon presentation, and for collection, maturing notes and bills. It is authorized to pay checks drawn against the head office by member banks within its collection zone out of funds deposited with the branch by the head office for that purpose and to act as a clearing house for member and non-member clearing banks within its zone. It may receive from any member bank or Federal reserve bank for collection and remittance, or for collection and credit with the head office, or with any other Federal reserve bank through the head office, items drawn against any bank within its collection zone. Finally, it is authorized to receive from any non-member

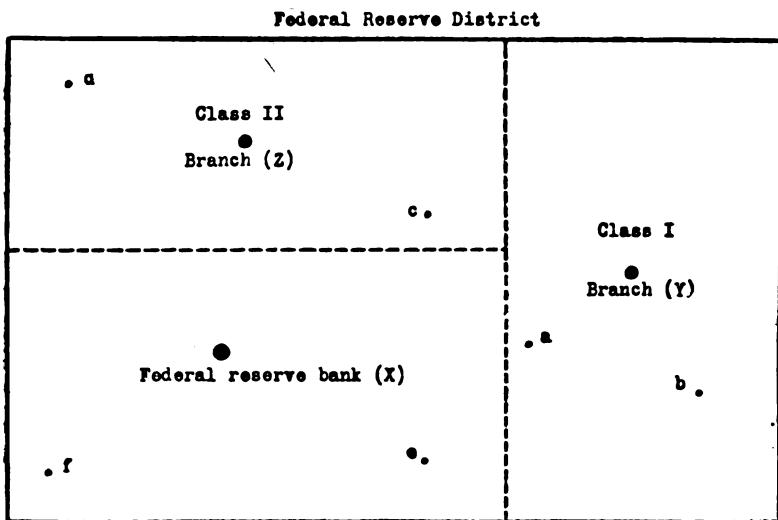


FIGURE 5.

bank or trust company within its collection zone solely for the purpose of exchange or collection, deposits of current funds in lawful money, national bank notes, Federal reserve notes, checks and drafts, payable upon presentation, or maturing notes and bills, provided, such non-member bank or trust company maintains with the head office a balance sufficient to offset the items in transit held for its account by the head office and its branches.

#### Intra-district clearing and collection through Federal reserve bank branches

Bearing in mind that a Federal reserve bank may have either or both types of branches, it will be profitable at this time to ex-

amine the method of clearing and collection employed within the limits of a district when the branches are used as collecting agents. In order to make the description complete, we will assume a district like that of Atlanta which includes both types of branches. The accompanying diagram will simplify the explanation. (See Figure 5.)

First of all, it should be understood that each branch has its own time schedule covering the banks in its district. The schedule is worked out in the same manner as is the schedule of the Federal reserve bank. All banks within a branch district receive credit according to the time schedule of their branch bank. For example, if bank (a) wishes to collect checks on bank (b) in the same branch district it will collect through branch (Y) and the funds will become available according to the time schedule of (Y). If it requires one day for a cash letter from bank (a) to reach the branch (Y), one day for the branch to reach bank (b) and one day for bank (b) to remit or acknowledge receipt, bank (b) will be in the two-day zone and bank (a) will receive credit two days after the branch receives the cash letter from bank (a) or three days after it sends the cash letter to the branch. The same principle obtains in the collection district of the Federal reserve bank (X) or branch (Z).

Ordinarily, banks which use the Federal reserve clearing and collection system are not permitted to send items direct to drawee banks. The principal exception in the second Federal reserve district is found in the case of county collections where all items are "overnight" items, that is, they are sent direct to drawee banks within the same county, notice being sent at the same time to the Federal Reserve Bank of New York which gives credit the next day to the sending banks and debits the accounts of the drawee banks.

Since branch (Y) carries the accounts of the member and non-member clearing banks assigned to it, settlement is made on its books independently of the parent Federal reserve bank. The procedure in Class I or direct-settling branches is the same as that in the collection district of the parent Federal reserve bank.

In a Class II district, which does not carry the accounts of the member and non-member clearing banks and does not settle directly through the Gold Settlement Fund, the procedure is the same as that described for the direct-settling branch or the parent bank except that settlement is made on the books of the Federal reserve bank (X). Branch (Z) has its time schedule according to

which banks assigned to it have their accounts debited or credited on the books of the Federal reserve bank. This is done after the Federal reserve bank receives the daily telegram of instructions from the branch. Such telegrams are followed by statements which are received by the parent bank on the following day.

If bank (c) in Class II territory wishes to collect on bank (b) in Class I territory it may secure permission from its branch (Z) to send the items to branch (Y). Ordinarily, a special time schedule will be worked out for such banks as (c) and will be based upon that of branch (Y) plus the time from bank (c) to branch (Y). The time that must elapse before credit is received will be the time from the bank (c) to branch (Y) plus the time both ways from branch (Y) to bank (b). The time saved would be about twice that from bank (c) to branch (Z). If no special time schedule is provided for bank (c), then the schedule of branch (Z) is used, in which case the time saved is that from bank (c) to the branch (Z). Settlement is made directly between branch (Y) and the Federal reserve bank (X) since branch (Z) does not carry the deposits of its member or non-member clearing banks. If bank (d) in Class II territory were collecting on bank (b) in Class I territory it would send the items to branch (Z) which would send them to branch (Y). Bank (d) would receive credit according to the schedule of branch (Z) and settlement would be made by telegram between branch (Y) and the Federal reserve bank (X), branch (Z) having notified the parent bank by telegram of the transaction.

If bank (c) in the collection district of the Federal reserve bank (X) wishes to collect items on bank (b) in Class I territory it may send the items direct to branch (Y), with the permission of the Federal reserve bank (X), or collect through the Federal reserve bank. Settlement is made directly between the Federal reserve bank and the branch by telegram. The Gold Settlement Fund is not involved in such transactions.

Let us suppose that bank (a) wishes to collect items on bank (c). Through what channels may it collect? Ordinarily it would be expected to collect through branch (Y) or branch (Z), preferably the latter. It might collect through the Federal reserve bank (X), if that is the most direct route, but such practice is exceptional. Banks are supposed to collect through the Federal reserve banks or branches to which the debtor and creditor banks involved are assigned. It is hardly safe to generalize on this point, however, as peculiar conditions in the different districts give rise

to exceptions to the general rule. If collection is made through branch (Y), that branch, in forwarding the items to branch (Z), wires the parent bank to credit it with the amount of the items sent according to its time schedule and follows up the telegram with a remittance sheet. Bank (c) will remit through branch (Z) which will telegraph the Federal reserve bank to credit branch (Y). The method of remittance and settlement would be practically the same if bank (a) collected through the Federal reserve bank (X) or through bank (Z).

The question may arise in the reader's mind relative to the availability of funds in case of delays in the mails. Let us suppose bank (e) wishes to collect items on bank (f) through the Federal reserve bank (X). It requires one day to reach the Federal reserve bank and two days for the Federal reserve bank to reach and hear from bank (f). Suppose the cash letter sent by bank (e) is delayed in the mail, when may bank (e) begin to count the funds as reserve? The general principle is that bank (e) will follow the time schedule and ignore the mail delays. If the items remitted constitute a very large sum, however, the Federal reserve bank will notify bank (e) of the delay and that bank will be required to make the necessary adjustment.

Items which are to be returned because of forgery, lack of funds, or for any other reason, are always returned through the same channels used in the attempted collection. For example, if a fraudulent check on bank (f) is deposited in bank (e), both banks being in the district of Federal reserve bank (X), bank (f), when it receives the check, will deduct the amount of the check from the remittances which it is making to the Federal reserve bank for other items, return the check to the Federal reserve bank, which, in turn, will charge the amount to the account of bank (e) unless the item is one amounting to \$500 or over. In the case of such large sums, bank (f) will notify the Federal reserve bank by telegraph which, in turn, will telegraph bank (e) concerning the transactions taking place.

#### **Direct collection within a Federal reserve bank or branch district**

Many member and non-member clearing banks frequently find themselves much nearer the drawee banks than to the Federal reserve bank or branch which they ordinarily use as a collecting agent. It involves a loss of time, under such circumstances, to send checks to the Federal reserve bank or branch and wait for acknowledgment or remittance to be made by the drawee bank to

the Federal reserve bank or branch. To meet this situation, banks sometimes make arrangements with their respective Federal reserve banks to send checks direct to the drawee banks, the final settlements to be made through the Federal reserve bank or branch. In the second and third Federal reserve districts, for example, banks in certain counties, whose business is essentially local, are permitted to send checks direct to the drawee banks in the same county. At the time the checks are sent to the drawee banks advices are sent to the Federal reserve bank showing the amount of the checks sent to the respective drawee banks. The advice is received by the Federal reserve bank at approximately the same time that the checks are received by the drawee bank. The Federal reserve bank then credits the account of the sending bank and charges the account of the drawee bank. This plan cuts the collection time approximately one-half.

In the Dallas district direct collections, under the Reserve City Clearing House System, are sent beyond county lines.<sup>31</sup>

#### **Member banks may collect through correspondents**

The Federal Reserve Act does not require member or non-member clearing banks to use the Federal reserve bank or branches as collecting agents. It only requires that these banks remit at par for all items drawn on them and presented to them by the Federal reserve banks or branches.<sup>32</sup>

Where banks feel that they prefer to collect through correspondents they may do so. Banks in important centers frequently find themselves near to each other but far removed from the Federal reserve bank or branch, and may decide that it is more advantageous to establish reciprocal relations with correspondents in such cities. This is done by opening accounts with one another, which may or may not bear interest, with agreements to collect each other's items free of charge, within a given territory. The time saved may be sufficient compensation. Such arrangements would be especially advantageous where there are many non-member banks that would not remit at par and upon which the Federal reserve bank or branch could not collect directly.

Many member and non-member clearing banks find it equally advantageous to effect some of their inter-district collections in this manner for similar reasons, namely, that they may be near to each other but far from the Federal reserve banks or branches,

<sup>31</sup>For a fuller discussion of this subject see pp. 187-189 above.

<sup>32</sup>Sending items directly through the mails is considered presentation.

and may desire to collect on banks that will not remit at par to the Federal reserve banks or branches. There is an additional reason for this practice in inter-district collections; member banks cannot secure the permission of the Federal reserve banks to send items direct to the drawee banks with permission for settlement through the Federal reserve banks, but can accomplish the same results through correspondents in the regions where they desire to reach certain banks.

#### **Non-member par banks collect through correspondents**

Non-member par banks have been discussed from one point of view only, that is, as drawee banks upon which member and non-member clearing banks within the same district may collect checks and drafts through the Federal reserve bank or its branches. Non-member par banks, as collecting banks, however, do not have direct access to the Federal reserve banks; they collect through correspondents, although the correspondents may be member banks of the Federal Reserve System. By using member banks as correspondents, they secure many of the advantages of the Federal reserve clearing and collection system. They carry their deposit accounts with the member bank rather than with the Federal reserve bank and may have their checks and other items collected at par and at the same time receive a small interest return on the deposit. The Federal reserve banks are not permitted to pay interest on deposits. These banks, also, may collect through correspondents that have no connection, even indirectly, with the Federal reserve clearing and collection system, that is, through non-par banks. It may be said in passing that when non-par banks use member banks as correspondents they thus secure the advantages of the system without rendering any service in return. Such practices constitute a real burden to the system.<sup>33</sup>

#### **The handling of intra-district collection items**

Space prevents any lengthy discussion of the collection of items known as "collection items," namely, maturing bills, notes, bonds, coupons, etc. The methods used to collect such items will be found mentioned elsewhere in this book. Since our interest is centered primarily in the methods used in clearing and collecting checks and drafts, a summarized statement of the methods used to collect intra-district collection items must suffice here.

Where banks are in the same town or city, but have no clearing

---

<sup>33</sup>See pp. 240-243 above for a full discussion of this subject.

house association, collection items are collected through messengers who are sent direct to the debtor with the matured items. Where banks in the same city have a clearing house association, the same general practice is followed, although certain collection items may be collected through the clearing house. In New York City, notes and acceptances growing out of commercial transactions may be sent through the morning clearings on the day of their maturity. But all such notes and evidences of indebtedness of the following nature are excluded: Those of the Federal or State governments, or any subdivision thereof, or other matured corporate or individual bonds or collateral notes arising out of or related to capital financing or money lending operations.<sup>34</sup> Documentary instruments and coupons cannot be sent through the clearing house, but must be collected by hand or through some other channel. In New York City the city collection department of the clearing house collects items for members of the association on other banks and institutions not in the association and which are south of 59th street, provided these institutions desire to have items collected on them in this manner. In addition to cash items, only clean drafts can be collected through this channel; all other collection items must be collected through messengers.<sup>35</sup> Many collection items may be collected within the city through the Federal clearing division or the city collection department of the Federal Reserve Bank of New York.<sup>36</sup>

Where banks are not in the same city but are within the same Federal reserve district, collection items may be collected through the Federal reserve bank or branch, or through correspondents.<sup>37</sup>

#### **B. The inter-district clearing and collection system. 1. The Gold Settlement Fund**

All Federal reserve districts are bound together by a central clearing agency at Washington, D. C., known as the Gold Settlement Fund, which is controlled and regulated by the Federal Reserve Board.<sup>38</sup> This Fund is owned by the Federal reserve banks and is held by the Treasurer of the United States in the name of the Federal Reserve Board. When the Fund was established in

<sup>34</sup>*Constitution of the New York Clearing House Association (As amended) July 29, 1918; December 11, 1922; July 23, 1923), p. 37.*

<sup>35</sup>See pp. 408-409.

<sup>36</sup>See Chap. X, pp. 409-411 above.

<sup>37</sup>For a complete discussion of the handling of collection items by the Federal reserve banks see pp. 201-205 above.

<sup>38</sup>For a full discussion of the nature and operation of this Fund, see Chap. VIII.

May, 1915, each Federal reserve bank was required to deposit with the United States Treasurer, for the benefit of the Fund, \$1,000,000 in gold, gold certificates, or gold order certificates, and, in addition, an amount at least equal to its net indebtedness to all other Federal reserve banks. Consequently, at no time could there be less than \$12,000,000 in the Fund. At present (May 15, 1924) there is about \$624,000,000 in the Fund, and this counts as part of the legal reserve of the Federal reserve banks.

Ownership in the Gold Settlement Fund is represented by entries on books maintained by the Federal Reserve Board with corresponding entries on books kept by the Federal reserve banks. Transfers of claims are effected at any time by telegram, but at least daily, and with the minimum of friction and expense. The Federal reserve banks, their branches, the Federal Reserve Board, and the Treasury Department are kept in instant communication with each other through a leased wire system.

Settlements resulting from the inter-district clearings and collections are made each evening at the close of business. Each Federal reserve bank and direct-settling branch telegraphs the Board the gross amount collected for the account of each other Federal reserve bank and direct-selling branch before the final closing of the books for the day. The settling agent, representing the Board, makes the settlement the same day and dispatches telegrams to each bank and settling branch in time to reach them before the opening for business the following morning, when the necessary entries are made and their books finally closed as of the close of the preceding day. The branches which are authorized to make settlements directly through the Fund, the so-called direct-settlement or Class I branches, settle in the same manner as do the Federal reserve banks, except that the net debit or credit balance of each branch is adjusted through the Gold Settlement Fund account of the parent Federal reserve bank, as these direct-settling branches do not maintain accounts with the Fund.

## 2. The types of items and transactions for which settlement may be made through the Gold Settlement Fund

Settlements are made through the Gold Settlement Fund for eight types of items and transactions: (1) Cash items, such as checks and drafts, (2) collection items, such as maturing notes and bills, (3) exchange and transfer drafts, (4) telegraphic



transfers, (5) rediscounting between Federal reserve banks, (6) special transfers by one Federal reserve bank to another for the account of the Treasury Department, (7) settlements resulting from the redemption of Federal reserve notes, and (8) transfers from the Gold Settlement Fund to the Federal Reserve Agents' Fund and vice versa.<sup>39</sup>

**(1) The collection of and settlement for inter-district cash items<sup>40</sup>**

Inter-district cash items, as in the case of intra-district items, may be collected through the Federal reserve mechanism or in any other manner that the member or non-member banks may choose. When the Federal reserve clearing and collection system is used the items may be collected in any one of three ways: (a) A member or non-member clearing bank may send its items to its own Federal reserve bank or branch of the Federal reserve bank (if it is assigned to that branch) which will send them to the Federal reserve bank or branch to which the drawee bank belongs; (b) a member or non-member clearing bank in one district may send the items direct to the Federal reserve bank or branch in the district of the drawee bank; (c) in certain instances items may be sent direct to the drawee member and non-member clearing banks in other districts.

**(a) Member and non-member clearing banks may collect through their own Federal reserve bank or branch**

An explanation of the method of collecting inter-district cash items through the payee bank's Federal reserve bank or branch may be simplified by resorting to the use of a diagram. (See Figure 6.)

Let us suppose that bank (f) in the district of the Federal reserve bank (X) wishes to collect checks and drafts on bank (k) in the district of the Federal reserve bank (M) and chooses to col-

<sup>39</sup>As fiscal agents of the United States, the Federal reserve banks are permitted to make telegraphic transfers of ownership of Treasury certificates of indebtedness and of Treasury notes, but not of United States bonds. In order to have this done, the bank, individual, or firm that desires to have the transfer made must deposit the certificates or notes with the Federal reserve bank, which arranges with the Commissioner of the Public Debt at Washington to have an equivalent amount of the same kind of securities issued by the Federal reserve bank of the district to which the transfer is made. Settlement is not made through the Gold Settlement Fund, but on the books of the Commissioner of the Public Debt, who credits one Federal reserve bank for the securities received and canceled and charges the other Federal reserve bank for the new securities issued.

<sup>40</sup>For an account of the bookkeeping involved in making settlements through the Gold Settlement Fund, see pp. 310-314.

lect through its own Federal reserve bank (X). It sends the items to the Federal reserve bank (X) which will send them to the Federal reserve bank (M), which, in turn, will send them to the drawee bank. Bank (f) will receive a deferred credit on the books of the Federal reserve bank (X) based upon the average time required to collect the items which is computed upon the basis of the time from the Federal reserve bank (X) to the Federal reserve bank (M) plus the time to and from the drawee bank

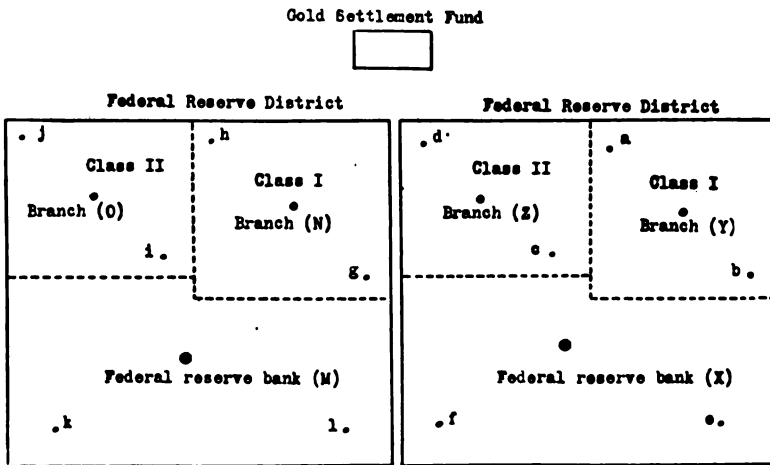


FIGURE 6.

(k). At the end of this time the Federal reserve bank (M) will settle with the Federal reserve bank (X) through the Gold Settlement Fund. When the payee bank (f) sends items to its Federal reserve bank (X) for collection, it must sort the items into batches according to their availability, that is, according to whether they can be collected immediately or in one, two, three, or more days. Bank (f) will count these deferred credits as an addition to its reserve after the elapse of the proper amount of time as indicated in the time schedule. Delays in the mails are generally ignored unless the amounts are large, in which case an adjustment is made between the bank (f) and its Federal reserve bank. If for any reason an item sent to bank (k) for collection is to be returned to bank (f), it will be returned over the same route used in the attempted collection. Bank (k) will deduct the amount of the item in remitting to Federal reserve bank (M), the Federal re-

serve bank will deduct the amount when making its daily settlement through the Gold Settlement Fund, and the Federal reserve bank (X) will charge the account of the bank (f). Had bank (f) sent the item direct to Federal reserve bank (M) for collection on bank (k), the procedure in returning the item would have been the same in so far as the deductions are concerned, although the item would have been returned directly to bank (f) by the Federal reserve bank (M). If the item amounts to \$500 or more, the banks concerned will be notified by telegraph of the transactions involved. Since returned items always follow the same channels used for their collection, it will be unnecessary to follow the course of the returned items in each separate case to be studied in the collection of inter-district items.

If bank (f) has items to collect on bank (h) in the territory of Class I branch (N) of another district, the collection through its own Federal reserve bank (X) will be made in the same manner as described for collecting through the Federal reserve bank (M). The only difference in the procedure arises in making the settlement through the Gold Settlement Fund. While branch (N) is a direct-settling branch, it carries no funds in the Gold Settlement Fund. Consequently, in making settlements, it telegraphs directly to the settling agent of the Gold Settlement Fund the amount it owes to all other Federal reserve banks and direct-settling branches, and the settling agent, while he notifies the direct-settling branches of the amounts credited to them by each other Federal reserve bank and direct-settling branch, actually makes the final net debit and credit settlement through the balance maintained by the parent bank; that is, in this case, while the branch (N) settles directly with the Federal reserve bank (X), the final settlement is made between the Federal reserve banks (M) and (X).

A slightly different method of settlement is used if the Federal reserve bank (X) collects on bank (i) in the district of the Class II branch (O). Otherwise the method of collection is the same as for the Federal reserve banks. After sufficient time has elapsed for the branch (O) to have heard from bank (i), the branch (O) telegraphs to its parent bank (M) the amounts which it owes to all other Federal reserve banks and direct-settling branches. The Federal reserve bank (M) includes these amounts in the telegram which it sends to the settling agent in making its daily settlements with all other Federal reserve banks and direct-settling branches. The inter-district settlement is thus between the Federal reserve

banks (M) and (X), the Federal reserve bank (M) and its branch (O) making the proper adjustments between themselves on their own books.

Of course any member or non-member clearing bank in the district of either branch (Y) or branch (Z) may send items to them to be collected on banks in another Federal reserve district or branch district, but the method of procedure is the same, to all intents and purposes, as described above. The only variation is in the method of settlement which depends upon the type of branch involved. The reader should be able to work out the methods from the description given above. For example—to use one more illustration—let us suppose that bank (c) in the district of branch (Z) wishes to collect items on bank (j) in the district of branch (O). Both are Class II branches. Bank (c), in sending the items through the branch (Z) will receive a deferred credit according to the time schedule of branch (Z). Branch (O), after the elapse of the proper amount of time, will telegraph to the parent bank (M) the amounts owed, which, in turn, will settle through the Gold Settlement Fund with the Federal reserve bank (X). The proper adjustments then are made between the Federal reserve bank (X) and the branch (Z); branch (Z) telegraphs each day to the Federal reserve bank the amounts of its debits and credits with which it should be charged or for which it should receive credit.

**(b) A member or non-member clearing bank in one district may send items direct to the Federal reserve bank or branch in another district**

The purpose of this direct routing of items is to save transit time. Quite often the payee banks are much closer to the drawee banks in other districts than are the Federal reserve banks or branches to which the payee banks belong. It is the policy of the Federal Reserve Board and Federal reserve banks to encourage practices which will save time in collections. The ideal form of direct routing would be for one member bank to forward checks to another member bank, whether in its own or in some other district, and for settlement to be made through one or both Federal reserve banks, as the case might be. To a limited extent this experiment has been tried in the fifth district, but it has not been successful. It developed that as a general rule one could not rely upon the co-operation of member banks to facilitate the presentation and collection of checks. Each member bank, of course, is exceedingly

anxious to hasten the collection of checks held by it and drawn on other member banks, but very many member banks are almost, if not entirely, as anxious to delay presentation and payment of checks drawn upon themselves. Direct routing, of necessity, therefore, has been confined almost exclusively to the system under which a member bank in one district is allowed, under proper conditions, to route items directly to another Federal reserve bank or branch for the credit of its own Federal reserve bank, the sending member bank to receive corresponding credit with its own Federal reserve bank.

While it is not safe to assume that the practices followed in one Federal reserve district are identical with those in another district, the variations are probably not very great. The Federal Reserve System is so extensive and the problems arising in different districts become so complicated that different practices are pursued in the different districts, and in many cases a uniform practice in all Federal reserve districts would be almost impossible. In the main, however, the general principles are the same. Consequently, the description of direct routing given here is confined to the methods used in the fifth district.<sup>41</sup>

The fifth district is divided into two parts: The banks in Maryland and the northern half of West Virginia deal with the Baltimore branch; banks in the remainder of the district deal with the Richmond office, and no member bank (there are no non-member clearing banks in the fifth district) in either territory is allowed to route items direct to the office in the other territory or to any other Federal reserve bank or branch without first obtaining permission of the Federal Reserve Bank of Richmond or the Baltimore branch, as the case may be. It is doubtless true that no Federal reserve bank allows one of its own members to route direct to another Federal reserve bank or branch without permission, but it is not necessary to secure permission of the other Federal reserve bank or branch to which the direct-routing letters are to be sent. When permission is granted by a Federal reserve bank or branch to one of its own members, the member is instructed very carefully how to proceed. Sample letter forms are furnished and the member is told how to separate the items, embodying certain items in one letter and certain other items in another letter. All these letters are sent to the Federal reserve banks or branches addressed, for the credit of the Federal reserve bank of the send-

---

<sup>41</sup>The writer is indebted for this information to Mr. Charles A. Peple, Deputy Governor of the Federal Reserve Bank of Richmond.

# RÉSUMÉ OF THE PRESENT SYSTEM

568

TO THE FEDERAL RESERVE BANK RICHMOND, VIRGINIA		Date _____ 192__	
<p>We have <u>this day</u> forwarded direct to the Federal Reserve Banks and Branches, as indicated, cash letters totaling the amounts listed below opposite the name of each bank to which sent for your credit. These letters are to be credited by you to our Reserve Account on dates of availability.</p>			
INSIDE ITEMS	X	X	OUTSIDE ITEMS
			BOSTON _____
			NEW YORK _____
			Buffalo Branch _____
			PHILADELPHIA _____
			CLEVELAND _____
			Cincinnati Branch _____
			Pittsburgh Branch _____
			BALTIMORE _____
			BRANCH _____
			ATLANTA _____
			Birmingham Branch _____
			Jacksonville Branch _____
			Nashville Branch _____
			New Orleans Branch _____
			CHICAGO _____
			Detroit Branch _____
			ST. LOUIS _____
			Little Rock Branch _____
			Louisville Branch _____
			Memphis Branch _____
			MINNEAPOLIS _____
			Helena Branch _____
			KANSAS CITY _____
			Denver Branch _____
			Oklahoma City Branch _____
			Omaha Branch _____
			DALLAS _____
			El Paso Branch _____
			Houston Branch _____
			SAN FRANCISCO _____
			Los Angeles Branch _____
			Portland Branch _____
			Salt Lake City Branch _____
			Seattle Branch _____
			Spokane Branch _____
	X	#	# TOTALS #
			X
<p>X - Do not use these columns. # - On line marked TOTALS, please correctly state the aggregate amount of all letters as shown on this sheet.</p>			
<p>THIS ADVICE SHOULD BE OFFICIALLY SIGNED AND MUST BE MAILED TO FEDERAL RESERVE BANK OF RICHMOND WITHOUT FAIL ON SAME DAY THAT DIRECT CASH LETTERS ARE DISPATCHED.</p>			
		_____ <i>Name of Bank</i>	
		_____ <i>Location</i>	
		_____ <i>Official Signature - Title</i>	

ing member bank, and are handled by the receiving Federal reserve banks and branches exactly as though they had been sent by the Federal reserve banks for whose credit the collections are to be made. That is to say, a certain Federal reserve bank receiving these letters from various member banks in the fifth district would make out credit tickets, one for each letter, showing the date of receipt, the name of the sending member bank, the name of the Federal Reserve Bank of Richmond, and the date upon which credit is to be given. These slips are, of course, assorted according to due date, and, as has been described in Chapter VIII on the nature and operation of the Gold Settlement Fund, payment is made to the Federal Reserve Bank of Richmond each day for all maturing credits. The other Federal reserve bank, when it makes the one payment through the Fund for all maturing credits, will dispatch to the Federal Reserve Bank of Richmond carbon copies of the various credit tickets, so that the Federal Reserve Bank of Richmond may know all the items composing the payment for the day.

In the meantime the member bank in the fifth district which has sent out the direct-routing letters to other Federal reserve banks and branches simultaneously sends to the Federal Reserve Bank of Richmond an advice covering such letters. (See Form 21.)<sup>42</sup> On this advice is printed the name of every Federal reserve bank and every branch. The left-hand column is headed "Inside Items". In this column are placed the totals of letters made up of checks drawn upon the Federal reserve bank or branch city and therefore collectible immediately upon receipt, provided they arrive in time for the clearing house on the day of receipt. The right-hand column is headed "Outside Items," and is intended for the totals of the letters containing items payable in the district of the Federal reserve bank or branch indicated but not in the Federal reserve bank or branch city. The two small columns marked "X" both top and bottom are used by the Federal Reserve Bank of Richmond for the insertion of the maturity dates of the respective letter totals.

It will be plain from the foregoing description why the Federal Reserve Bank of Richmond requires its member banks to obtain permission before attempting to route direct to other Federal reserve banks and branches. Unless it assort items properly and unless it gives proper advice of these various sendings to the Federal Reserve Bank of Richmond, that Federal reserve bank could not possibly make correct credits to the reserve account of the

---

<sup>42</sup>See also Forms 19 and 20, pp. 456-457.

member bank at the proper time. While each Federal reserve bank sends to every other Federal reserve bank and branch each day a complete set of credit slips covering the day's payment through the Gold Settlement Fund, such slips frequently are not received by the other Federal reserve bank or branch until several days after the date of credit. While useful, therefore, to check up credits previously given, they could not be made the basis of actual credits to member banks.

It is the practice of the Federal Reserve Bank of Richmond to establish a special time schedule for each member bank in the district which is allowed to route direct to other Federal reserve banks and branches. This time schedule is designed to cover the transit time between the member bank and the other Federal reserve bank or branch, plus the transit time applicable to the item after receipt by the Federal reserve bank or branch. In other words, it is the object of the Federal Reserve Bank of Richmond to give credit to the member bank by which the items are forwarded to another Federal reserve bank or branch on the same day that payment is made to the Federal Reserve Bank of Richmond through the Gold Settlement Fund.

While a special schedule is made up for each member bank to which the privilege of direct routing is accorded, those schedules are by no means permanent but are subject to correction in case it is found that payment through the Gold Fund is received by the Federal Reserve Bank of Richmond either before or after the time stated in the schedule. From the advice sheets already referred to, which are mailed to the Federal Reserve Bank of Richmond by the member banks that have sent out direct-routing letters, the Federal reserve bank makes up credit tickets for the reserve accounts of the member banks and charge tickets for the other Federal reserve banks and branches. When the payment is made to the Federal Reserve Bank of Richmond by another Federal reserve bank through the Gold Settlement Fund, the Federal Reserve Bank of Richmond charges the Gold Settlement Fund and credits the account of the other Federal reserve bank against which charges have been previously made. These account tickets are really in the nature of suspense accounts. When the bunch of tickets representing a given credit is received by the Federal Reserve Bank of Richmond, they are checked up against similar bunches of charge tickets previously made by the Federal reserve bank, and in this process of checking it is always possible to ascertain whether a given item is paid to the Federal Reserve Bank of



Richmond through the Gold Settlement Fund on the day upon which it was credited by that bank to the account of some member bank, for the reason that the credit ticket to the account of the member bank and the charge ticket to the other Federal reserve bank or branch are made out simultaneously.

From the results of this checking the Federal reserve bank keeps a very accurate record covering its experience with each member bank with respect to direct-routing letters. Form 22 shows a card which would represent a very active member bank. As a matter of fact, the items on the card are copied from the cards of two member banks. The card indicates that the member

F. R. BANK OR BRANCH					Name of Bank				
STATEMENT OF CASH LETTERS SENT DIRECT DURING THE MONTH OF _____									
Location									
F. R. BANK OR BRANCH	No. Letters Sent	No. Cr. On Time	No. Cr. Late	No. Cr. Early	F. R. BANK OR BRANCH	No. Letters Sent	No. Cr. On Time	No. Cr. Late	No. Cr. Early
BOSTON	32	51		1	LOUISVILLE	14	12	2	
NEW YORK	30	46	4		MEMPHIS	39	29	5	5
BUFFALO	26	25	1		MINNEAPOLIS	46	44	1	1
PHILADELPHIA	52	52			HELENA				
CLEVELAND	26	26			KANSAS CITY	52	52	2	
CINCINNATI	16	15	1		DENVER	16	12	2	2
PITTSBURGH	52	48	3	1	OKLAHOMA CITY	15	15		
Baltimore	26	26			OMAHA	19	15	1	2
ATLANTA	50	50			DALLAS	27	26	1	
BIRMINGHAM	49	49			EL PASO	1	1		
JACKSONVILLE	50	46	4		HOUSTON	25	23	2	
NEW ORLEANS	48	43	2	3	SAN FRANCISCO	24	22	4	2
NASHVILLE	49	47	2		LOS ANGELES	26	24	2	
CHICAGO	26	26			PORTLAND	24	20	1	3
DETROIT	26	25	1		SALT LAKE CITY				
ST. LOUIS	27	26	1		SEATTLE	1	1		
LITTLE ROCK					SPOKANE	1	1		

FORM 22

bank under consideration sent during the month 52 letters to Boston for the account of the Federal Reserve Bank of Richmond. Of these, 51 were credited on time (that is to say, Boston paid the Federal Reserve Bank of Richmond through the Gold Settlement Fund on the same day on which the latter bank credited the member bank) and one arrived ahead of time. The same bank sent 50 letters to New York during the month, 46 of which arrived on time, while four were late. The same bank sent to the New Orleans branch of the Federal Reserve Bank of Atlanta 48 letters during the month, of which 43 were credited on time, two were credited late, and three were credited early.

As a matter of practice those special time schedules that are working fairly well are allowed to stand, even though some few letters may be credited a day late occasionally, on the theory that the same thing would happen if the items were handled through the Federal Reserve Bank of Richmond and its letter was credited a day late because of unavoidable delays in the mail. As a matter of fact, a record is kept also with reference to letters forwarded by the Federal reserve bank and it does not penalize member banks by changing their direct-routing schedules if their letters arrive as promptly as those dispatched by the Federal reserve bank.

### **Abuses of the direct-routing system**

It has developed that there are occasional abuses of the direct-routing privilege, and these, if detected, are always followed up and corrected by the Federal reserve bank granting the privilege. An example of these abuses may be given without indicating either banks or towns in which such abuses have been observed.

Suppose a bank in Washington, D. C., uses the direct-routing privilege with respect to items held by it and payable in New York City. The Washington bank would be given a one-day schedule for New York. Now suppose the Washington bank had a correspondent in New York and would include in its direct letter to the Federal Reserve Bank of New York for the credit of the Federal Reserve Bank of Richmond, a check of considerable size on its New York correspondent. If the Washington bank is careful to mail the letter in time it will be received by the Federal Reserve Bank of New York in time for the clearing house, and the Federal Reserve Bank of Richmond will receive credit on the day on which it gives credit to the Washington bank. But suppose the Washington bank should delay mailing the letter until such a time that it cannot arrive in New York in time for the clearing house. The Federal Reserve Bank of New York would hold the check over and give credit to the Richmond bank one day after receipt, which would be one day after the day upon which the Washington bank was credited by the Federal Reserve Bank of Richmond. Incidentally, the Washington bank would get from its New York correspondent one day's additional interest on the amount of its balance represented by the check.

While it is true that the direct-routing privilege was not intended to be used for the collection by banks of checks drawn by themselves upon their own correspondents, it is difficult, if not impracticable, to make a distinction. Consequently, in the cases

in which the Federal reserve bank has found the privilege abused it has simply added more time to the special schedule. In one or two flagrant cases it has placed the time at the maximum point, but has advised the member bank that if more time were taken (and occasionally more time was taken) it would make a deduction from the bank's reserve account to cover, while any item collected sooner than the time allowed would be represented by corresponding credits in the reserve account of the member banks for the purpose of calculating penalties upon reserve deficiencies. Consequently, it is obvious that direct routing is not as simple as one might think. It requires more or less care on the part of the member bank and quite an extensive and complicated system of checks and counter checks on the part of the Federal reserve bank. Occasionally the privilege is granted to a member bank which demonstrates its inability to manage the matter in such a way that the Federal reserve bank can keep track of its direct sendings. In such cases the privilege, of course, is withdrawn. The direct-routing privilege is not intended to be used for all items but only for items of such a size as would warrant the use of this variation of the collection system.

**(c) Sending items direct to member and non-member clearing banks in other districts**

There are two ways in which these direct sendings are accomplished: (1) Where the payee banks, although technically not using the Federal reserve clearing and collection system, actually accomplish much the same results that could be accomplished by using it, and save time in addition, and (2) where special arrangements are made by certain Federal reserve banks for direct sendings. These two methods will now be described briefly in the order mentioned.

Theoretically, member or non-member clearing banks *when using the Federal reserve clearing and collection system* cannot send cash items direct to drawee banks in other districts for credit through Federal reserve banks or branches. As a matter of fact, member and non-member clearing banks may send cash items direct to drawee banks in other districts and request the drawee banks to deposit the proceeds with the Federal reserve bank for their credit. In this case, however, it will be noted that the Federal reserve clearing and collection system is not being used and naturally the Federal reserve banks have no control over

transactions outside of the system. Nevertheless, the payee banks build up their reserve balances just as though they had used the system.

Consulting the *Tenth Annual Report of the Federal Reserve Board* (1923), p. 161, one notices that 190,000 items amounting to \$85,996,000.00 represent items drawn on banks in other Federal reserve districts and forwarded direct to drawee banks. For instance, a member bank (a) in the Chicago district receives on deposit checks on a member bank (b) in the Cleveland district which is not located in a Federal reserve bank or branch city. Ordinarily bank (a) must forward the items for collection to the Federal reserve bank or branch of the district in which the drawee bank is located. In certain exceptional cases arrangements have been made between the two Federal reserve banks involved (and they are in each case in adjoining districts), for one *Federal reserve bank or branch* to send direct to the drawee bank in the other district. The member bank then remits to its Federal reserve bank for the credit of the sending Federal reserve bank or branch. This special arrangement saves considerable collection time. The following cases will serve to illustrate.

Detroit, Mich., located in Chicago's district, and Toledo, O., in the Cleveland district are located only a few miles apart. Cincinnati, O., located in the Cleveland district and Indianapolis, Ind., in the Chicago district are located comparatively close together. Both Toledo and Indianapolis are important industrial centers and if checks on these two cities were forced to follow the regular collection channels, Toledo checks originating in Detroit would have to be forwarded to Cleveland, and then to Toledo, and the Indianapolis checks would have to be forwarded first to Chicago and then to Indianapolis. By special arrangement, the Detroit branch of the Federal Reserve Bank of Chicago forwards checks on Toledo banks direct to the drawee banks which, in turn, remit for them to the Federal Reserve Bank of Cleveland for the credit of the Detroit branch of the Federal Reserve Bank of Chicago. The same procedure applies to checks on Indianapolis which are forwarded by the Cincinnati branch to Indianapolis and remitted for by the drawee banks to the Federal Reserve Bank of Chicago for the credit of the Federal Reserve Bank of Cleveland.<sup>43</sup>

---

<sup>43</sup>The writer is indebted to Mr. H. F. Strater, Assistant Cashier of the Federal Reserve Bank of Cleveland, for this information.

**(2) The collection of and settlement for inter-district collection items**

Federal reserve banks and branches are authorized by Sections 13 and 16 of the Federal Reserve Act to act as collecting agents for member and non-member clearing banks in the collection of maturing bills and notes. They may receive such collection items from the member and non-member clearing banks within their own districts or from other Federal reserve districts when payable within their own district.

In 1920 the Federal Reserve Board authorized member banks to send such items, drawn upon firms or individuals in another district, direct to the Federal reserve bank of that district for collection and credit, provided the Federal reserve bank for whose account the collection is being made has authorized its member bank to act as its agent, in forwarding items of this character for collection and credit.<sup>44</sup>

Collection items are received by Federal reserve banks and branches for collection and credit, not credit (deferred) and collection, as in the case of cash items. Nor is there any provision in the Act requiring the Federal reserve banks or their branches to accept such items at par. Obviously, no collecting bank should be forced to credit at par an unmatured or uncollected note or bill. It should be noticed, also, that while trade acceptances are treated as collection items, bankers' acceptances are treated as cash items and are collected on the basis of a time schedule.<sup>45</sup> While no bank may charge a Federal reserve bank or branch for collecting or remitting for a cash item, there is nothing in the Act which prohibits member banks making charges against the Federal reserve banks for the service of collecting maturing notes and bills drawn upon individuals, firms, or corporations other than banks. A member bank has no authority in law to deduct exchange in accounting to the Federal reserve bank for one of its own acceptances forwarded to it for collection by the Federal reserve bank since these are classed as cash items. A member bank, however, may charge for collecting notes and bills drawn on persons other than banks, even though such items may be payable at the collecting banks.<sup>46</sup> The Federal reserve banks ordinarily do not charge for collecting these items unless they are charged

<sup>44</sup>*Federal Reserve Bulletin*, Vol. VI (1920), p. 276. There is no authority in the Federal Reserve Act for this procedure.

<sup>45</sup>This schedule is given on p. 205 above.

<sup>46</sup>*Federal Reserve Bulletin*, Vol. VI (1920), p. 699.

by collecting member banks, in which case the Federal reserve bank passes the charges back to the banks depositing the items.

Settlement for inter-district collection items may be made by remitting direct in acceptable exchange to the Federal reserve bank in the district of the creditors, or to any other near-by Federal reserve bank for credit to the proper bank, in which case settlement is made through the Gold Settlement Fund in the same manner as for checks and drafts.

### (3) Federal reserve transfer and exchange drafts<sup>47</sup>

The purpose of these two types of drafts is to provide all member banks and their customers with a satisfactory method of remittance to other districts. These drafts serve as cash payments in any district and eliminate the time that would be required for collecting ordinary drafts before the funds actually become available.

The Federal reserve transfer draft is drawn by a member bank on its own Federal reserve bank and made payable on advice of the drawee at any Federal reserve bank specified in the draft. These drafts are drawn in amounts in excess of \$5,000. Member banks give the drawee Federal reserve bank daily advice of all drafts drawn and forward duplicates of the advice to the Federal reserve banks at which the drafts are payable.

Federal reserve exchange drafts are those drawn by member banks upon their Federal reserve bank for an amount not exceeding \$5,000. They are receivable for immediate availability at par at any other Federal reserve bank, but are actually payable only at the drawee reserve bank. Members forward to their Federal reserve bank a daily mail advice of all drafts drawn. On receipt of this advice the reserve bank charges the amount to the account of the member bank and the funds are held in a special account against which the drafts are charged when presented for payment.<sup>48</sup>

Adjustments between Federal reserve banks, necessitated by the use of such drafts, are made through the Gold Settlement Fund. Federal reserve banks which have paid such drafts of other Federal reserve banks deduct that amount from the total credits reported each day to the settling agent for settlement

<sup>47</sup>See pp. 206-208 above.

<sup>48</sup>R. B. Westerfield, *Banking Principles and Practice*, Vol. II (New York, 1921), p. 419.

through the Gold Settlement Fund, thus obtaining, in effect, immediate payment for these items.<sup>49</sup>

#### (4) Telegraphic transfers

Through the leased wire system and Gold Settlement Fund, member banks may create without cost any amount of exchange that they may need at any point where a Federal reserve bank or branch is located, as well as obtain without cost immediate settlement for any amount of exchange that may accumulate there.<sup>50</sup> Exchange charges, which were based upon the assumption that it might be necessary to ship currency, have been eliminated, since the necessity for shipping currency has been removed. If any is shipped, it is at the expense of the Federal reserve banks. Thus funds of each member bank on deposit with its Federal reserve bank may be made available immediately at par, anywhere, and absolutely free of any charges. Such wire transfers of funds through the Federal reserve banks are limited to those ordering payments or credits to banks or bankers. Direct payments by Federal reserve banks to individuals, firms, or corporations are not permitted, although such transfers are made for individuals and non-member banks through the medium of the member banks.<sup>51</sup>

Settlements between Federal reserve banks as a result of these telegraphic transfers are made daily through the Gold Settlement Fund. However, if the amount of any transfer is very large, and particularly if the balance between the two banks at the time is largely in favor of the bank of which the request is made, the bank making the request makes a simultaneous transfer through the Fund at once. There is a general understanding among the Federal reserve banks that an immediate transfer can be required at any time.

Telegraphic transfers may be made also between banks within a Federal reserve district, in which case settlements are made on the books of the Federal reserve bank and member banks involved.

---

<sup>49</sup>See p. 314 above.

<sup>50</sup>See pp. 304, 467-469 above; Westerfield, *op. cit.*, II, p. 417.

<sup>51</sup>While Federal reserve banks now make transfers over the Federal reserve private wire system free of charge, such transfers are accepted from and paid to member banks only, are limited to bank balances, and must be in multiples of \$100. The leased wire facilities of the system are not sufficient to take care of other transfers handled for the account of member banks and such transfers accordingly are made over commercial wires, the member banks for whom the transfers are made being charged with the cost of the commercial telegrams. The Federal reserve banks make no charge for their services in connection with any telegraphic transfers.

**(5) Rediscounting between Federal reserve banks<sup>52</sup>**

Section 11 of the Federal Reserve Act provides that a Federal reserve bank may be permitted or, upon the affirmative vote of at least five members of the Federal Reserve Board, may be required to rediscount the discounted paper of another Federal reserve bank at rates of interest fixed by the Federal Reserve Board. The mere suggestion on the part of the Board has been sufficient to secure the desired amount of rediscounting among the Federal reserve banks; compulsion has been unnecessary.

When a Federal reserve bank desires to have some of its paper rediscounted, it wires the Federal Reserve Board, stating the amount needed and the character of the paper offered. The Board assigns the rediscount to some other Federal reserve bank which the Board knows has a surplus reserve. Upon receipt of this advice, the second Federal reserve bank transfers the gross amount through the Gold Settlement Fund to the credit of the Federal reserve bank requesting the rediscount. This transfer is made at once and is independent of the daily settlements made through the Fund. The discount, however, is calculated by the bank requesting the rediscount, later verified by the other Federal reserve bank, and is handled as an ordinary credit and cleared through the Fund on the next day. Maturing rediscounts are paid, in like manner, through the Fund, also independently of the regular settlements.

**(6) Special transfers by one Federal reserve bank to another for the account of the Treasury Department**

Special transfers by one Federal reserve bank to another for the account of the Treasurer of the United States are made by special telegrams between the Federal reserve banks involved and the Federal Reserve Board. The settlements through the Gold Settlement Fund are made at once and independently of the regular daily settlements. The proper adjustments are made on the books of the Federal reserve banks upon directions from the settling agent acting for the Board.

**(7) Settlements resulting from the redemption of Federal reserve notes<sup>53</sup>**

Each Federal reserve bank or branch is required to redeem all Federal reserve notes upon presentation regardless of which Fed-

<sup>52</sup>See pp. 304-305 above.

<sup>53</sup>See. pp. 315-318 above.



eral reserve bank issued them. After redemption each Federal reserve bank or branch endeavors to convert them into lawful reserve. To secure credit for the Federal reserve notes held, but which were issued through other Federal reserve banks, each Federal reserve bank or branch daily ships directly to the debtor Federal reserve banks all notes fit for reissue, properly packed and assorted. At the same time, all the unfit notes are shipped to the Treasurer of the United States for the account of the Federal reserve banks through which they were originally issued. Each Federal reserve bank or branch, at the time of making the shipments, advises the Federal Reserve Board by wire of all such shipments, using telegraphic forms which describe each shipment separately. The settling agent, on the next business morning after receiving the telegrams, acknowledges their receipt, makes up a settlement, charges the proper accounts, and advises by telegram all banks involved. The proper debits and credits are made in the Gold Settlement Fund independently of the regular daily settlements resulting from the clearing and collection of checks. It is to be observed, however, that settlements growing out of Federal reserve note transactions are also daily, although independent of the check-clearing settlement. Daily settlement for these notes was instituted in February, 1922. Although both settlements are independent they are handled simultaneously by the settling agent, and each Federal reserve bank makes the proper entries on its books as of the close of business of the previous day.

**(8) Transfers from the Gold Settlement Fund to the Federal Reserve Agents' Fund and vice versa**

The Federal Reserve Agents' Fund should not be confused with the Gold Settlement Fund.<sup>54</sup> In this Fund the Federal reserve agents, who are accountable for the security underlying Federal reserve notes, may hold all or little of the gold security with the exception of the five per cent. redemption fund which is held in the United States Treasury. The Federal Reserve Agents' Fund and the Gold Settlement Fund are carried on the same books by the settling agent, but are kept entirely separate. Inter-district settlements between the Federal reserve banks for Federal reserve notes are settled through the Gold Settlement Fund. But any shifting of credit from the Gold Settlement Fund to the Federal Reserve Agents' Fund for the benefit of any agent or vice

<sup>54</sup>See pp. 299-301 above for a description of this Fund.

versa has nothing to do with inter-district transactions; it is entirely between a Federal reserve bank and its agent.

Transfers between a Federal reserve bank and its agent are made by the settling agent upon advice wired by the bank or the agent, and the proper entries are made by the bank on its books and by the agent on his books upon receipt of wired advice from the settling agent. Such transfers do not affect the gold funds of any other bank or agent, and, therefore, are made independently and not as a part of the regular daily settlement participated in by all Federal reserve banks.<sup>55</sup>

Prior to June 1, 1922, Federal reserve banks made payments through the Gold Settlement Fund to the Treasurer of the United States for the account of member national banks for credit to their five per cent. redemption funds against national bank notes. Since that time, however, the transfers are made between two funds within the Treasury, namely, the gold redemption fund against Federal reserve notes and the five per cent. redemption fund against national bank notes.<sup>56</sup>

### Gold movements

One of the greatest advantages of the Gold Settlement Fund is the fact that it reduces gold shipments to a minimum. If any shipments are made, they are done at the expense of the Federal reserve banks, which means the greatest economy for all banks participating in the system. Today the shipment of gold in settlement of inter-district balances practically has ceased as a result of the operation of the Gold Settlement Fund, although some gold coin and certificates, particularly the latter, are shipped between the Treasury of the United States and the Federal reserve banks, also between Federal reserve banks and member and non-member banks. The expense of gold shipments between the Treasury offices and Federal reserve banks, under the provisions of Section 16 of the Federal Reserve Act, amounted, in 1922, to \$6,231.60, and in 1923, to \$3,254.11. As a result of assuming the work of receiving gold, silver, and minor coin for exchange and redemption, formerly done by the sub-treasuries, the Federal reserve banks, in 1923, paid out approximately \$177,000 in shipping charges (postage, expressage, and insurance) on coin shipped to member and non-member banks in that year.<sup>57</sup>

<sup>55</sup>See also p. 318 above.

<sup>56</sup>See p. 319.

<sup>57</sup>See pp. 319-321 above.

**The advantages of the Federal reserve clearing and collection system**

There is, in principle at least, probably no better clearing and collection system in the world than the one operated by the Federal Reserve Board and banks. The more universal it becomes, the greater the number of non-member banks that join the system, the more effective it will be, and the greater will be the benefits that will accrue to all. It would seem difficult to improve upon the plan as conceived. It means the maximum of economy and speed in collection and transfers as well as increased safety for all banks. It means an increased and wider use of deposit currency as a medium of exchange, the most effective and economical medium ever devised. More specifically, it has brought about daily settlements for the entire United States, so far as participating banks are concerned; it has made possible an almost instantaneous transfer of credit from one end of the country to the other; it has brought about the direct routing of checks and has eliminated most of the time necessary for remittance; it has reduced to a minimum the necessity for currency shipments and for exchange charges, thereby securing greater economy for all and placing deposit currency virtually on a par with note currency; it has reduced the float to a minimum and thereby made reserves real; and finally, it has made provisions by which virtually all commercial banks may secure the benefits directly or indirectly.

In the face of these advantages, however, many banks have refused to participate in the system or assume any of the responsibilities connected with it. Indeed, the number of banks opposing the system has increased since 1921. A word may be said at this time concerning the opposition to the system.

**Opposition to the Federal reserve clearing and collection system<sup>58</sup>**

The chief advantage claimed by the banks which oppose the logical and complete development of the new system comes from charging exchange for remittances. This argument, as well as others presented by them, has been demonstrated to be fundamentally unsound. If all commercial banks would participate in the new system there would be much greater gains to all. But while some banks are in the system and others are not, there may be some small element of truth in the claim of the opposing banks that they secure some advantages by remaining on the outside and

<sup>58</sup>For a full discussion of this subject see Chap. VII.

charging exchange. This claim has had validity only because these banks have been able to get their checks and drafts collected at par indirectly through the Federal reserve clearing and collection system, while they exacted charges for making remittances. In other words, their connection with the system has been parasitical in the main.

The opposition, which has been strongest in the South, has been rather well organized and, on the whole, fairly successful. A large percentage of the opposing banks are members of an organization known as the National and State Bankers' Protective Association, which was designed to organize an effective opposition. Almost every conceivable obstacle has been thrown in the way of the Federal reserve banks in their efforts to establish a Federal par remittance system. Dilatory practices have been resorted to in tendering payments, legends have been stamped on checks in order to prevent them finding their way to Federal reserve banks as collecting agents, petitions have been sent to Congress for hearings and amendatory legislation, literature has been circulated widely in behalf of the opposing banks, States have passed legislation hostile to the Federal par remittance system, and finally, the opposition has carried its complaints to the courts.

The opposing banks have emerged from the controversy rather successfully up to date. The United States Supreme Court has definitely decided that there is nothing in the Federal Reserve Act which obligates the Federal Reserve Board or banks to make the system nation-wide and has upheld the North Carolina statute which authorized the State banks to charge exchange for remitting to all banks or to pay agents of the Federal Reserve Bank of Richmond in drafts when they present checks at the banks' counters. Federal reserve banks may collect checks on such banks by presenting them directly over the counters through local collecting agents, but they may not use this method to embarrass the drawee banks, nor may they publish the names of banks on their par lists without the consent of those banks.<sup>59</sup>

The decisions of the United States Supreme Court constitute a real blow to the Federal reserve banks in their effort to establish a universal par remittance system. There are but two ways through which the system may become nation-wide: One is to

---

<sup>59</sup>It had been a common practice for the Federal reserve banks to publish on their par lists the names of all banks on which they would collect checks at par, that is, including those on which they would collect checks by direct presentations over the counters, regardless of whether these banks had any desire to remit at par or had given their approval for the publication of their names.

amend the Federal Reserve Act and make it compulsory for all banks to remit at par; the other is through competition. Just how effective competition will be is an open question. If customers of these non-par banks feel hampered because of the fact that their checks tend to become unacceptable outside the local community, they may tend to move their accounts to par banks. It has been pointed out above that many of these non-par banks, while refusing to remit at par, had been securing indirectly and at the same time, the benefits of par collections, by using member banks as collecting agents. The Federal Reserve Board has now limited these benefits by prohibiting Federal reserve banks from receiving checks and drafts drawn on non-par banks. This will deprive the opposing banks of some of the advantages which they may have thought they had and will tend to restrict the checks of their customers to a narrower field, and perhaps, make the competitive aspect of the question more effective.

While competition may accomplish much, it must be borne in mind that there are several factors which tend to render it ineffective. In some communities there are no competing banks and, consequently, the customer has no alternative. Many others would not remove the accounts to par banks if they had an alternative. Some are uninterested in the controversy and know nothing of the merits of the issues involved. Others will look upon it as a matter of local pride to protect the home bank against any outside interference. The old State-rights idea is probably an important factor lying back of the opposition, most of which is in the southern States. Many people instinctively resist everything that tends toward centralization and instead of carefully analyzing the problem, assume that the proposition must be wrong somewhere. The fact that it is the small institutions arrayed against the large, powerful, Federal, centralizing organization has its dramatic appeal. Whether the opposition is due to more or less subconscious or conscious reasons, it rests upon bases fundamentally unsound. Certainly, an enlightened self-interest does not constitute any part of the reasons for the opposition.

A simple solution to the problem would be to pass a Federal law making the system compulsory for all banks. Such a step would be opposed most strenuously by the non-par banks, nevertheless it would be for their general well-being as well as for that of the entire country. As pointed out above,<sup>60</sup> these non-par

---

<sup>60</sup>P. 290.

banks have placed themselves directly across the path of banking progress and are attempting to levy a tribute upon business while progressive tendencies in business and banking tend towards the elimination and more equitable distribution of such charges.

## **II. The practices of banks not connected with the Federal reserve clearing and collection system, directly or indirectly**

In the interest of completeness of treatment, a brief survey will be made of the practices of those banks which have no connection with the Federal reserve clearing and collection system. Space prevents more than a summarized statement of their methods; did it not, more than that seems unnecessary.

### **A. Where the banks are in the same city. 1. Where the banks have no clearing house association**

Banks located in the same town or city but having no clearing house association, collect checks and other items on each other by direct presentation of the items over the counter through messengers. These local methods are much the same regardless of whether the banks may or may not be members of the Federal reserve clearing and collection system.

### **2. Where the banks are members of a clearing house association**

It is doubtful whether there is a clearing house association in existence in which none of the members have any connection, directly or indirectly, with the Federal reserve clearing and collection system. When a city is large enough to justify a clearing house, it is hardly probable that there would not be one or more national or member State banks located there. Were it possible to find a clearing house association composed of banks having no connection with the Federal reserve clearing and collection system, the methods used at the clearing house would not be found different from those described elsewhere. Such a clearing house, obviously, would make its settlements in some form other than on the books of the Federal reserve bank and might have a country collection department for the purpose of collecting the out-of-town checks for its members. Otherwist, the practice would be the same in principle, as that described in Chapter X.

### **3. Where some of the banks are members of the clearing house association and others are not**

Here, again, it is doubtful if there is a city large enough to enjoy not only a clearing house, but large enough to have banks

outside the clearing house association, which at the same time have no connection, directly or indirectly, with the Federal reserve clearing and collection system. Such non-member banks will be found in greater numbers outside the clearing house association than inside, and in that case the connection between the association and those outside will be little, if any, different from those described for New York City. The connections may be through either a city collection department of the clearing house, or through messengers, or both.

#### **B. Where the banks are not in the same city**

Non-member banks collect their out-of-town checks through correspondents. The methods used by such banks are no different from those which prevailed among all the banks prior to the establishment of the Federal reserve clearing and collection system.<sup>61</sup> Such banks find it necessary to carry accounts in some of the more important financial centers, not only to secure collecting agents, but to be able to meet the demand of their customers for drafts needed in making out-of-town remittances.

Various kinds of correspondent relations are established among such banks. Reciprocal relations are common. Two widely separated banks may open accounts with each other and agree to collect each other's checks, drafts, and other items free of charge. In such cases, settlement between the banks is made by crediting and charging the accounts of the respective banks. It is rather common for banks in financial centers to agree to collect checks for distant banks at par, not to secure the same favors, but primarily to induce country banks to carry deposits with them for the sake of the profit which is supposed to result from the use of such deposits. A few banks still pay interest on such deposits, in addition to agreeing to collect the checks at par within a given area.

Regardless of the arrangement made, the practice is cumbersome, expensive, and wasteful. There are no advantages in it that cannot be secured through the Federal reserve clearing and collection system. The problem *par excellence* in the collection of checks has been in connection with the collection of out-of-town checks and in the correspondent relations among the banks. Most of the evils and weaknesses found in our clearing and collection "system" prior to the inauguration of the Federal Reserve System were found connected with the correspondent relations existing

<sup>61</sup>See Chap. IV, especially pp. 99-101.

among banks.<sup>62</sup> It has been one of the main purposes of the Federal Reserve System to correct these evils, and to the extent that the non-par banks successfully oppose the new system, it will be impossible to eradicate all the defects.

Many non-par banks have used member banks as correspondents and have secured many of the advantages of the Federal reserve clearing and collection system indirectly, but the Federal Reserve Board has now prohibited any Federal reserve bank from receiving on deposit or for collection any check drawn on any non-member bank which cannot be collected at par in funds acceptable to the Federal reserve bank of the district in which the non-member bank is located.<sup>63</sup> This will separate the non-par banks from the system to a limited extent. As pointed out above, competition may or may not force them to become par banks. If competition does not force non-par banks into the system, the only solution will be found in a Federal statute which will require all banks to remit at par. Without this, the Federal reserve clearing and collection system can never reach that degree of perfection nor secure for the people those benefits for which it was designed.

---

<sup>62</sup>See p. 101 above.

<sup>63</sup>Regulation J, Series of 1924, Section III (Superseding Regulation J, Series of 1920), *Federal Reserve Bulletin*, Vol. X (1924), p. 489.





## INDEX

### A

- Acceptances, collection charges on, 203; collection of, 203, 204; New York Clearing House provides for clearing of, 204; passed through New York Clearing House, 446; reserves against money paid in anticipation of, 364; schedule for availability of proceeds of bankers', 205.
- Adams, L. R., check collection plan, 277-278; General Secretary, National and State Bankers' Protective Association, 235.
- Afternoon force in the transit department of a bank, 451-452.
- Agency in collection, drawee banks as agents, 541; Federal reserve banks act as agents only, 178, 227, 229; liabilities of Federal reserve banks, 289; Massachusetts Rule, 285; New York Rule, 284-285.
- Agricultural Credits Act, 1923, 223-224.
- Alabama, anti-par remittance law, 252-254.
- Aldrich-Vreeland Act, 161, 163.
- American Bankers' Association, 425-428.
- American Banknote Company, 157.
- Amsterdam, Bank of, 11, 16.
- Analysis of accounts, 449.
- Analysis of reserve account of member banks, 354-355.
- Andrew, A. P., on currency substitutes in 1907, 151, 153, 154, 160.
- Annalist (New York Times), barometer and Business Index Line, 482, 497; on clearings as a business barometer, 520.
- Assembly racks, 435, 437-438; work of, 393-394.
- Atlanta, Ga., country clearing house, 29; par collection case, 227, 255-263.
- Attorney-General, on par remittance, 246; Gregory rules that par remittance does not apply to State banks, 234.
- Auditor's Proof of Individual Ledgers, 356-357.

- Austria, use of checks in, 22.
- Austrian National Bank, 22.
- Austro-Hungarian Bank, 22.
- Availability of checks (see deferred and immediate credit principle), deferred for intra-district cash items, 185; immediate, for items being collected, 172, 175, 176; immediate and deferred, 308-310.

### B

- Babbage inquiry of 1855 on importance of checks, 46.
- Babson Compositplot, 493-497.
- Babson, Roger W., on clearings as a business barometer, 519-520; Statistical Organization, 482, 493-497.
- Bachem, Joseph, on checks in England, 18; on checks in Germany, 14; on origin of checks, 9; on use of checks in Holland, 15.
- Bagehot, Walter, on development of deposit banking, 40-41.
- Balances, clearing house, settlement of, 402-406.
- Bank, Austrian National, 22; Austro-Hungarian, 22; Cheque, The, note, 62, 20; Connecticut Land, of, 1732, 40; Industrial of Russia, 27; Land of 1686, 39-40; Land of 1714, 40; Massachusetts Land Bank scheme of 1740, 40, 42; National of Belgium, 26; National of Denmark, 25; National Hungarian, 23; Reichsbank, 21; Silver of 1740, 42; Suffolk, 73-78; Swiss National, 24.
- Bank clearings as a business barometer, 514-525.
- Bank notes, as a bank liability, 74-77; collection of, before 1863, 78-79; differ from checks, 5; principle of par collection of, 73-78; profit in using, 5.
- Bank of Amsterdam, 11, 16; Brazil, 34; Colombia, 33; England, 19; Finland, 28; France, 21; Genoa, 12; Japan, 31; Latvia, 29; Mexico, 32; Mutual Redemption, 78; New York, 54; North America, 43-45, 54; Norway, 25; Pennsylvania, 45, 54; Por-

- tugal, 27; Roumania, 29; Spain, 26; St. George, 12; State Bank of Russia, 27; Sweden (Riksbank), 25; United States, first, 45, 54; United States, second, 56-58; Venice, 10.
- Bank organization, assembly racks, 435, 437-438; check clerk, 436; check desk department, 435-437; city collection department of a bank, 439-444; coupon collection department, 447; fifth teller, 439; first teller, 429-431; for clearing and collection, 429; fourth teller, 433-435; handling of clearing house items, 437-438; handling of items payable at bank itself, 429-431; mail teller's department, 394, 433-435; paying teller's department, 429-431; receiving tellers' department, 431-432; second teller, 431-432; transit department of a bank, 448-449.
- Banking, Colonial period, during, 37; destitution of early information on, 47-48; general banking and currency situation, 1816-1836, 58-59; paper money and banking schemes of Colonies, 41-43; sectional differences in 1838, 61; wildcat, 1836-1863, 60-66.
- Banknote Company, American, 57.
- Banks, liabilities to drawers of checks, 2; liabilities to holders of checks, 2; Lumber (Lombard), 38; outside continental United States, reserve requirements of, 339; private land of 1671, 38.
- Barometer, business, *Annalist*, 482, 497, 520; bank clearings as a, 514-525; Brookmire, 500-501; clearings as a, 496, 497, 499, 501, 504, 519-525; debits to individual accounts as a, 514-525; Standard Statistics Company's, 497-499.
- Barometers, composite type of, 482; nature of, 478, 482, 492-493; single, of business conditions, 480-483.
- Batch method for handling checks and drafts, 431-432.
- Belgium, National Bank of, 26; Use of checks in, 26.
- Bills of exchange, definition of, 1; International Congress on, 7; nature of, 3; origin of, 9.
- Bill-of-lading drafts as collection items, 203-204.
- Block method of handling checks and drafts, 431-432.
- Bollman, Erick, on use of checks, 1810, 52-54.
- Branches of Federal reserve banks, 169, 186-187, 216, 307, 332-334, 547-553; as collecting agents, 547-550; direct-settling, 547-550; direct-settling clear through Gold Settlement Fund, 307; intra-district clearing and collection through, 550, 553; reserve requirements of, 332-334.
- Branches, foreign, of member banks, reserve requirements, 340.
- Brandeis, Mr. Justice, in Atlanta par collection case, 261-262.
- Brazil, Bank of, 34; use of checks in, 34.
- Brookings State Bank of Oregon, in San Francisco par collection case, 263-266.
- Brookmire, Economic Service, 482, 500-501; on clearings as a business barometer, 520; United States Barometer Chart, 500.
- Bubble Act of 1741, 43.
- Bureaus of credit in clearing houses, note 12, 137.
- Burgess, W. R., on velocity of deposits, 94, 510-514.
- Business barometers (see barometers).
- Business conditions, barometer of, single, 480-483; meaning of, 478-479.

## C

- Canada, use of checks in, 32.
- Cannon, James G. on currency substitutes during panic of 1907, 151, 153, 154.
- Carey, H. C., on use of checks, 1840, 62.
- Case of, American Bank and Trust Company et al. v. Federal Reserve Bank of Atlanta et al., 227, 255-263; *Briscoe v. The Commonwealth of Kentucky*, 60; *Brookings State Bank v. Federal Reserve Bank of San Francisco*, 228, 263-266; *Drovers' National Bank v. Anglo-American Packing and Provision Company*, 104; *Farmers and Merchants Bank of Catlettsburg, Ky. v. Federal Reserve Bank of Cleveland, Ohio, and Mary B. McCall*, 228, 266-269; *Farmers and Merchants Bank of Monroe, North Carolina, et al. v. Federal Reserve Bank of Richmond, Virginia*, 77, 228, 269-276; *Federal Reserve Bank of Richmond v. Malloy et al., Trading as Malloy Brothers*, 228, 272, 284-286; *First National Bank of Nymore v. Miller*, 108; *Gifford v. Hardell*, 108; *Merchants' National Bank of Philadelphia v. Goodman et al.*, 104; *Pascagoula National Bank of Moss Point, Mississippi v. Federal Reserve Bank of Atlanta et al.*, 277-282; *Suffolk Bank v. Lincoln Bank*, 75-76; *Suffolk Bank v. Worcester Bank*, 76.

- Cash, 432.
- Cash items, nature of cleared through Gold Settlement Fund, 307.
- Cashier's checks, as an emergency currency, 154; nature of, 4.
- Catlettsburg, Ky., bank, in Cleveland par collection case, 266-269.
- Catterall, R. C. H., on second Bank of the United States, 56-57.
- Centerville, Ind., State Bank of, 461.
- Certificates of deposit, as an emergency currency (1907), 155-156; nature of, 4.
- Certified checks, 2.
- Charges, exchange, excessive, 102, 103.
- Check clerk, 436.
- Checks collection (see under specific topic in question), attempts at reform, 124-130.
- Check desk department, 435-437.
- Check of, Burr, Aaron, 1784, 44; Verplanck Gulian, 1789, 44; Washington, George, 52; Webster, Noah, 52.
- Checks, advantages of, 6; attempts to determine importance of, 45-47, 86-95; bank's liabilities to drawer and to holder of, 76-77, 272-274, 530-531; Carey, H. C., on use of, 1840, 62; cashier's, 4; cashier's, as an emergency currency, 154; certified, 2; circuitous routing of, 103, 105-107, 108; clearing and collection, meaning of, 67-69, 528-529; clearing house, for general circulation, 154; collection of before days of clearing house, 71-73; definition of, 1; deposits as a measure of the importance of, 47-51; Dewey, D. R., on use of checks after 1840, 62-63; differ from bank notes, 5; Hamilton, on use of, 1790, 45; importance of, 1855-1924, 84-95; importance of, 1895, 88; importance of, 1896, 89; importance of, 1896-1909, 91-92; importance of, 243; increasing use of, 8; inquiries into importance of, 20, 45-47, 86-95; limitations of, 6; limiting amount to be paid (1907), 159; nature of, 1-3, 5, 76-77, 272-274; 530-531; need of separate legal code for, 7; origin in United States, 37-40; origin of, 9-10; payable only through clearing house (1907), 159; payment for in drafts, 2; Raguét, Condy, on use of, 1837-1838, 61-62; requisites of, 3; right of payment, relative, 238, 239; use of, during Colonial period, 37; use of, 1791-1811, 51; use of, 1811-1816, 54-56; use of, 1816-1836, 56-58; use of, 1836-1863, 60-66.
- Cheque Bank, The, note 62, 20.
- Chicago Clearing House, establishes first examination department, 414.
- China, currency system, 30; use of checks in, 30.
- Circuitous routing of checks, 103, 105-107.
- City collection department of a bank, 439; disposition of receipts of, 443-444; messenger force, 443; receipts, disposition of, 443-444; settling for collections, 444; sources of items handled by, 440-441; territory covered by, 441-442; types of items handled by, 439-440; of Federal Reserve Bank of New York, 411, 536-537.
- City collection department of a clearing house, 391, 408-409, 535-537.
- City department of a clearing house, 391, 394-408.
- City items, collecting, 409-410.
- Claiborne-Adams check collection plan, note 90, 277-278.
- Claiborne, Charles DeB., 277-278.
- Clarke, Mr. Chief Justice, in Richmond par remittance case, 271.
- Classification of items sent for collection, 471.
- Clean drafts, 440.
- Clearances, 436.
- Clearing, force for effecting in clearing house, 397; items eligible for in clearing house, 391-392, 532-533; meaning of, 67-69, 528-529; origin of practice, 69-70; procedure, 397-406.
- Clearing and collection of checks, bank organization for, 429.
- Clearing and collection system, defects of old, 101-112; growth of, 225-226; inter-community under National Banking System, 99-101; inter-district (see inter-district clearing); intra-district (see intra-district clearing); meaning of, 67-69, 528-529; opposition to, 226-229 (see opposition to); relation to reserve system, 96-98, 101; under National Banking System, 98-130; when banks in same city have a clearing house, 531-535; when banks in same city do not have a clearing house, 529-531; when some banks are in clearing house, others are not, 535-537.
- Clearing certificates, an emergency currency, 149.
- Clearing house, administration, the, 384; departments, 391, 532; indorsement of items for, 392-393; New York committees, 385-387.
- Clearing house associations (see clearing house).

- Clearing house balances, borrowing and loaning, 404-405; manager certifies to Federal reserve bank, 402-404; paying in clearing house certificates, 402; paying in clearing house loan certificates, 404; payment of money, 404; settlement by draft, 405; settlement by manager's check, 405; settlement of, 402-406.
- Clearing house bureaus of credit, note 12, 137.
- Clearing house checks for general circulation (1907), 154.
- Clearing house conferences, 137.
- Clearing house departments, 391, 408-415, 532-537; city collection department, 391, 408-409, 535-537; city department, 391, 394-408; country department, 391, 411-413; examination department, 391, 414-415.
- Clearing house errors, adjustment of, 406-408.
- Clearing house examiners, 414-415.
- Clearing house forms, 394-396; clearing house proof (New York), 401; delivery clerk's receipt, 395-396; exchange slip, 394; first ticket, 395; New York Clearing House Manager's certified list of debit and credit balances, 403; nine o'clock ticket, 396; second ticket, 400; settling clerk's statement, 398-399; small ticket, 394-395, 398.
- Clearing house items, eligible for clearing, 391-392; handling of by banks, 437-438; indorsement of, 392-393.
- Clearing house loan certificates, in large denominations (1907), 151-153; in small denominations (1907), 153-154; issued in times of stress, 423; issue of 1860, 140-144; issues of 1861, 1863, 1864, 144; issues of 1873, 145-146; issues of 1873-1896, 141; issues of 1879, 1884, 1890, 1891, 146-147; issues of 1893, 147-149; issues of 1895, 1896, 149-150; issues of 1907, 150-160; issues of 1914, 161; nature of, 138-140, 151.
- Clearing house of, Atlanta, 141, 149; Baltimore, 141, 144, 145, 146, 149, 162; Berlin, 71; Birmingham, 141, 149; Boston, 71, 141, 144, 145, 147, 148, 149, 168; Chattanooga, 141, 149; Chicago, 152, 162, 414; Cincinnati, 141, 145, 146, 149, 155; Cleveland, 71, 144, 154; Des Moines, 162; Detroit, 141, 149, 162; Dublin, 71; Edinburgh, 71; Fargo, 153; Harrisburgh, Pa., 153; Kansas City, Mo., 153; London, 71; Louisville, Ky., 141, 147, 162; Los Angeles, Calif., 153; Milwaukee, Wis., 154; Minneapolis, Minn., 162; New Orleans, 141, 145, 146, 148, 149, 162; New York City, 71, 80-82, 141, 144, 145, 146, 147, 148, 150, 162, 383-384; Northern New Jersey, note 28, 411; Paris, 71; Philadelphia, 7, 141, 144-146, 148, 149, 153, 157, 162; Pittsburgh, 141, 149; St. Louis, 145, 162; St. Paul, Minn., 162; St. Petersburg, Russia, 71; Vienna, Austria, 71; Worcester, Mass., 71.
- Clearing house procedure, 397-398, 533-534.
- Clearing house proof, 400-401.
- Clearing House Section of the American Bankers' Association, 414, 425-428, 484-485.
- Clearing house sessions, 396-397, 533.
- Clearing house statements, 137, 424-425.
- Clearing house system of examinations, note 10, 136.
- Clearing houses, departments of, 391, 408-415, 532-537; Federal reserve banks as, 538; functions, 531-532; items eligible for clearing, 391-392, 532-533; Middle Ages, in, 69; nature of, 70, 383, 531; number of, 383, 391, 531; origin of, 70-71; rendering assistance to members, 422; reports on clearings, 483-484; settling clerk, 438; special functions of, 131 ff., 416; State, proposed, 119; statements, public, 424-425.
- Clearing non-members of New York Clearing house, 389.
- Clearing of checks (see under particular topics); Gallatin recommended system for, 79-80.
- Clearing operations, nature of, 383.
- Clearing procedure in clearing houses, 397-398, 533-534.
- Clearing telegrams, incoming Gold Settlement Fund, 312; outgoing Gold Settlement Fund, 311.
- Clearings, as an index of business conditions, 483-484; versus debits to individual accounts, 483-487.
- Clearings and transfers, average weekly for years, 1915-1922, 319; effect on gold movements, 322-323.
- Clearings as a business barometer, 496, 497, 499, 501, 504, 514-525; Annalist on, 520; Babson, R. W., on, 519-520; Brookmire on, 520; Commercial and Financial Chronicle on, 519; Hardy, C. O. on, 521-522; Harvard Committee of Economic Research on, 520; Snyder, Carl, on, 519, 522-525; Standard Daily Trade Service on, 520.

- Clearing's Index of Business, 1875-1924, 517-518.
- Cleveland par collection case, 228, 266-269.
- Collecting agents, drawee bank, as, 541; Federal reserve banks as, 178, 227, 229; Federal Reserve bank branches, as, 547, 550.
- Collecting checks, items of cost in, 113-117.
- Collection, by banks in same city, 529-531; by city collection department of a bank, 442-443; direct intra-district, 553-554 (see direct routing and direct presentation); meaning of, 67-69, 528-529.
- Collection charges, absorption by collecting banks, 1863-1914, 112-119; burden of in 1919, 212-213; provisions (original) of Federal Reserve Act affecting, 164; rules and regulations of New York Clearing House regulating, 418-421; who bore the cost, 1863-1914? 112-113; who should bear the cost? 117-119.
- Collection items, bill-of-lading drafts as, 203-204; charges for collection, 203; collection of, 201-205; collection within a city, 534-535; inter-district, 570-571; intra-district, handling of, 555-556; out-of-town, 463-467; settlements for out-of-town, 465-467.
- Collection of checks on non-member par banks, 543-545.
- Collection of notes, drafts, and other items, 201-205, 444-448.
- Collection procedure, by city collection department of a bank, 442-443.
- Collections, method of sending through Federal reserve banks, 465; methods of settling for, 444, 462-463; settling for, 444.
- Colombia, Bank of, 33; use of checks in, 33.
- Colwell, Stephen, on Bank of St. George (Genoa), 13; on Bank of Venice, 11; on growth of deposit currency after 1835, 63-64.
- Commercial and Financial Chronicle, on clearings as a business barometer, 519.
- Compensating balances, under old clearing and collection system, 110-111.
- Conant, C. A., on origin of credit instruments, 10; report on bills of exchange, 7.
- Committees, clearing house, 385-387.
- Composite barometers, 482.
- Composite indices, Snyder on, 504-509.
- Compositplot, Babson, 493-497.
- Compulsory clearing system, 165; first applied in Kansas and St. Louis districts, 168; under decentralized reserves, 177-178.
- Computation of reserves, against balances due from foreign branches, 363; against balances held in foreign banks by member banks, 362-363; against money paid in anticipation of acceptances, 364; against "Special savings deposits," 364-365; by Federal foreign banking corporations, 381; by Federal reserve banks, 369-371; by member banks, 350-362; by non-member national banks, 381; by non-member State banks, 379-381; by private banks, 379-381; by trust companies, 379-381; country national bank, semi-monthly and daily, 355-360; distinction between individual and bank deposits, 362; no reserves against balances due to foreign branches, 363-364; penalties for deficient reserves in member and Federal reserve banks, 366-369, 371-374; periods over which computed by member banks, 365-366.
- Conferences, annual clearing house, 137, 425-428.
- Correspondents, member banks may collect through, 554-555; non-member banks collect through, 555.
- Cost of collecting checks, items of, 113-117; who bore it under old system? 112-113; who should bear it? 117-119.
- Cost of collecting items absorbed by Federal reserve banks, 213-214.
- "Countries, large," 449.
- "Countries, small," 449.
- Country Bankers' Association of Georgia, 256.
- Country Clearing Houses of, Atlanta, 129; Boston, 126-129, 168; Kansas City, Mo., 128-129; Reserve City Bankers' Association attempts to establish, 129.
- Country collection department of a clearing house, 391, 411-413.
- Country items, collection numbers, 464-465; collection of, 463-465; record files for, 464-465; stamps used in collection of, 464-465.
- Country national bank, auditor's proof of individual ledgers, 356-357; computation of reserves of, 355-360; daily statement of re-

- quired reserve, 358-359; transit account of, 360-361.
- County clearing of checks, 187-188.
- Coupon collection department of a bank, 447.
- Credit data, gathering by clearing houses, 136-137, 423.
- Credit system for cash items, deferred, 308-310; immediate, 237, 308-310.
- Currency deposit, growth of, 1855-1924, 84-95.
- Currency situation, 1816-1836, 58-59.
- Currency situation, 1836-1863, 60-66.
- Currency situation (for other periods and countries, see topics in question).
- Currency substitutes in panic of 1907, 150-160.
- Curtis, F. H., on computation of reserves, 353.
- D**
- Daily statement of required reserve for country national bank, 358-359.
- Daily settlements provided for in Gold Settlement Fund, 215.
- Daily settlements supplant weekly, 305-308.
- Davis, A. M., on Colonial monetary theories, 37; on plan for private land bank of 1671, 38.
- Debits, to bank accounts, 485-486; to bank accounts v. debits to individual accounts, 487-488; to individual accounts, 484-486.
- Debits to individual accounts, as reported by Federal Reserve Board, 488-493; clearings versus, 483-487; monthly average, 1919-1924, 490-493; reported by 141 centers, 1919-1924, 523-524; versus debits to bank accounts, 487-488.
- Decentralized reserves, compulsory clearing and collection under, 177-178; relation of voluntary clearing system to, 166-167.
- Defects of the old clearing and collection system, 101-112.
- Deferred availability principle, 179-180, 309-310, 471-475, 542-543; intra-district cash items, for, 185; nature, 309-310.
- Deferred credit principle (see deferred availability principle).
- Deferred debits, 542-543.
- Delivery clerk's statement, 395-396.
- Denmark, National Bank of, 25; use of checks in, 25.
- Deposits, "all other" in Federal reserve banks, 348-349; bank distinguished from individual in computing reserves, 362; government in Federal reserve banks, 347-348; government in member banks, reserves against, 344-345; individual distinguished from bank, 362; in Federal foreign banking associations, nature, 250; in Federal reserve banks, nature, 347-349; in non-member State banks, nature of, 349-350; in private banks, nature of, 349-350; in trust companies, 349-350; nature of against which reserves are held, 343-347; regulation of interest on by clearing houses, 416-418; reserve of member banks in Federal reserve banks, 348; special savings, reserves against, 364-365; velocity of, 1875-1925, 517; velocity of, 1919-1924, 512; velocity in eight cities, 1919-1923, 512, 514; velocity of, as a measure of business activity, 510-514; velocity of, in 141 cities, 1919-1923, 514, 516.
- Deposit currency, annual rate of turnover, 93-94 (see velocity of deposits); as a bank liability, 76-77, 238-239, 530-531; growth after the Revolution, 43-45; growth of, 1855-1924, 84-95; growth of, 1881-1923, 94-95; growth of, 1896-1909, 91-92; nature of, 1-5, 76-77, 272-274, 530-531; profit in using, 5; why it did not develop in Colonies, 40-41.
- Destitution of early information on banking, 47-48.
- Dewey, D. R., on Colonial paper money issues, 42; on use of checks after 1840, 62-63.
- Direct collection by Federal reserve banks, 178-179, 227, 541-542.
- Direct presentation of cash items, 105 (see also direct routing), by Federal reserve banks to drawee banks, 227, 541-542.
- Direct routing of items, Federal Reserve Bank of Richmond, provisions for, 562-567; form for four-day points, 456; inter-district, 561-567; intra-district, 187-189; recapitulation form of cash letters sent direct, 457; to drawee banks of inter-district cash items, 191-192, 568-569; to Federal reserve banks and branches in other districts, 190-191, 561-567; schedules, time, for, 558-561, 565-568.
- Direct routing system, abuses of, 567-568.
- Direct sending of items (see direct routing).
- Direct-settling branches, 546-550.

- Discounts, of Federal reserve banks on selected dates, 328-329.
- Dishonored items, 440 (see also protest).
- Documentary drafts, 440.
- Doubles, 434.
- Drafts, clean, 440; clearing and collection of (see under clearing and collection); documentary, 440; Federal exchange and transfer, 206, 208; on reserve banks as emergency currency (1907), 156.
- E
- Eckels, Comptroller of the Currency, 46, 88, 89; inquiry into importance of checks, 46, 88, 89.
- Edge corporations, computation of reserves by, 381; reserve requirements of, 340-341.
- Ellis, Judge W. D., on Atlanta par collection case, 257.
- England, Bank of, 19; use of checks in, 18.
- Errors, adjustments of clearing house, 406-408; penalties of New York Clearing House for, 415-416.
- European countries, southern, use of checks in, 29 (for other countries, see names of each).
- Evans, Judge Beverly D., on Atlanta par collection case, 257, 260.
- Examination departments in clearing houses, 135-136, 391, 414-415.
- Exchange charges (see also collection and remittance charges); burden of in 1919, 212-213; excessive under old system, 102-103; fixing uniform rates of, 134; no longer justified, 241, 242; regulation of by New York Clearing House, 418-421; uniform charges proposed, 121.
- Exchange drafts, Federal reserve, 206-208, 571.
- Exchange slips of New York Clearing House, 394.
- Exchanges, local, with clearing houses, 99, 531-537, 579-580; local, without clearing houses, 98, 529-531, 579.
- Expenses of clearing and collection assumed by Federal reserve banks, 538.
- Expenses of New York Clearing House, 390.
- F
- Fairs, Lyons, 69-70; Mediaeval, 69; Placenzia, 69-70.
- Federal Advisory Council, on computation of reserves against balances held in foreign banks, 362-363.
- Federal clearing division of Federal Reserve Bank of New York, 410, 536.
- Federal foreign banking corporations (see Edge corporations); computation of reserves by, 381; deposits in, nature of, 350; reserve requirements of, 340-341.
- Federal Reserve Act, amendment of Section 13, Sept. 7, 1916, 196, 233; amendment of June 21, 1917, 197-198; Hardwick amendment, June 21, 1917, 200, 234, 238; legal provisions for clearing, 164-165; Section 11 on reserve deficiencies in Federal reserve banks, 373; Section 13, 164-165, 196-198, 201, 233; Section 16, 164-165, 372; Section 19, 166-167.
- Federal Reserve Agents' Fund, 299-301; changes in method of operating, 171, 214; establishment of, 170-171; operations of, 1915-1923, 302; transfers from to Gold Settlement Fund, 315, 318, 574-575.
- Federal reserve bank branches, as collecting agents, 547-550, 558-561; inter-district clearing and collection through, 556-570; intra-district clearing and collection through, 550-553; relation to Gold Settlement Fund, 186-187, 216; reserve requirements, 332-334; two types, 169, 186-187, 216.
- Federal Reserve Bank of New York (for others, see under name or subject); city collection department of, 411, 536-537; Federal clearing division of, 410, 536; Reports Department on velocity of deposits, 92-94; statement of condition of, 368.
- Federal Reserve Bank of Richmond, form for direct routing of items, 563; Immediate Credit Symbol System of, 545-547; provision for direct routing of items, 562-567.
- Federal reserve banks, "all other" deposits in, 248-249; absorb costs of collecting items, 213-214, 538; as collecting agents, 558-561; computation of reserves by, 369-371; deposits in, nature of, 347-349; discounts of, on selected dates, 328-329; gold deposits in, 347; gold reserves, October 29, 1920 and March 22, 1922, 325; method of sending collection items through, 465; penalties for deficient reserves, 371-374; present items direct to drawee banks, 541-542; re-discounting between, 573; reserve condition, method of reporting,



- 374-380; reserve requirements, 331-332; reserves on selected dates, 328-329; statements of condition, new and old methods compared, 376-377; transit department of, 470-475.
- Federal Reserve Board, debits to individual accounts, as reported by, 488-493; gathers reports on debits, 485-486.
- Federal reserve city items, 451.
- Federal reserve clearing and collection system (see special topics in question), advantages of, 576; attempts to develop, 200 ff.; average daily number and amount of items handled, 1916-1918, 230; compulsory system under decentralized reserves, 177-178; growth of, 225-226, 247-249; institution of the system, 165-166; inter-district clearing and collection, illustration of, 556-575; inter-district system introduced, 169-170; intra-district system, 529-556; made compulsory, 165; operations of the system, 1919-1923, 231; opposition to, 226-229, 576-579; outline of, 526-528; success of, 229-231; voluntary, 164; where banks in same city have no clearing house, 529-531; where banks in same city have clearing house, 531-535; within a city between members and non-members of a clearing house, 535-537.
- Federal reserve country items, 451.
- Federal reserve exchange and transfer drafts, introduction of, 206-208.
- Federal reserve exchange drafts, 571.
- Federal reserve notes, circulation on selected dates, 328-329; inter-district movement of, 326-328; settlements resulting from redemption of, 315-317, 573-574.
- Federal Reserve System, membership in, 1914-1923, 218-225; membership in, June 30 and December 31, 1923, 222.
- Federal reserve transfer drafts, 571.
- Finland, Bank of, 28; use of checks in, 28.
- First ticket, New York Clearing House, 395, 438.
- Fiscal operations of government, effect on gold movements, 323-324.
- Fisher, Irving, on growth of deposit currency, 1896-1909, 91-92.
- Float, under Federal reserve system, 474-475; under old system, 109-110.
- Florida anti-par remittance law, 252-254.
- Forecasting (see barometers), by economic analysis, 483.
- Foreign banks, computation of reserves against balances held in, 362.
- Foreign branches, computation of reserves against balance in, 363; no reserves against balances due to, 363-364.
- Forms (see content table on).
- France, Bank of, 21; use of checks in, 20.
- Franklin, Benjamin, advocated land banks, note 1, 37.
- Freeport, N. Y., First National Bank of, 461.
- Fund at Boston in New England, The, 38-40.

## G

- Gallatin, Albert, on currency and banking, 1831, 48; on importance of deposits, 1829, 59; on importance of deposits, 1841, 63; recommends clearing and collection system, 1841, 79-80; reports to Congress on condition of first United States Bank, 1809, 1811, 54.
- Garfield inquiry on importance of checks, 1877, 46, 87.
- Genoa, Bank of, 12.
- Georgia, anti-par remittance law, 252-254; Country Bankers Association, 256.
- Germany, giro system in, 14; use of checks in, 14.
- Giro system, in Germany, 14; in Netherlands, 18; in Switzerland, 24.
- Gold distribution in the United States, 321.
- Gold movements, 575; affected by clearings and transfers, 322-323; effect of fiscal operations of government on, 323-324; effect of inter-district movement of Federal reserve notes on, 326-328; effect of rediscounting between Federal reserve banks on, 324-326; excessive under old system, 112; factors affecting inter-district, 319-329.
- Gold reserves of each Federal reserve bank on October 29, 1920, and March 22, 1922, 325.
- Gold Settlement Fund, 189, 556-557; changes in operation of, 171, 214; clearings and transfers combined, 1915-1922, 319; daily settlements provided for, 215-216; daily settlements supplant weekly, 305-308; deductions made in settling through, 314; deputy settling agent,

## INDEX

## I

- 170; direct-settling branches cleared through, 186-187, 216, 307; established, 169-170; gold in, counts as reserves for Federal reserve banks, 296; gold order certificates discontinued, 301-303; incoming Gold Settlement Fund clearing telegram, 312; method of making settlement through, 310-315; nature of, 291; nature of cash items cleared through, 307; operations of, 1915-1923, 318; outgoing Gold Settlement Fund clearing telegram, 311; provisions for, 294-296; relation to rediscounting between Federal reserve banks, 216-217, 304-305; results of operations in 1915, 298-299; settlements for Federal reserve notes through, 573-574; settlements for inter-district cash items, 558; settlements through, 557; settling agent, 170; steps leading to creation of, 293-294; transactions not included in daily settlements, 315-319; transfers from to Federal Reserve Agents' Fund, 315, 318, 574-575; transfers to redemption funds, 315, 319; types of items and transactions cleared through, 557-558; voluntary intra-district system, relation to, 297-298; weekly settlements originally provided for, 297; withdrawals from, 298.
- Government deposits, in Federal reserve banks, 347-348; in member banks, reserves against, 344-345.
- Gregory, Attorney General, on par remittance affecting State banks, 234.
- H**
- Hamilton, Alexander, on use of checks, 1790, 45.
- Hamilton, W. P., on stock market as a business barometer, 482.
- Harding, Governor W. P. G., letter to Edmund Platt, 255.
- Hardwick Amendment, June 21, 1917, 200, 234, 238, 281.
- Hardy, Charles O., classification of barometers, 521; on Babson Composit plot, 496; on clearings as a business barometer, 521-522.
- Harvard Bureau of Economic Research, 482, 501-504.
- Harvard Index of General Business Conditions, 501-504, 520.
- Hepburn, A. Barton, inquiry of 1892 on importance of checks, 46, 88.
- Holland, use of checks in, 15.
- Holmes, Mr. Justice, on Atlanta par collection case, 258.
- Hungary, use of checks in, 23.
- Immediate and deferred credit system, 308-310.
- Immediate credit, giving for uncollected items, note 22, 176.
- Immediate credit principle, 237.
- Immediate Credit Symbol System (fifth district), 477, 545-547.
- Importance of checks (see inquiries into).
- Indices, single of business conditions, 480-483, 492-493.
- India, currency situation, 31; use of checks in, 30.
- Indorsement of items, for clearing, 392-393; through city collection department of clearing house, 409.
- Industrial Bank of Russia, 28.
- Inquiries in England on importance of checks, 45-47; Babbage, 1855, 46; Lubbock, 1865, 46; Martin, 1880, 46; Palgrave, 1873, 46; Pownall, 1864, 46; Slater, 1857, 46.
- Inquiries in the United States on the importance of checks, 46-47, 86-95; Eckels, 1894, 1896, 46; Federal Reserve Bank of New York, 92-94; Fisher, Irving, 91-92; Garfield, 1877, 46, 87; Hepburn, 1892, 46, 88; Kemmerer, E. W., 91; King, W. I., 92, 94-95; Kinley, 1910, 46-47, 88-90; Knox, 1881, 46, 87; Lacey, 1890, 46, 87; United States National Monetary Commission, 1909, 46, 90.
- Inter-community clearing and collection under National Banking System, 99-101.
- Inter-district accommodation, distribution of total, Oct. 29, 1920, 325.
- Inter-district cash items, collection of and settlement for, 189-192, 558; collection of through a bank's own Federal reserve bank or branch, 190; collection through Federal reserve bank, 185-186; collection through Federal reserve bank branches, 186-187; direct-routing to banks, 187-189, 191-192, 568-569; direct-routing to Federal reserve banks and branches, 190-191, 561-567.
- Inter-district clearing before Gold Settlement Fund, 291-293.
- Inter-district clearing and collection system, 556-575; illustration of, 558-561; time schedule, 182-185, 471.
- Inter-district collection items, collection of, 570-571; settlement for, 570-571.

- Inter-district gold movements, 319-329; factors affecting, 322.
- Inter-district movements of Federal reserve notes, 326-328.
- Inter-district settlements (see Gold Settlement Fund), the first, 170.
- Interest, paying on uncollected funds, 110.
- Interest on deposits, fixing uniform rates, 134; regulation of by clearing houses, 416-418; schedule of, fixed by New York Clearing House, 417.
- Intra-district clearing and collection system, 529-556; through Federal reserve bank branches, 550-553.
- Intra-district collection, direct collection within a district, 553-554; time schedule, 539-541.
- Intra-district collection items, handling of, 555-556.
- Italy, use of checks in, 13.
- Items eligible for clearing, 532-533.
- J
- Japan, Bank of, 31; use of checks in, 31.
- Jay, Pierre, on the float, 1916, 237-238; on the growth of membership in Federal reserve system, 218-220, 224.
- Jordan, David, on business barometers, 481.
- K
- Kansas City, Mo., country clearing house, 128-129.
- Kemmerer, E. W., mission to Columbia, 33; on importance of checks, 1906, 91.
- King Resolution No. 476, 254.
- King, W. I., on importance of deposit currency, 92, 94-95.
- Kinley, David, inquiry of 1910 on importance of checks, 46-47, 88-90.
- Klein, J. J., on origin of checks, 9.
- Knickerbocker Trust Company in panic of 1907, 150.
- Knox, John J., inquiry of 1881 on importance of checks, 46, 87.
- L
- Lacey, E. S., inquiry of 1890 on importance of checks, 46, 87-88.
- Lancaster, Pa. county clearing house, 129-130.
- Langston, L. H., on assembly racks, 393-394.
- "Large countries," 432, 449.
- Latavia, Bank of, 29; use of checks in, 29.
- Leased wire system, 209-211, 214-215, 303.
- Legal tender provisions of the Constitution, 2.
- Letters of transmittal, 452-458; forms used by Mechanics and Metals National Bank of New York, 454, 455; form used by Nation City Bank of New York, 453.
- Liabilities of banks; for certified checks, 2; to drawers of checks, 2, 76-77, 272-274, 530-531; to holders of checks, 2, 76-77, 272-274, 530-531; to holders of notes, 76-77.
- Loans to government, extended by clearing houses, 131-132, 423-424.
- Local exchanges; with clearing houses, 99, 531-537, 579-580; without clearing houses, 98, 529-531, 579.
- Lord, Eleazor, on importance of notes and deposits, 1834, 59.
- Louisiana anti-par remittance law, 252-254.
- Lubbock, inquiry on importance of checks in England, 20, 46.
- Lumber Bridge, N. C., Bank of, in Malloy case, 284-286.
- M
- Macleod, H. D., on nature and origin of clearing houses, 70-71; on origin of checks, 9.
- Magee, H. A., in Cleveland par remittance case, 266-269.
- Mail teller, 394, 433-435, 437, 441.
- Malloy case, 284-286.
- Martin inquiry of 1880 on importance of checks, 46.
- Massachusetts Rule on agency, 285.
- McCall, Mary B., defendant in Cleveland par collection case, 266-269.
- McFadden Bill, 255.
- Member banks (see specific topics affecting); analysis of accounts, 354-355; computation of reserves, 350-362; may collect through correspondents, 554-555; may collect through Federal reserve bank or branch, 558-561; reserve deposits in Federal reserve banks, 348; reserve requirements, 330-331; reserves, period over which computed, 365-366; time deposits, reserves against, 345; trust funds, reserves against, 345-347.
- Membership in Federal reserve clearing and collection system, 218-226, 247-249.
- Membership in Federal Reserve System, June 30 and December 31, 1923, 222.
- Membership in New York Clearing House Association, 387-389.

- Messenger force, city collection department of a bank, 443.
- Mexico, Bank of, 32; use of checks in, 32.
- Mississippi anti-par remittance law, 252-254.
- Missorts, 441.
- Monitor, A Friendly (William Jones), 47.
- Morning force in transit department, 451-452.
- N
- National and State Bankers' Protective Association, 235, 249-251.
- National Association of Credit Men, favors par remittance, 240.
- National Bank of Hungary, 23.
- National Banking System (see specific topics affecting); clearing and collection system, under, 98-130.
- National clearing agency proposed, 120.
- National (U. S.) Monetary Commission inquiry into importance of checks, 46, 90.
- Nebraska, bankers of, charge Federal reserve banks oppressive, 254.
- Negotiable Instruments Law; defines a check, 1; liabilities of banks under, to holders and drawers of checks, 2, 76-77, 272-274, 530-531; on checks, 7; on nature of deposit currency as a bank liability, 2, 76-77, 272-274, 530-531; origin of, note 6, 2.
- Netherlands, use of checks in, 17.
- New York City clearings excluded from total for country, 486, 489, 496, 499, 511, 521.
- New York City Clearing House Association; acceptances cleared, 204, 446; bank examiner, 414-415; city collection department, 408-409, 535-537; city department, 391, 394-408; clearing non-members, 389; clearing procedure, 397-398; clearings and balances for 70 years, 426-427; collecting city items, 409-410; committees, 385-387; country collection department, 413; errors, adjustment of, 406-408; examination of member banks, 135-136, 414-415; expenses of, 390; extending loans to government, 131-132, 423-425; force for effecting clearing, 397; gathering credit data for members, 136-137, 423; issue of clearing house loan certificates, 140-163, 423; issue of public statements, 137, 424-425; Manager's Annual Report for 1923, extracts from, 427; membership, 387-389; non-member banks may clear through members, 390; penalties for errors, 415-416; penalties for violating rules, 415-416; proof, 400-401; regulation of collection charges on out-of-town items, 134, 418-421; regulation of interest on deposits, 134, 416-418; regulation of reserves, 135, 421-422; rendering assistance to members, 132-134, 422; sessions, 396-397; settlement of balances, 402-406; settling clerk's statement, 398-399; transactions for one day (1919), 405; trust companies in, 388.
- New York Rule on agency, 284-285.
- New York Times Annalist (see Annalist).
- Night force in the transit department of a bank, 450-451.
- Non-member banks; admitted to clearing system, 197-198; may clear through members of New York Clearing House, 390; problem of collecting checks on, 198-200; question of status in clearing system, 196.
- Non-member clearing banks; in Federal Reserve System, 537; may collect through Federal reserve banks or branches, 558-561; nature of, note 30, 308; national, computation of reserves of, 381.
- Non-member par banks; collect through correspondents, 555; nature of, note 30, 308; problem of collecting on, 475-477, 543-545; within Federal Reserve System, 537, 539.
- Non-member State banks, computation of reserves in, 378-381.
- Non-par banks; clearing and collection system of, 579-581; clearing house associations, 579-580; collecting out-of-town items, 580-581; collections among banks in same city, 579; parasites on the system, 242; problem of collecting checks on, 198-200.
- Normal growth in industry, meaning of, 506.
- Note issue, systems of, 1916-1836, 58.
- Notes, drafts, and other items, charges for collections of, 203.
- North Carolina, anti-par remittance law (1921), 2, 252-254, 531.
- Northern New Jersey Clearing House Association, note 28, 411.
- Norway, Bank of, 25; use of checks in, 24.
- Note teller's department of a bank, 437, 445.
- Numerical transit system, 458-461.

## O

- Ohio Bankers' Association, Group No. 2, in panic of 1907, 159-160.
- Omaha branch of Federal reserve bank, charged with oppressive methods, 254.
- Opposition to Federal reserve clearing and collection system, 226-229, 576-579 (see specific topics relative to); Alabama law relative to, 252-254; basis of, 235-240; by non-par banks, 199; Claiborne-Adams Check Collection Plan, 277-278; dilatory practices in payments, 249-250; Florida law, 252-254; forms of, 226-227, 249-256; Georgia law, 252-254; growth of, 232-235; hostile State legislation, 249, 251-254; increased, 246-249; injunctions and suits, 249; Louisiana law, 252-254; Mississippi law, 252-254; National and State Bankers' Protective Association, 235, 249-251; North Carolina Law, 2, 252-254, 531; petitions to Congress, 249, 254; principles resulting from court decisions, 227-229; South Dakota law, 252-254; stamping legends on checks, 249-250; Tennessee law, 252, 254.
- Out-of-town collection agencies proposed, 120.
- Out-of-town collection items, 463-467.
- Out-of-town items; collection of, 463-465; collection of by non-par banks, 580-581; intra-district collection of, 537-539.

## P

- Palgrave inquiry of 1873 on importance of checks in England, 46.
- Panics; of 1857, 82-83; of 1860, 141-144; of 1873, 145-146; of 1884, 146; of 1893, 147-149; of 1907, 150ff.
- Paper money issues in Colonies, 41-43; prohibited by Parliament, 1764, 43.
- Par banks, non-member, problem of handling checks on, 475-477.
- Par collection (see par remittance); arguments for, 240-243; arguments for and against, 121-122; meaning of, 193-194, 232; of bank notes, 73-78.
- Par lists; growth of, 243-246; nature of, 245.
- Par points and charges points proposed, 122-123.
- Par remittance; a technique in clearance, 97; arguments against, 235-240; arguments for, 240-243; arguments for and against, 121-122; favored by certain associations, 240; increased opposition to, 246-249; principles resulting from court decisions, affecting, 288-290.
- Par remittance controversy (see opposition to Federal reserve, clearing and collection system); conclusion on principles, 288-290.
- Par system, universal, proposed, 121-122.
- Pascagoula National Bank par remittance case, 277-282 (see Federal Reserve Bulletin, Vol. XI (1925), p. 843 for later developments in this case; principles and decision unchanged).
- Pay checks payable to bearer, 156.
- Paying teller's department, 429-431, 437.
- Penalties; for reserve deficiencies in Federal reserve banks, 371-374; for reserve deficiencies in member banks, 366-369; for violating New York Clearing House rules, 415-416.
- Peple, Charles A., on provisions for direct-routing of items (fifth district), 562-568; Senior Deputy Governor, Federal Reserve Bank of Richmond, note 2, 292-293.
- Perry Banking Company in Malloy case, 284-286.
- Persons, Warren M., on Harvard Index of General Business Conditions, 501-504.
- Phillips, Chester A., formula for loan expansion, 115.
- Pig iron production, index of, 1875-1924, 518.
- Platt, Edmund, Chairman of House Committee on Banking and Currency, 255.
- Portugal, Bank of, 27; use of checks in, 27.
- Powell, E. T., on checks in England, 18.
- Pownall inquiry on use of checks in England, 20, 46.
- Presentation of checks; direct to drawee banks, 104-105; direct by Federal reserve banks, 178, 227, 229, 541-542.
- Price, Theodore H., on method of reporting reserve condition of Federal reserve banks, 375-378.
- Private banks; computation of reserves, 379-381; deposits in, nature of, 349-350; reserve requirements of, 334-339.
- Protest, the, 469-470.

## R

- Racks, assembly, 393-394, 435, 437-438.**
- Raguet, Condy, on use of checks, 1837, 1838, 61-62.**
- Receiving teller's department, 431-432, 437.**
- Redemption funds, transfers to, 315, 319.**
- Rediscounting between Federal reserve banks; effect on gold movements, 324-326; not included in daily settlements, 315; relation to Gold Settlement Fund, 216-217, 304-305, 573.**
- Reform in check collection; attempts at, 124-130; country checks to be sent through clearing house to correspondent banks, 120-121; country clearing houses, 126-129; county clearing houses, 129-130; national clearing agency, 120; New York City plan, 125-126; out-of-town collection agencies, 120; par points and charge points proposed, 122-123; placing of burden upon drawer, 121; proposals for, 119-123; Sedalia, Mo. plan, 124-125; State clearing houses, 119-120; uniform exchange charges proposed, 121; universal par system proposed, 121-122.**
- Regulation J.; Series of 1920, 282; Series of 1923, 282-283; Series of 1924, 229, 283, 286-288, 366-369.**
- Regulation L., Series of 1915, 294.**
- Reichsbank, 21.**
- Remittance charges, as a cause for circuitous routing of checks, 103-105; as an excuse for opposition to par remittance, 236; authorized by original Federal Reserve Act, 165; legality of, 103-105; no longer justified, 241-242; North Carolina law on, 531 (for other State laws, see opposition to Federal reserve clearing and collection system); question does not arise when banks are in same city, 530; universal would not be as large as thought, note 13, 239-240.**
- Remittances in unsatisfactory funds, 544-547.**
- Reserve account, analysis of member bank, 354-355.**
- Reserve balances, maintenance with banks to secure items on which to charge exchange, 111-112.**
- Reserve City Bankers' Association, 129.**
- Reserve City Clearing House Association of Texas, 188-189.**
- Reserve condition of Federal reserve banks, method of reporting, 374-380.**
- Reserve deficiencies, penalties for; in Federal reserve banks, 371-374; in member banks, 366-369.**
- Reserve requirements; fixed by clearing houses, 135, 421-422; of banks outside Continental United States, 339; of Edge Corporations, 340-341; of Federal foreign banking corporations, 340-341; of Federal reserve bank branches, 332-334; of Federal reserve banks, 331-332; of foreign branches of member banks, 340; of member banks, changed, 195; of member banks of Federal reserve banks, 330-331; of private banks, 334-339; of State banks, 334-339; of trust companies, 334-339.**
- Reserves; against government deposits in Federal reserve banks, 347-348; against government deposits in member banks, 344-345; against member bank deposits, 343-347, 348; against time deposits in member banks, 345; against trust funds in member banks, 345-347; allocation of, 342-343; Board's proposal to concentrate, 194-195; computation of (see computation of reserves); concentration of, 195-197; decentralized, 166-167, 176-178; gold in Gold Settlement Fund as, 296; nature of, 341-343; of Federal reserve banks on selected dates, 328-329; regulation of by New York Clearing House, 421-422; relation to clearing and collection system, 96-98, 101, 194-195; what constitutes, 341-343.**
- Richmond par collection case, 228, 269-276.**
- Riksbank (Bank of Sweden), 25.**
- Roumania, Bank of, 29; use of checks in, 29.**
- Routing of checks, circuitous, 103, 105-107.**
- Russia; banking system in, 27; Industrial Bank of, 28; new currency system, 27; Peoples' Bank of, 27.**

## S

- San Francisco par collection case, 227, 263-266.**
- Scandinavian countries, use of checks in, 24.**
- Schedule; for availability of proceeds of bankers' acceptances, 205; Inter-district time for checks, 182-**

- 185, 471; intra-district time for cash items, 539-541; of maximum interest rates (New York City Clearing House), 417; time, for collecting checks, 180-185; time, for direct-sending of items, 558-561, 565-568; time, of Federal Reserve Bank of New York, 184-185, 471.
- Second ticket, 400.
- Sedalia, Mo., plan of check collection, 124-125.
- Service charges, 192-193; exacted by Federal reserve banks for collecting checks, 165; lowered and abolished, 211-213.
- Sessions, clearing house, 533.
- Settlements (see also Gold Settlement Fund); between branches and Federal reserve banks, 314; daily through Gold Settlement Fund, 215-216, 305-308; deductions made in settlement through Gold Settlement Fund, 314; first inter-district, 170; for collections, 462-463; for Federal reserve notes, 315-317; for out-of-town collections, 465-467; method of settling for clearings, 534; method of settling through Gold Settlement Fund, 310-315; through Federal reserve banks, 534; transactions not included in daily, 315-319; weekly originally provided for, 297.
- Settling clerk, 438.
- Settling clerk's statement, 398-399.
- Settling for proceeds of collections; charge method, 462; remittance method, 462-463; transfer method, 462-463.
- Sibley, Judge Samuel H. in Pascagoula National Bank case, 277-282.
- Sights, 432, 435.
- Single indices, Carl Snyder's, 504-509.
- Slater inquiry of 1857 on importance of checks, 46.
- "Small countries," 432, 449.
- Small ticket, 394-395, 398.
- Snyder, Carl; Index of Price Level, 1875-1924, 509; Index of Volume of Trade, 504-509; on clearings as a business barometer, 522; on single index of general business, 481; on velocity of deposits as a business index, 510-514.
- Smelser, C. R., on computation of reserves in a country national bank, 355-361.
- South America, use of checks in, 33.
- South Dakota anti-par remittance law, 252-254.
- Spain, Bank of, 26; use of checks in, 26.
- Special functions of clearing houses; annual conferences, 137, 425-428; examination of member banks, 135-136; extending loans to the government, 131-132, 423-424; fixing charges on collections, 134, 418-421; fixing reserve requirements, 135, 421-422; fixing uniform rates of interest on deposits, 134, 416-418; gathering credit data for members, 136-137; issuing clearing house loan certificates, their nature, 138 ff., 423; issuing public statements, 137, 424-425; rendering assistance to members, 132-134, 422.
- St. George, Bank of, 12.
- Standard Daily Trade Service, 497-499, 520; Standard Statistics Company's Barometer, 497-499.
- State banks; deposits in, nature of, 349-350; reserve requirements of, 334-339.
- State clearing house proposed, 119.
- Statements; clearing house, 137, 424-425; Federal reserve bank, new and old compared, 374-380.
- Steagall Bill, 255.
- Stewart, Walter W., on gold movements, 320-321.
- Stock Exchange Clearing Corporation, 487.
- Strater, H. F., on direct-routing of inter-district items, 568-569.
- Suffolk Bank versus Lincoln Bank, 75-76.
- Suffolk Bank versus Worcester Bank, 76.
- Suffolk principle of par collection, 73-78.
- Suffolk System, 73-78.
- Suspension of specie payments, 1907, 158-159.
- Sutherland, Mr. Justice, dissents in Richmond par remittance case, 273.
- Sweden, Bank of, 25; use of checks in, 25.
- Swiss National Bank, 24.
- Switzerland, use of checks in, 23.

## T

- Tax, currency substitutes as a violation of 10 per cent. tax on bank notes, 161; ten per cent. tax on State bank notes, 154.
- Telegraphic transfers, 208-211, 304, 572; application for and sending, 467-468; making payments under, 468-469; mechanism for handling, 467.

- Teller; fifth, 439; first, 429-431; fourth, 433-435; mail teller's work, 394, 433-435; paying teller, 429-431; receiving, 431-432; second, 431-432.
- Tennessee anti-par remittance law, 252-254.
- Texas, Reserve City Clearing House Association of, 188-189.
- Time deposits, in member banks, reserves against, 345.
- Time schedule (see schedule); Federal Reserve Bank of New York, 184-185, 471; inter-district, 182-185, 471; intra-district, 539-541; nature of, 180-185.
- Trade; estimates of total volume, 479-480; Index of Volume of, 514, 516; rate of growth of total volume of, 515.
- Transfer drafts, Federal reserve, 206-208, 571.
- Transfer system, telegraphic, 304 (see telegraphic transfers).
- Transfers; between gold funds not part of daily clearing, 315-318; special between Federal reserve banks for account of Treasury Department, 315, 573; to redemption funds, 315, 319.
- Transfers and clearings; average weekly volume for years, 1915-1922, 319; effect on gold movements, 322-323.
- Transit account of a country national bank, 360-361.
- Transit department of a bank, 448-449; afternoon force, 451-452; morning force, 451-452; night force, 450-451.
- Transit department of a Federal reserve bank, 470-475; outgoing sections, 474; receipt of items by, 471-473.
- Transit system, numerical, 458-461.
- Transits, 448, 449.
- Transmittal, letters of, 452-458.
- Trumbull, J. H. on Colonial paper currency, 38, 41.
- "Trust companies," 432, 435.
- Trust companies; computation of reserves in, 379-381; deposits in, nature of, 349-350; members of New York Clearing House Association, 388; reserve requirements of, 334-339.
- Trust funds in member banks, reserves against, 345-347.
- "Trusts," 449.
- United States Barometer Chart, Brookmire's, 500.
- United States Chamber of Commerce favors par remittance, 240.
- United States Monetary Commission inquiry on importance of checks, 46, 90.
- Van Devanter, Mr. Justice, dissents in Richmond par collection case, 273.
- Velocity of deposit currency, 91-95; as a measure of business activity, 510-514; in 1875-1924, 517; in 8 cities, 1919-1923, 512-514; in 141 cities, 1919-1923, 514, 516.
- Venice, Bank of, 10.
- Volume of Trade; estimates of, 479-480; index of, 514, 516; percentages of variations in, 508; rate of growth, 515; Snyder's index of, 504-509.
- Voluntary clearing system, 165-177; a failure, 173; initial steps preceding, 167-169; objections to, 174-177; relation to decentralized reserves, 166-167.
- Voluntary intra-district clearing system; growth of, 174; introduced, 171-173; relation to Gold Settlement Fund, 297-298.

## W

- Washington Trust Company, Washington, Pa., 461.
- Webb, Judge James L. in Richmond par collection case, 271.
- Webster, Noah, on use of checks, 1801, 53.
- Webster, Pelatiah; on Continental currency, 43; on use of checks, 1786, 43-44.
- Westerfield, Ray B., on organization of National City Bank, 434-435.
- White, Horace, on wildcat banks, 60-61.
- Wildcat banking, 60-61.
- Wolverton, Judge, in San Francisco par collection case, 264-265.
- Woodlock, Thomas F., on method of reporting condition of Federal reserve banks, 378.
- Working, Holbrook, on importance of deposit currency, 92.
- Wright, Ivan, on gold movements, 320, 323.

## Z

- Zone system for collection, 179-180 (see deferred availability principle).

## U

- Uncollected items, nature of, 309-310.