

Operation of the National and Federal Reserve Banking Systems

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON BANKING AND CURRENCY
UNITED STATES SENATE

SEVENTY-FIRST CONGRESS

THIRD SESSION

PURSUANT TO

S. Res. 71

A RESOLUTION TO MAKE A COMPLETE SURVEY OF THE
NATIONAL AND FEDERAL RESERVE
BANKING SYSTEMS

APPENDIX

PART VII

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OPERATION OF THE NATIONAL AND FEDERAL RESERVE BANKING SYSTEMS

RELATIONS OF THE BANKS WITH THE SECURITY MARKETS

INTRODUCTION

1. *Relations of banks and the security markets.*—The commercial banking system of the United States has been associated with its security markets to a steadily growing extent during recent years. In its earlier development, the banking system of this country was largely divorced from the market for securities, and disastrous experiences of bank failures due to frozen or worthless security holdings, such as the case of the second bank of the United States after it assumed a Pennsylvania charter in 1836, tended to enforce such separation of commercial from investment banking in law.

Loans on securities, which expand the capacity of the investment market to absorb new securities by permitting their purchase with the aid of bank credit, have always played some rôle in commercial banking, however. During the twentieth century, the rate of increase of security loans has been considerably accelerated, while the banks have participated in the security business in other ways as well.

The chief points of contact between the commercial banks and the security markets may be summarized as follows:

(1) Security loans: These include loans made to brokers and dealers, as well as to other borrowers, and may be made for a variety of purposes, as indicated in Part I below. Such loans amounted in June, 1930, to approximately 19 per cent of the total of commercial banking assets.

(2) Investments: Bonds have long constituted a component element of banking assets in this country, but only during and since the World War have bond investments of banks expanded rapidly. The opening of thrift and savings departments of commercial banks tended to stimulate to a large extent the expansion of bond holdings of the banks. On June 30, 1930, investments amounted to 22 per cent of the total of commercial banking assets in this country. Included in this total are securities bought under repurchase agreements from the sellers, which are more like loans than investments in nature.

(3) Security affiliates: In order to operate in the security markets in various capacities without the restrictive influences of existing statutes, a number of banks have established affiliates which enjoy identity of ownership and management with the bank, but are incorporated separately under State law and can freely operate as security companies. The activities of these affiliates in the major financial centers have assumed a very large scope in the case of many individual institutions, and they have hitherto attracted far less attention than their importance would deserve.

2. *Effects of banks' participation in security markets.*—The significance of rapidly mounting bank loans on securities and bank security investments is imperfectly understood, even by a large proportion of economists and students of banking. Various aspects of this expansion have been emphasized in public discussion latterly, serving to clarify the broader aspects of the subject.

It has been pointed out that security credit granted by the banks furnishes funds to industry for productive purposes, just as would business loans. This is unquestionably true, and a clear grasp of this fact would quickly dispel the widespread popular fallacy that if a bank advances funds on securities the supply of bank credit available to business is thereby reduced. The security markets can not absorb credit, but merely furnish a channel through which it is directed to specific users. If the credit finances the sale of new securities, the corporations or governments originating these securities get the proceeds of the loan, and can use them for their purposes. If the loan is utilized to finance the purchase of already issued securities, the proceeds of the security advance will go to the seller of the securities, who may use them in turn to buy new securities, to purchase goods or perhaps to buy other already issued securities. In the latter case the funds are transferred a third time, but sooner or later the proceeds of security loans find their way at one or more removes, into the hands of some seller of securities who will utilize them for business or consumption purposes.

Since security loans represent purchasing power which makes itself felt as buying power in the hands of purchasers of goods and labor, an expansion of such loans has approximately the same net effect as an expansion of commercial loans. The rise in security loans during the period which culminated in the stock market panic of 1929 thus constituted an inflationary movement which permitted the maintenance of commodity prices despite the tendency to overproduction and unbalanced production in numerous industries, but made the subsequent production readjustment all the more drastic.

Security loans differ from commercial loans to a large extent in their effect on the liquidity of the banking institutions making them. If commercial loans are carefully made, they tend to be self-liquidating transactions, which will be paid off with the sale of the goods that are produced or carried with the proceeds. In the case of security loans, however, liquidity depends largely upon the ability to sell the collateral, and if such loans become excessive a downward movement in security prices will bring wholesale forced liquidation, such as occurred during the "stock market panic" of 1929 and on recurring occasions thereafter, as the volume of security credit was being reduced.

The granting of credit to business indirectly through the security loan, rather than directly through the commercial loan, also reduces the degree of control possessed by the bank over the flow of credit to business. The bank knows the purpose for which most commercial loans are made and can proceed to cut down the amounts of such advances when thought desirable. In the case of security loans on the other hand, the bank is interested primarily in the quality of the collateral, and in the nature of the case it can have no real control over the utilization of the proceeds by the original seller of the security, since the loan is not to the latter but rather to the pur-

chaser of the issue, or perhaps to another party that buys securities from those who use the proceeds to absorb new offerings.

3. *Anticipation of capital accumulation.*—When the commercial bank makes a loan to finance a single turnover of goods, whether in production or trade, it facilitates the current processes of industry and commerce. When it uses its power of credit expansion to finance the sale of securities, however, either through the making of a loan or an investment, it anticipates the accumulation of capital through creating purchasing power which is devoted to capital purposes. This tends to make the ability of the capital market to absorb securities much more flexible than would otherwise be the case, and thus tends greatly to increase the amplitude of fluctuations in the supply of capital available at different times.

During a period of widespread confidence and active business, the stimulation of the capital market resulting from rapidly increasing bank loans on securities and bank purchases of bonds tends to stimulate capital investment far more than would otherwise be the case. At the same time the overdevelopment that ordinarily occurs in various fields during such a period is correspondingly exaggerated, making the subsequent reaction and period of deflation and liquidation all the more severe. The experience of the past 10 years lends spectacular confirmation to the view that the more intensive participation by commercial banks in the capital market exaggerates financial and business fluctuations and undermines the stability of the economic organization of the country.

The further participation by the banks in the security markets through security affiliates has the same general effect, since these companies tend to rise to the forefront of activity in the capital market during active periods, because of their strong connections with the banks, while in deflation periods the possession of large portfolios of securities and lack of a large outside demand for issues they sell tend to make all of them relatively inactive.

4. *Text of questionnaires.*—The subcommittee on Senate Resolution 71, in investigating the relations between these banks and the security markets, sent out six questionnaires to a selected group of institutions. The text of the questionnaires is reproduced herewith, and the material presented in this report is largely based upon the replies received to these questionnaires

NO. 1. QUESTIONNAIRE ON SECURITY LOANS (TO BANKS)

Direct loans by banks on securities now constitute about 80 per cent of all security loans. The purposes and soundness of such loans must be better known in the future if effective credit control policies are to be developed in the banking system.

1. What was the total of loans on stocks and bonds reported by you at the last condition call? The date of this call was

2. Give comparable figures for the five previous calls:

Date	Amount
-----	-----
-----	-----
-----	-----
-----	-----

3. What proportion of such stock and bond collateral loans, as reported in the last condition statement, was made to brokers and dealers in securities? -----

4. What proportion of such loans was made by the borrowers, in your opinion, for direct commercial, industrial, or agricultural use? -----

5. What proportion of such loans were made, in your opinion, for the sole purpose of carrying securities? -----

6. What proportion of the collateral on such loans carried by you consisted of stocks? -----

7. What proportion of your collateral on such loans consisted of listed securities? -----

8. What proportion of your collateral loans is secured by investment trust issues? -----

9. What proportion of your collateral loans is secured by issues without active markets? -----; by unlisted issues? -----

10. What proportion of your outstanding security collateral loans is secured by stocks and/or bonds having a market value of less than 110 per cent of the amount of the loan (excluding loans on Government bonds)? -----

11. What is the amount of security collateral loans made to controlled or affiliated institutions:

Name of institution	Amount of loans
-----	-----
-----	-----
-----	-----
-----	-----

12. Indicate maximum security collateral loans made to all affiliated or controlled institutions in each of the past five years:

Year	Maximum loans to affiliates
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----

13. Indicate the maximum amount of security loans made by you in each of the past four years against securities issued by real estate holding companies:

Year	Loans on stocks	Loans on bonds
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----

No. 2. QUESTIONNAIRE ON SECURITY AFFILIATES (TO BANKS)

Little information is now available on the condition of security affiliates of commercial banks. In view of the important rôle and large resources of such organizations, a clear picture of their condition and relations with parent banks is desirable.

1. List names and addresses of all affiliates of your bank which deal in or hold securities, with capital and surplus of each:

Name of affiliate	Address	Capital	Surplus
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

2. How was the capital and surplus of each security affiliate provided?-----

3. What was the maximum indebtedness of each security affiliate to your bank and affiliated institutions in 1929? -----
in 1930? -----
4. What was the average amount of such indebtedness in 1929? -----
; in 1930? -----
5. What proportion of such indebtedness was secured? -----
6. What proportion of such indebtedness was secured by stock collateral?-----
7. How is identity of ownership of your bank and security affiliates assured?

8. What was the total amount of securities bought by you from all your security affiliates under repurchase agreements in each of the past four years? -----
9. What was the maximum amount of such repurchase agreements from all your security affiliates outstanding at any one time in each year? -----
10. Append income accounts of security affiliates for 1928, 1929, and any portion of 1930 available.
11. Append balance sheets of security affiliates at end of 1928, 1929, and latest date in 1930 available.
12. Append full portfolio of security affiliates at close of 1928, 1929, and latest date in 1930 available, with original cost and present market values indicated.
13. What was the aggregate amount of syndicate and other participations of your security affiliates during each of the past four years? -----
14. Describe the nature of the five largest participations of this sort in 1929.

No. 3. QUESTIONNAIRE ON LOANS FOR "OTHERS" (TO MONEY BROKERS)

A major obstacle to effective credit control during the inflation period of 1927-1929 was the rapid growth of loans to brokers from nonbanking sources. Such loans were largely handled by the New York banks, but substantial sums flowed into the money market from other sources as well. The aim of this survey is to determine the chief channels through which this flow of funds occurred and the sources from which it came.

1. What was the approximate daily average of brokers' loans funds you handled in 1929? -----
2. What was the maximum handled in one day for that year? -----
3. Approximately what proportion of these funds were advanced directly to brokers and dealers in securities, rather than through commercial banks? -----
4. Is it practicable for you to advance funds directly to brokers and dealers without banking intervention? -----
5. Please indicate briefly reason for answer to question 4. -----
6. Approximately what proportion of the brokers' loans handled by you in 1929 came from business corporations? -----
From investment trusts? -----
From foreign banks? -----
From other foreign sources? -----
7. What is your usual charge for handling such funds? -----

No. 4. QUESTIONNAIRE ON BANK INVESTMENTS (TO BANKS)

Bond investments of commercial banks have shown a marked increase in recent years. This questionnaire seeks to throw light on several of the more important causes and characteristics of this movement.

1. State the amounts of United States Government, domestic, and foreign securities held by you in your investment account on December 31 in each of the past seven years (please consolidate, if feasible, bond holdings of banks acquired during this period):

Date	Total investments	U. S. Government	Domestic	Foreign
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----

2. What is your explanation of the increases in each of these classifications during the period shown? -----

3. Are the amounts of holdings shown above based on original cost, cost with allowance for amortization to maturity, or prevailing market price? -----

4. Do you ever make allowance for unrealized appreciation or depreciation in your bond accounts? -----

5. State names and amounts of your 10 largest holdings of bonds other than those of the United States Government:

Name of bond	Amount	Cost	Present market price
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

6. What proportion of your holdings consists of convertible bonds or bonds with common stock purchase warrants attached? -----

7. State names and amounts of your 10 largest holdings of convertible bonds, and bonds with common stock purchase warrants attached:

Name of bond	Amount	Cost	Present market price
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

8. Do you think the present restrictions on bank investments in securities adequate? If not, state suggestions for changes -----

9. Indicate percentage of present bond holdings which are listed on the New York Stock Exchange ----- other stock exchanges -----

10. What was the total of security holdings held by you under repurchase agreements during each of the past four years, showing United States Government bonds and other securities separately? -----

11. What was the maximum amount of such repurchase agreements outstanding at any one time in each of these four years? -----

12. What were the chief reasons for utilizing the repurchase agreement in preference to advancing direct security loans in these cases? -----

No. 5. QUESTIONNAIRE ON LOANS FOR "OTHERS" (TO BANKS)

A major obstacle to effective credit control during the inflation period of 1927-1929 was the rapid growth of loans to brokers from nonbanking sources. Such loans were largely handled by the New York banks, but substantial sums flowed into the money market from other sources as well. The aim of this survey is to determine the chief channels through which this flow of funds occurred, and the sources from which it came.

1. What was the approximate average amount of brokers' loans "for the account of others" handled by you in September, 1929? -----
2. What was the maximum amount of such loans handled by you at any one time in 1929? -----
3. Approximately what proportion of such loans "for the account of others" came from business corporations? ----- from investment trusts? ----- from individuals? ----- from foreign banks? ----- from other foreign sources? -----
4. If you had not handled these funds for the lenders, is there any other channel through which they might have found their way into the call loan market? ----

No. 6. QUESTIONNAIRE FOR BANK EXAMINERS

The soundness of security collateral loans of commercial banks is of vital significance, in view of the unprecedentedly large total of such loans outstanding at the present time. Present practices in examining such loans should throw considerable light on their soundness. Methods of examination of the investment holdings of commercial banks are also subject to considerable variation, and it is desired to secure further light on current practices.

1. What criteria do you use in analyzing the soundness of security loans? ----
2. How do you arrive at a valuation of stocks and bonds having no regular market quotations? -----
3. Do you find evidence of many security loans with collateral of a value less than the amount of the loan? ----- Are these mainly in small or large banks? -----
4. How do you handle security loans, the value of the collateral of which is less than the amount of the loan? -----
5. Do you take the cost or market value of investments in examining the condition of a bank? ----- Is there any other valuation basis you use? -----
6. On which type of investment do you find that the banks you examined have suffered the most severe losses? -----
7. Have you noted any security loans based upon stocks or bonds of real estate holding companies in the portfolios of banks within your jurisdiction? -----
8. What proportion of all security loans are based upon real estate holding company securities, in your opinion? -----
9. What is your attitude toward such loans, and how do you determine their soundness in examination? -----

PART I

BANK SECURITY LOANS

1. *Expansion of bank credit, 1921-1930.*—The decade 1921-1930 was marked by an almost uninterrupted steady increase in the deposits of American commercial banks. This increase in the total of outstanding bank credit was accomplished during a period of relative stability of commodity prices, but the expansion in bank deposits, and thus purchasing power, which occurred, had a distinctly bolstering effect upon the price level, and stimulated a rapid expansion in the volume of production and distribution at the same time.

Total deposits in the National banks, State banks, and trust companies of the United States, as reported to the Comptroller of the Currency, increased from \$29,697,009,000 on June 30, 1921, to \$49,151,326,000 on June 30, 1930. This increase of approximately 65 per cent in total deposits during the decade was divided among the three classes of institutions as follows:

TABLE 1.—*Total deposits*

[Source: Annual Reports of the Comptroller of the Currency]

Class of banks	June 30, 1921	June 30, 1930
National banks.....	\$12,991,320,000	\$23,268,884,000
State banks.....	10,849,807,000	12,385,792,000
Trust companies.....	5,855,882,000	13,496,650,000
Total.....	29,697,009,000	49,151,326,000

The total resources of these three classes of institutions increased at the same time from \$42,898,053,000 to \$62,089,101,000, a gain of almost 45 per cent. Among the major assets, the item of security investments showed the greatest increase in dollars, with a rise of 63 per cent during the period. Real-estate loans showed the fastest rate of growth, with a gain of 95 per cent, to some extent attributable, however, to a change of classification. Security loans registered a rise of 50 per cent, although the increase was probably considerably greater than this because of the more inclusive definition of "secured loans" as used in 1921. "Other loans and discounts" registered a gain of only 10 per cent.

The percentage of total banking resources invested in each of these ways at the two dates mentioned compared as follows:

TABLE 2.—Percentage of resources invested
 [Source: Annual Reports of the Comptroller of the Currency]

Type of assets	June 30, 1921	June 30, 1930
Security loans.....	18	19
Investments.....	20	22
Other loans.....	37	28
Real estate loans.....	5	7
Total.....	80	76

It is thus seen that funds placed in security loans and investments together increased, according to this compilation, from 38 per cent to 41 per cent of the total banking resources of the United States. The rise in security loans was actually considerably greater than thus shown, owing to changes in classification. These two items in fact played a dominant rôle in the great expansion of credit during this decade, and careful analysis of them is necessary as a background for a sound policy of credit control.

It must be kept in mind that the effectiveness of bank credit is determined by two factors, its volume and its velocity. The statistics presented above show the nature of the increase in volume. Data on velocity are not available in reliable form, but the statistics on bank debits to individual accounts, usually used as a rough index to velocity, indicate that for the most part the velocity of turnover of bank accounts increased as rapidly as did the total of bank deposits. The relative velocity of deposits arising out of security loans and investments varies, but there is good reason to believe that at least the former category enjoys a specially high degree of rapidity of turnover. In view of the fact that the proceeds of a security loan are for the most part immediately turned over to a seller of securities, frequently a speculative operator, in toto, an a priori case can be built up for the theory that a specially high rate of velocity attaches to this type of bank asset.

2. *Growth of security loans.*—Until the post-war period, banking statistics on security loans were not satisfactory. However, from the inadequate available data the conclusion is clearly indicated that such advances have been a major element in American banking only since the World War.

Before 1914 the Annual Report of the Comptroller of the Currency classified loans chiefly into the two categories of "demand" and "time." Beginning with June 30, 1914, statistics for State banks and trust companies distinguish loans secured by stocks and bonds from other secured loans, such as those secured by chattel mortgages and commercial paper deposited as collateral. Such distinction was not made for national banks. On June 30, 1914, loans secured by stocks and bonds for State institutions, and secured loans other than real estate for national banks, were reported as amounting to \$1,526,319,-186 in the report of the Comptroller of the Currency, or only about 13 per cent of the total of 1930.

During the war a great mass of loans secured by United States Government bonds was created, as part of the program for financing the conflict. These loans were rapidly deflated after 1920, but collateral loans secured by other stocks and bonds underwent a rapid

increase, beginning with 1922. Security loans in all banks, as reported to the Comptroller of the Currency, compared as follows:

TABLE 3.—*Total security loans*¹

[Source: Annual Reports of the Comptroller of the Currency]

Class of banks	June 30, 1921	June 30, 1930	Increase, per cent
National banks.....	\$4,361,884,000	\$5,484,713,000	26
State banks.....	1,525,894,000	1,435,529,000	-6
Trust companies.....	1,704,065,000	4,534,946,000	166
Total.....	7,591,843,000	11,455,189,000	50

¹ The classification "security loans" was more inclusive in 1921 than in 1930, so that, as already indicated, the increase was actually greater than shown in the above table. The 1921 totals apply to "all collateral loans other than real estate."

A continuous record showing the increase in the total of security loans is available for the reporting member banks of the Federal reserve system since 1918. Such loans are divided as those secured by United States Government bonds and those secured by other stocks and bonds since August 15, 1919. The increase in security loans since that date has been as follows:

TABLE 4.—*Security loans, reporting member banks of the Federal Reserve system*

[Sources: Statement of Condition, Reporting Member banks in Leading Cities, issued by the Federal Reserve Board]

Date	Number of banks	Secured by United States Government bonds	Secured by other stocks and bonds	Total of security loans
Aug. 15, 1919.....	769	\$1,319,521,000	\$2,945,970,000	\$4,265,491,000
Dec. 26, 1919.....	796	1,020,359,000	3,300,331,000	4,320,690,000
Dec. 31, 1920.....	820	908,722,000	3,173,823,000	4,082,545,000
Dec. 28, 1921.....	806	512,520,000	3,165,481,000	3,678,001,000
Dec. 27, 1922.....	782	290,261,000	3,774,775,000	4,065,036,000
Dec. 26, 1923.....	764	228,365,000	3,857,662,000	4,086,027,000
Dec. 31, 1924.....	737	194,974,000	4,667,760,000	4,862,734,000
Dec. 30, 1925.....	719	170,107,000	5,759,678,000	5,929,785,000
Dec. 29, 1926.....	688	144,075,000	5,708,092,000	5,852,167,000
Dec. 28, 1927.....	657	128,253,000	6,587,067,000	6,715,320,000
Dec. 26, 1928.....	626	106,239,000	7,023,487,000	7,129,726,000
Dec. 31, 1929.....		6,304,000,000		8,304,000,000
Dec. 31, 1930.....		7,814,000,000		7,814,000,000

It will be seen from the statistics of security loans of reporting member banks presented above that such advances rose more than 100 per cent from 1921 to 1929. This is a truer picture of the extent of the growth in security loans than that furnished by the reports of all banks to the comptroller, because of the changes in classification that have occurred in the latter data. However, as the larger banks included among the weekly reporting member banks have expanded their security collateral loans more rapidly than have the smaller, nonreporting banks, as shown by the following tables, the actual increase in total security loans for the period was less than the 100 per cent rise shown by the former.

The data on security loans of the reporting member banks of the Federal reserve system also indicate that the increase in this item

became marked in 1924, in June of which year began the upturn in security prices, accompanied by a rising tide of popular participation in speculation in stocks, which continued with only minor interruptions to the stock market panic of 1929. It is also noteworthy that, apart from liquidation of loans on United States Government bonds, the volume of security loans did not change much during the immediate post war inflation and deflation periods, covering the years 1919 to 1922, inclusive.

The reporting member banks, including the larger financial institutions of the country, advance more than 70 per cent of all security loans, although possessing little over half the banking resources of the country. Thus, on June 30, 1930, reporting member, nonreporting member, and nonmember banks compared as follows:

TABLE 5.—Security loans, member and nonmember banks

[Source: Annual Reports of the Comptroller of the Currency and Statements of Condition, Reporting Member Banks]

Banks	Security loans		Total loans and investments	
	Amount	Per cent of total	Amount	Per cent of total
Reporting member.....	\$8,442,000,000	74	\$23,099,000,000	50
Nonreporting member.....	1,983,000,000	17	12,556,000,000	26
Nonmember.....	1,030,000,000	9	11,643,000,000	24
Total.....	11,455,000,000	100	47,298,000,000	100

The statistics thus far presented as indicating the extent of the expansion of security loans do not present a complete picture of the situation in so far as loans may in effect be granted through indirect arrangements. The most common of these is the utilization of the resale and repurchase agreement, whereby the bank makes a technical purchase of securities, with a contract to resell them at the same price, plus an agreed upon rate of interest, within a stated period of time. Repurchase agreements will be considered more fully in connection with bank investments in Part III of this report.

3. *Analysis of security loan increase.*—The expansion of security loans occurred chiefly among the large member banks of the Federal Reserve system.

Dividing the increase from 1921 to 1930 among the three classes of banks, National, State member, and State nonmember, the showing is as follows:

TABLE 6.—Increase in security loans, by classes of banks

[Source: Annual Reports of the Comptroller of the Currency and Federal Reserve Bulletin]

Class of banks	1921	1930	Increase, per cent
National.....	\$4,361,884,000	\$5,484,713,000	26
State member.....	2,551,022,000	4,940,640,000	94
State nonmember.....	678,937,000	1,029,835,000	52
Total.....	7,591,843,000	11,455,188,000	50

For the period since June 30, 1928, separate data for security loans of Federal reserve member banks in New York, Chicago, reserve cities, and finally so-called country banks, are available. The percentage of the total outstanding security loans made on June 29, 1929, by each of these groups of banks was as follows:

TABLE 7.—*Security loans, by groups of member banks*

[Source: Member Bank Call Report, Federal Reserve Board]

Bank groups	Number of banks	Amount	Per cent of re-sources
New York City banks.....	59	\$3, 236, 150, 000	28
Chicago banks.....	18	773, 972, 000	33
Other reserve city banks.....	488	3, 293, 710, 000	21
Country banks.....	8, 142	2, 455, 053, 000	15
Total.....	8, 707	9, 758, 885, 000	21

The banks of the two central reserve cities, it will be seen from the above, had well over 28 per cent of their resources in security loans, nearly twice the proportion of the country banks, which had 15 per cent.

The expansion of security loans during the decade 1921-1930 was a nation-wide phenomenon. This is proved by the statements of reporting member banks of the Federal reserve system, as divided by districts.

TABLE 8.—*Increase in security loans of reporting member banks by Federal reserve districts*

[Sources: Statement of Condition, Reporting Member Banks in Leading Cities issued by the Federal Reserve Board]

Federal reserve district	Jan. 7, 1921	Jan. 8, 1930	Increase, per cent
Boston.....	\$241, 000, 000	\$533, 000, 000	121
New York.....	1, 743, 000, 000	3, 488, 000, 000	100
Philadelphia.....	274, 000, 000	505, 000, 000	84
Cleveland.....	404, 000, 000	740, 000, 000	83
Richmond.....	142, 000, 000	189, 000, 000	40
Atlanta.....	86, 000, 000	152, 000, 000	77
Chicago.....	542, 000, 000	1, 247, 000, 000	129
St. Louis.....	150, 000, 000	251, 000, 000	67
Minneapolis.....	53, 000, 000	86, 000, 000	62
Kansas City.....	104, 000, 000	127, 000, 000	22
Dallas.....	50, 000, 000	113, 000, 000	126
San Francisco.....	187, 000, 000	435, 000, 000	133
Total.....	3, 976, 000, 000	7, 886, 000, 000	98

The San Francisco reporting member banks show the sharpest increase during this period, with a rise of 133 per cent. The Kansas City and Richmond districts show the smallest, with 22 and 40 per cent, respectively. The decade witnessed a further concentration of security loans in the Boston, New York, and Chicago districts, the reporting member banks of which together accounted for 63 per cent of the total in 1921, and 67 per cent in 1930.

4. *Purposes of security loans.*—While the regularly published banking statistics now give a clear view of many of the quantitative aspects of bank security loans, they do not attempt to present to any

important extent an insight into their qualitative characteristics. At this point, therefore, it will be necessary to turn to the results of the questionnaire sent out by the Subcommittee of the Senate Committee on Banking and Currency, covering several qualitative aspects of the subject of security loans.¹

Considerable differences of opinion have been voiced by practical bankers and students of banking concerning the ultimate purposes for which security loans are made by the borrowers. Some have claimed that they are almost entirely arranged for the purpose of carrying investment or speculative purchases of securities. Others argue that they are largely designed to fulfill the needs of the borrower for business or in some instances for consumption purposes, and that the security collateral is merely incidental and designed to provide added protection for the bank advancing the credit.

The questionnaire, sent to a selected list of banks, asked the following two questions:

What proportion of loans on stocks and bonds reported by you at the last condition call was made by the borrowers, in your opinion, for direct commercial, industrial or agricultural use?

What proportion of such loans was made, in your opinion, for the sole purpose of carrying securities?

As would be expected, a number of banks had no data for forming an opinion on this subject. Of the institutions answering the questionnaire, however, 56 per cent (10 out of 18) in New York City and 84 per cent (41 out of 49) elsewhere were able to give replies. In a majority of cases the reply was given in approximate form, indicating that the division was based upon empirical approximation. In other cases, the division was more exact, at time given in percentages carried to two decimal places, indicating that notations on loan cards or other devices were being habitually used by many banks to indicate the purposes of security loans. Such action by some institutions, therefore, points to the general possibility of all banks securing at least approximate information from customers as to the purposes of security collateral loans. Loans to brokers and dealers in securities can, of course, be considered as advanced entirely for the purpose of carrying securities for investment or speculative purposes, although the advance in many cases is planned as a temporary one pending distribution of a block of stocks or bonds to customers.

The replies to the questionnaire in some cases covered the September 24, 1930, call date, and in others that of December 31, 1930. There was no significant difference in conditions at each of these two dates to affect the replies to these questions to any extent. Taking the banks which gave more or less specific replies to the questions, the answers of the New York City banks were as follows: (number at left of table is an arbitrary designation for each bank):

¹ Questionnaire No. 1 for full text of which see the introduction to this Part VII.

TABLE 9.—Purposes of security loans—New York City banks

Bank	Loans on stocks and bonds	Proportion for commercial, industrial, or agricultural use	Proportion for the sole purpose of carrying securities	Bank	Loans on stocks and bonds	Proportion for commercial, industrial, or agricultural use	Proportion for the sole purpose of carrying securities
		Per cent	Per cent			Per cent	Per cent
No. 1.....	\$823,000,000	1 20	1 80	No. 6.....	\$138,000,000		1 50
No. 2.....	525,000,000	1 5	1 95	No. 7.....	110,000,000	2.03	
No. 3.....	311,000,000	1 40	1 60	No. 8.....	105,000,000	1 7.5	1 75
No. 4.....	231,000,000	57.1	42.9	No. 9.....	104,000,000	1 2	1 98
No. 5.....	217,000,000	3 15.3	84.7	No. 10.....	33,000,000	10	90

¹ Designated as an estimate, approximation, or belief.

² For head office and larger domestic branch, given as 43.5 and 56.5, based on undivided analysis of loans.

³ Including consumptive loans.

The summary of replies on the purposes of security loans from banks outside New York City was as follows:

TABLE 10.—Purposes of security loans, banks outside of New York City

Bank	State in which located	Loans on stocks and bonds	Proportion for commercial, industrial, or agricultural use	Proportion for the sole purpose of carrying securities
			Per cent	Per cent
No. 1.....	Massachusetts.....	\$169,000,000	1 20	1 66½
No. 2.....	Rhode Island.....	28,000,000	1 10	1 85
No. 3.....	New York.....	82,000,000	9.7	90.3
No. 4.....	Ohio.....	113,000,000		36.49
No. 5.....	do.....	36,000,000	(²)	1 100
No. 6.....	Illinois.....	548,000,000	1 23	1 77
No. 7.....	do.....	54,000,000	1 5	1 95
No. 8.....	Michigan.....	47,000,000	1 0	1 100
No. 9.....	do.....	7,000,000	1 40	1 60
No. 10.....	Minnesota.....	28,000,000	1 9.2	1 84
No. 11.....	do.....	16,000,000	25	65
No. 12.....	do.....	11,000,000	1 90	1 10
No. 13.....	Missouri.....	59,000,000	10	90
No. 14.....	Nebraska.....	1,000,000	17	83
No. 15.....	California.....	159,000,000	30	70
No. 16.....	do.....	91,000,000	9.846	80.206
No. 17.....	do.....	32,000,000	33	50
No. 18.....	do.....	21,000,000	10	90
No. 19.....	do.....	20,000,000	20	80
No. 20.....	Washington.....	1,000,000	26	20

¹ Designated as an estimate, approximation or belief.

² Very small percentage

The two conclusions indicated in a general way by the above tables are that first, in the majority of cases which reported, much the larger part of security loans were not made for commercial, industrial, or agricultural uses, but rather for the purpose of carrying securities; and secondly, that a few banks find it feasible to separate such loans according to purpose with considerable nicety, while a great many others are able to make a rough division without any apparent difficulty.

The chief purposes for which security loans are made may be summarized as follows:

(1) Carrying of securities by dealers pending distribution to investors.

(2) Carrying of securities with intention of the holder to resell eventually at a rise in price, to permit reimbursement of the loan out of the proceeds. The general run of brokers' loans are in this category.

(3) Carrying of securities intended for long-term investment, the borrower expecting to liquidate the security loan gradually out of income.

(4) Carrying of securities for indefinite periods, for purposes of corporate control, etc.

(5) Business, agricultural, and commercial uses, with the security collateral deposited to protect the bank against loss.

(6) Consumption purposes, with the security deposited as protection to the bank.

In general, it might be said that in the first, third, and fifth types of security loans the bank does not rely solely upon the collateral for the liquidity of the loan, since the borrower is expected in the normal course of business to be provided with funds out of which the security loans are to be liquidated. The second type of loan, which accounts at times of speculative activity for the bulk of the total of such advances, is rather anomalous in the field of commercial banking, for its liquidity depends primarily upon ability to find a market for the collateral, rather than upon the self-liquidating character of the loan itself. Although a large part of such loans are payable on demand, actually wholesale liquidation without disturbance is out of the question, because buyers for cash can not be found for any large volume of securities previously carried on credit without a drastic and painful deflation in the security markets.

5. *Character of collateral.*—During and immediately after the war, a large proportion of security loans were secured by United States Government bonds, and these were reported separately until 1929 by the reporting member banks. Loans secured by United States obligations constituted about one-third of all security collateral loans of reporting member banks in 1919, but declined thereafter, especially during 1921 and 1922, to small proportions. At the end of 1928, the reporting member banks showed only about 1½ per cent of all their security loans collateralized by United States obligations, although investments in such securities rose sharply, reflecting the shifting of the bulk of Government debt from private to institutional ownership.

Through the questionnaire on security loans already referred to, it was sought to determine the extent to which the security loans of the banks are secured by stocks as against bonds. The opinion has been advanced that a large proportion of the aggregate volume of such credit outstanding has been backed by bonds in course of distribution. The question asked on this score was:

What proportion of the collateral on such loans (i. e., loans on stocks and bonds) carried by you consisted of stocks?

It is understood, of course, that many loans are made on mixed collateral consisting both of stocks and bonds, so that the figures given present a division of the aggregate collateral held by the bank.

An effort was also made to throw light on the character of the collateral from the point of view of marketability. The questions asked on this point were:

What proportion of your collateral on such loans consisted of listed securities?
 What proportion of your collateral loans is secured by issues without active markets?

The answers to these three questions are tabulated below:

TABLE 11.—Character and marketability of collateral of security loans
 NEW YORK CITY BANKS

Bank	Loans on stocks and bonds	Per cent of collateral consisting of stocks	Per cent of collateral in listed securities	Per cent of collateral without active markets
No. 1.....	\$823,000,000	59	63	16
No. 2.....	525,000,000	80	68	3
No. 3.....	311,000,000	63	69	3.3
No. 4.....	310,000,000	87	89	3.6
No. 5.....	231,000,000	87	80	3.7
No. 6.....	217,000,000	86	76	2.4
No. 7.....	138,000,000	80	70	15
No. 8.....	110,000,000	86	96	2.5
No. 9.....	105,000,000	89	70	4
No. 10.....	104,000,000	90	95	6
No. 11.....	95,000,000	90	90	3
No. 12.....	89,000,000	75	71	4
No. 13.....	68,000,000	75	86	3.3
No. 14.....	33,000,000	95	90	5
No. 15.....	31,000,000	90	90	1
No. 16.....	16,000,000	80	95	2
No. 17.....	15,000,000	60	83	5
Total, 17 banks.....	3,216,000,000	76	78	7

BANKS OUTSIDE OF NEW YORK CITY

Bank	State in which located	Loans on stocks and bonds	Per cent of collateral consisting of stocks	Per cent of collateral in listed securities	Per cent of collateral without active markets
No. 1.....	Massachusetts.....	\$169,000,000	77	73	7.6
No. 2.....	do.....	59,000,000	90	85	5
No. 3.....	do.....	12,000,000	82	75	2
No. 4.....	Rhode Island.....	28,000,000	85	85	5
No. 5.....	New York.....	82,000,000	90	85	10.8
No. 6.....	Pennsylvania.....	56,000,000	-----	95	(1)
No. 7.....	do.....	30,000,000	52	70	3.5
No. 8.....	Ohio.....	113,000,000	77	64	1
No. 9.....	Illinois.....	548,000,000	75	90	10
No. 10.....	do.....	54,000,000	50	60	25
No. 11.....	Michigan.....	47,000,000	90	98	10
No. 12.....	do.....	7,000,000	89	66	1
No. 13.....	Minnesota.....	28,000,000	78	100	.03
No. 14.....	do.....	16,000,000	90	70	15
No. 15.....	do.....	11,000,000	44	58	2
No. 16.....	Missouri.....	59,000,000	60	80	15
No. 17.....	Nebraska.....	1,000,000	60	95	1
No. 18.....	California.....	91,000,000	87	83	10
No. 19.....	do.....	39,000,000	100	90	0
No. 20.....	do.....	32,000,000	67	85	5
No. 21.....	do.....	21,000,000	70	75	7
No. 22.....	do.....	20,000,000	70	99	1
No. 23.....	Washington.....	1,000,000	38	64	36
Total, 23 banks.....	-----	1,524,000,000	77	54	10

¹ Negligible.

It was sought through the questionnaire to determine two other points regarding the character of the collateral behind bank security loans. The first point was the percentage of collateral loans backed by investment trust issues, to determine whether any important proportion in any case was secured by issues of this character, which on the whole were regarded as relatively unseasoned because of their newness at the end of 1930. In no case, the replies indicated, was any large proportion of security loans backed by investment trust issues. In New York City one trust company having total security collateral loans of \$95,000,000 reported 7 per cent were collateralized by investment trust issues. Another institution with \$231,000,000 in such loans reported 3 per cent secured by investment trust securities. In the majority of cases such security loans amounted to less than 1 per cent of the total.

In the case of banks outside of New York City, one Buffalo institution with collateral loans of \$82,000,000 reported 10.1 per cent of them secured by investment trust issues; a bank in San Francisco with \$20,000,000 in such loans reported 10 per cent, and a Chicago bank with \$54,000,000, and a Detroit bank with \$47,000,000, in such loans reported 5 per cent. Most other banks showed 1 per cent or less of their collateral loans backed by investment trust securities.

With regard to the second point—the proportion of security loans backed by stocks and bonds of real estate holding companies—it was sought to determine whether any important volume of real estate loans were being disguised as security loans through incorporation of realty properties and issuance of stocks and bonds by them. Specific replies were available in many cases, but for the most part the banks stated they had no such loans. Such loans were reported as follows by the few banks reporting any substantial volume of them:

TABLE 12.—Loans secured by real-estate holding company securities

Bank	Location	Loans secured by real estate holding company issues	Per cent of total security loans
No. 1.....	New York City.....	¹ \$9, 809, 146	1.2
No. 2.....	do.....	400, 000	.4
No. 3.....	do.....	² 1, 592, 000	1.5
No. 4.....	do.....	1, 195, 000	1.3
No. 5.....	Philadelphia.....	² 142, 000	.5
No. 6.....	Los Angeles.....	³ 3, 487, 368	3.8

¹ Of which \$3,576,800 in stocks and \$6,232,346 in bonds.

² All bonds.

³ Of which \$2,712,914 in stocks and \$774,454 in bonds.

The general conclusion from the replies received was that no significant volume of real-estate loans is included in the security loan total through collateral advances on real estate holding company stocks and bonds.

6. *Soundness of security loans.*—The determination of the general soundness of security loans is a complex and difficult matter. The usual test of soundness is the percentage that the market value of collateral bears to the face value of the loan. This test may be misleading from two main viewpoints. During a period of drastic liquidation security collateral tends to lose marketability to a large extent, even in the case of relatively active listed issues, and any

concerted effort to liquidate loans upon the part of the banks generally is thus impracticable. This is especially true of inactive and unlisted issues. Secondly, borrowers in individual cases may have other resources which make the loan better than appears on the surface from a consideration merely of collateral value.

In order to get some approximate idea of the proportion of security loans which had an inadequate margin of collateral protection, the following question was asked:

What proportion of your outstanding security loans is secured by stocks and/or bonds have a market value of less than 110 per cent of the amount of the loan (excluding loans on Government bonds)?

In current banking practice, various measures are taken when the margin on a collateral loan becomes impaired, through a decline in the value of the pledged securities. In some cases, when additional collateral is not forthcoming, drastic action through calling of the loan, and insistence upon immediate partial repayment or sale of some of the pledged collateral, is taken. In other instances, especially where the customer is well-known to the bank or where the securities have been sold to him by the security affiliate of the bank, a laxer policy is frequently followed. Cases have been related where, on the decline in the value of the collateral, the customer is asked to convert his loan partly into an unsecured advance, leaving the balance as a security loan. In such instances, the total amount of the loan is unchanged, but the part falling within the technical classification of security loans is reduced, and thus the adequacy of the margin is restored. No data is available to indicate how widely these and similar practices prevail, but their existence must be kept in kind in interpreting the conclusiveness of the replies to the questionnaire query.

The replies cover the end of 1930, when security prices were lower than at any time in the preceding 15 months, but were also considerably higher than at the end of 1931. The percentage of impaired security loans was doubtless considerably larger than reported below by the end of 1931. The answers were as follows:

TABLE 13.—*Proportion of bank security loans undermargined*

NEW YORK CITY BANKS

Bank	Loans on stocks and bonds (other than U. S. Government)	Percentage secured by less than 110 per cent in market value of securities	Bank	Loans on stocks and bonds (other than U. S. Government)	Percentage secured by less than 110 per cent in market value of securities
No. 1.....	\$823, 000, 000	9.41	No. 11.....	\$95, 000, 000	10
No. 2.....	525, 000, 000	none.	No. 12.....	89, 000, 000	6
No. 3.....	311, 000, 000	1.5	No. 13.....	63, 000, 000	1
No. 4.....	310, 000, 000	none.	No. 14.....	49, 000, 000	15
No. 5.....	231, 000, 000	3.8	No. 15.....	33, 000, 000	0.3
No. 6.....	217, 000, 000	¹ 3	No. 16.....	31, 000, 000	1
No. 7.....	138, 000, 000	1	No. 17.....	16, 000, 000	3.5
No. 8.....	110, 000, 000	.9	No. 18.....	15, 000, 000	1.3
No. 9.....	105, 000, 000	1			
No. 10.....	104, 000, 000	4			
			Total, 18 banks.	3, 365, 000, 000	4

¹ Nearly half of this, a loan for \$3,000,000, "further secured by 2 guaranties considered good for several million.

TABLE 13.—Proportion of bank security loans undermargined—Continued.

BANKS OUTSIDE OF NEW YORK CITY

Bank	State in which located	Loans on stock and bonds (other than U. S. Government)	Percentage secured by less than 110 per cent in market value of securities
No. 1.....	Massachusetts.....	\$169,000,000	7.3
No. 2.....	do.....	59,000,000	3.75
No. 3.....	do.....	12,000,000	None.
No. 4.....	Rhode Island.....	28,000,000	7
No. 5.....	New York.....	82,000,000	19
No. 6.....	Pennsylvania.....	56,000,000	(¹)
No. 7.....	do.....	30,000,000	6
No. 8.....	Ohio.....	113,000,000	.69
No. 9.....	do.....	36,000,000	1
No. 10.....	Illinois.....	548,000,000	7.5
No. 11.....	do.....	54,000,000	1
No. 12.....	Michigan.....	47,000,000	3
No. 13.....	do.....	38,000,000	16
No. 14.....	do.....	7,000,000	23
No. 15.....	Minnesota.....	28,000,000	5.5
No. 16.....	do.....	16,000,000	12
No. 17.....	do.....	11,000,000	9
No. 18.....	Missouri.....	59,000,000	5
No. 19.....	Nebraska.....	1,000,000	10
No. 20.....	California.....	159,000,000	(¹)
No. 21.....	do.....	91,000,000	12
No. 22.....	do.....	31,000,000	None.
No. 23.....	do.....	32,000,000	2
No. 24.....	do.....	21,000,000	7
No. 25.....	do.....	20,000,000	.5
No. 26.....	Washington.....	1,000,000	2
Total, 26 banks.....		1,749,000,000	6

¹ Practically none.

A further approximate index to the soundness of security loans is furnished by determining the percentage placed through brokers and dealers. As a rule there is good reason to believe that security loans placed through brokers are sounder than those advanced directly to customers. In the first place, the broker's liability is added to that of the customer, and secondly, the broker is likely to be considerably more ruthless in insisting upon the maintenance of adequate margins than are the banks themselves when making security loans to individual customers. Loans to dealers on security issues in process of distribution, or being held for long-term purposes, have in practice proved less sound in several cases, since many banks, especially in New York and other financial centers, have at times become so far involved in the affairs of investment houses as to refrain from taking protective action in time in the event of a general decline in security prices.

Data on the proportion of security loans advanced through brokers and dealers is presented in Part II of this report.

7. *Loans to security affiliates.*—The failure of the Bank of United States in New York City in December, 1930, served to center attention upon the fact that banks may make large loans to affiliated corporations which are not treated objectively, and which in that particular case became so unwieldy as to have led to the collapse of the institution. The development of affiliates, chiefly for purposes of holding and distributing securities, has been especially marked in New York City, but has spread to some extent in recent years to other centers. A full discussion of the security affiliates is reserved for Part IV of this report, but here an indication will be given of the extent to which the banks have loaned money to them.

The questionnaire asked the banks addressed to state the amount of security collateral loans to controlled or affiliated institutions as of the end of 1930, as well as the maximum amount of such loans in each of the preceding five years. The answers are tabulated herewith:

TABLE 14.—*Loans to security affiliates, New York City banks*

Bank	Loans to affiliates, Dec. 31, 1930			Maximum loans to affiliates during year	
	Amount	Per cent of total security loans	Per cent of capital and surplus	Amount	Date
No. 1.....	\$28,820,000	3.5	9.7	\$28,820,000	1930
No. 2.....	None.			18,100,000	1927
No. 3.....	None.			31,296,849	1927
No. 4.....	4,799,600	1.5	2	25,504,966	1930
No. 5.....	4,300,000	3.1	5.1	5,500,000	1930
No. 6.....	24,650,000	22.3	20.3	25,020,000	1929
No. 7.....	2,250,000	2.2	8.9	4,545,000	1930
No. 8.....	3,000,000	3.4	4.1	7,100,000	1929
No. 9.....	None.			825,000	1929
No. 10.....	207,000	1.3	5.2	400,000	1930

Out of 18 banks answering questionnaires in New York City, only 7 had collateral loans outstanding to their affiliates at the end of 1930. Several that had had large credits advanced to affiliated security corporations previously had liquidated them by that time. With one exception, the New York City banks showed moderate commitments in this respect at the close of 1930 relative to their total security loans.

TABLE 15.—*Loans to security affiliates, banks outside of New York*

Bank	State in which located	Loans to affiliates, Dec. 31, 1930 ¹			Maximum loans to affiliates	
		Amount	Per cent of total security loans	Per cent of capital and surplus	Amount	Date
No. 1.....	Massachusetts.....	None.			\$7,985,000	1930
No. 2.....	do.....	\$1,000,000	1.7	3.3	2,600,000	1927
No. 3.....	New York.....	None.			4,700,000	1929
No. 4.....	Ohio.....	3,200,000	2.8	8.4	4,120,000	1930
No. 5.....	do.....	575,000	1.6	6.8	1,021,000	1930
No. 6.....	Illinois.....	14,100,000	2.6	10.1	21,000,000	1930
No. 7.....	do.....	2,696,000	5.0	13.5	4,920,000	1929
No. 8.....	Michigan.....	1,344,472	3.5	12.2	6,788,264	1930
No. 9.....	Minnesota.....	166,000	1.0	2.4	394,650	1928
No. 10.....	do.....	937,266	8.7	8.6	937,266	1930
No. 11.....	Missouri.....	550,000	0.9	2.2	1,500,000	1925
No. 12.....	California.....	380,000	1.9	4.5	600,000	1930

¹ In a few cases, the data are as of Sept. 24, 1930.

Out of 25 representative out-of-town banks answering the question, only 12 reported having made collateral loans to affiliates within the past few years, and but 10 had such loans outstanding at the end of 1930. In general, it will be seen that several out-of-town banks had a substantial part of their capital and surplus advanced as loans to affiliates. The practice is not, therefore, as some suppose, restricted entirely to the largest cities.

The question arises as to how some banks advance more than 10 per cent of their capital and surplus to affiliates, in view of the limita-

tions on loans to one interest contained in Section 5200 of the Revised Statutes for national banks, and cognate provisions in many State banking laws, to 10 per cent of a bank's capital and surplus. This limitation is circumvented in some cases through possessing several affiliates, each with a separate corporate entity and thus entitled to a separate line of credit up to the 10 per cent maximum. In another case, it was found that the advance above the 10 per cent limit was secured by United States Government bonds as collateral, thus constituting an exception from the restriction contained in the statute. These bonds were not owned by the affiliate, however, but borrowed from an unnamed source.

8. *Deflation of security loans.*—The total of security loans by banks reached its peak after the break in the stock market in October, 1929, because of the immediate enormously heavy withdrawal of loans placed through the agency of the banks with brokers "for the account of others." While the total volume of credit advanced on security collateral declined rapidly after the panic, the banks for a time had to take the place of these nonbanking or "other" lenders.

The deflation of total security loans of member banks, which together are responsible for over 90 per cent of such loans of all commercial banks, proceeded as follows:

TABLE 16.—*Deflation of security loans of member banks*

[Source: Member bank call reports, Federal Reserve Board.]

Date	All security loans	Per cent of Oct. 4, 1929, total	Date	All security loans	Per cent of Oct. 4, 1929, total
Oct. 4, 1929.....	\$9,993,767,000	100.0	Sept. 24, 1930.....	\$10,335,938,000	103.3
Dec. 31, 1929.....	10,147,866,000	101.6	Dec. 31, 1930.....	9,439,160,000	94.5
Mar. 27, 1930.....	10,073,809,000	100.8	Mar. 25, 1931.....	9,053,749,000	90.6
June 30, 1930.....	10,425,353,000	104.3	June 30, 1931.....	8,334,479,000	83.4

The deflation in the security loan total of 16.6 per cent from the October, 1929, level does not present a complete picture of the situation, as it does not take account of the simultaneous virtual elimination of some \$5,000,000,000 of such loans made "for the account of others." A fuller presentation of the extent and character of the deflation in security loans is presented below, in the section on brokers' loans.

The deflation of bank security loans has been at a somewhat more rapid pace in the interior banks than in New York, owing to the greater extent to which the latter are tied up with the security markets, so that they usually supply funds to replace those withdrawn by other lenders. This is indicated in the following table:

TABLE 17.—*Deflation of bank security loans*

[Source: Member bank call reports, Federal Reserve Board.]

Date	New York City banks		Chicago and reserve city banks		Country banks	
	Amount	Per cent of total	Amount	Per cent of total	Amount	Per cent of total
Oct. 4, 1929.....	\$3,040,000,000	30	\$4,282,000,000	43	\$2,671,000,000	27
June 30, 1931.....	2,960,000,000	36	3,313,000,000	40	2,061,000,000	24

PART II

BROKERS' LOANS

1. *Expansion of brokers' loans.*—Statistics of loans on securities to brokers and dealers are available in partial form for the past 15 years. They have been published regularly both by the Federal Reserve Bank of New York and the New York Stock Exchange since 1926, while earlier data represent a private compilation by the Federal Reserve Bank of New York.

"Street loans" placed by New York City daily reporting banks were first reported in October, 1917, to amount to \$903,000,000, of which \$688,000,000 was for own account and \$214,000,000 for correspondents. The highest point for such loans before 1922 was reached in October, 1919, when they aggregated \$1,422,000,000. They subsequently dropped to \$719,000,000 in August, 1921, a decline of nearly 50 per cent, in connection with the postwar security market deflation, and thereafter began a steady rise which, with moderate interruptions, continued through the decade.

Beginning with January 6, 1926, these figures have been made public weekly, and are segregated into loans "for own account," those "for account of out-of-town banks," including nonbanking lenders placing funds through interior banking institutions, and loans "for account of others," or nonbanking lenders dealing directly with the New York banks.

The total of such loans increased as follows from the beginning of 1926 to the panic period of 1929:

TABLE 18.—*Brokers' loans by and through reporting member banks in New York City*

[Source: Statement of Weekly Reporting Member Banks in New York City, Federal Reserve Bank of New York]

Date	For own account	For account of out-of-town banks	For account of others	Total
Jan. 27, 1926.....	\$1,201,000,000	\$1,287,000,000	\$610,000,000	\$3,098,000,000
Jan. 26, 1927.....	865,000,000	1,126,000,000	741,000,000	2,732,000,000
Jan. 25, 1928.....	1,275,000,000	1,472,000,000	1,041,000,000	3,789,000,000
Jan. 30, 1929.....	1,091,000,000	1,853,000,000	2,615,000,000	5,559,000,000
Oct. 2, 1929.....	1,071,000,000	1,826,000,000	3,907,000,000	6,804,000,000

The division between brokers' loans from bank and nonbanking sources can not be made exactly from the above data, since the loans placed by the reporting New York member banks for the account of out-of-town banks include advances made for nonbanking customers of these institutions. Such advances actually are made "for the account of others," but originate outside of New York City. A partial indication of the extent to which these loans for the

account of out-of-town banks are for nonbanking lenders is furnished by comparing them with the statistics of loans by out-of-town member banks to brokers in New York, as given in the member bank call report showing the condition of all member banks. The comparison, which indicates that at times as much as half of these out-of-town funds may be for "others," follows:

TABLE 19.—*Brokers' loans from out-of-town member banks*

[Sources: Weekly brokers' loans report Federal Reserve Bank of New York and member bank call report Federal Reserve Board]

Date	Loans for account of out-of-town banks	Loans to brokers in New York City by outside member banks	By out-of-town nonmembers and others
October, 1928 ¹	\$1,682,000,000	\$805,000,000	\$877,000,000
January, 1929.....	1,648,000,000	917,000,000	731,000,000
October, 1929.....	1,826,000,000	789,000,000	1,037,000,000

¹ Corresponding classification not available previous to Oct. 3, 1928, call date.

Loans made in New York City to members of the New York Stock Exchange through channels other than the New York City reporting member banks are available in the monthly reports of the exchange, which give borrowings of its members made through commercial banks in the city and those made via other channels separately. In addition, loans are made by banks, including New York City institutions but more especially those outside, to brokers outside of the city. These are available in the member bank call report. The following table summarizes data from all of these sources, showing total brokers' loans from banking and nonbanking sources in the period leading up to the stock market panic in October, 1929:

TABLE 20.—*Total brokers' loans*

[Sources: Weekly brokers' loan report Federal Reserve Bank of New York; member bank call report Federal Reserve Board, and monthly report on members' borrowings New York Stock Exchange]

Date	By and through New York banks		From private banks, brokers, etc., to New York Stock Exchange members	To brokers outside of New York by out-of-town member banks	Total
	Bank account	Others ¹			
October, 1928.....	\$1,807,000,000	\$2,835,000,000	\$866,000,000	\$805,000,000	\$6,313,000,000
January, 1929.....	2,008,000,000	3,346,000,000	1,071,000,000	925,000,000	7,350,000,000
October, 1929.....	1,860,000,000	4,944,000,000	1,472,000,000	893,000,000	9,169,000,000

¹ As shown above, loans made for "out-of-town banks" are divided in such a manner as to include loans made by nonmember banks with the "others."

The total of brokers' loans shown in the above table is not complete in several respects. It does not include:

1. Loans made by nonmember banks to brokers outside New York.
2. Loans made through agencies other than New York reporting member banks to nonstock-exchange members within the city, and all "loans for the account of others," whether made through the mediation of a bank or otherwise, to brokers outside of New York City.

3. Credit balances and special deposits kept with brokers and investment bankers.

2. *Relation of brokers' loans to bank security loans.*—It will be seen from the above discussion that the category of brokers' loans includes security loans advanced by the banks to brokers and dealers in securities, as well as loans of this kind originating from nonbanking sources. We can thus distinguish three main classes of security loans—first, bank loans to brokers and dealers; secondly, bank loans to other customers, and thirdly, loans to brokers and dealers, advanced mainly through the agency of the banks, by nonbanking lenders. In October, 1929, at the time of the stock-market panic, when the total of security loans from banking and nonbanking sources was at its height, the computed aggregate of security credit outstanding, with comparisons with the year before, was as follows:

TABLE 21.—All security loans

Source	October, 1928	October, 1929	Increase (per cent)
Bank loans to brokers and dealers.....	\$2,749,000,000	\$2,824,000,000	3
Bank security loans to other customers.....	6,375,000,000	7,875,000,000	24
Loans to brokers and dealers by others.....	3,701,000,000	6,416,000,000	73
Total.....	12,825,000,000	17,115,000,000	34

It will be seen from the above that restrictive credit policies of the Federal Reserve authorities during this period was really effective only in curtailing loans by banks to brokers and dealers.

The proportion of bank security loans advanced to brokers and dealers varies widely as between individual institutions. Data on this point as of the end of 1930 were secured in Questionnaire No. 1 on security loans. The replies are tabulated herewith:

TABLE 22.—Proportion of bank security loans made to brokers

NEW YORK CITY BANKS

Banks	Loans on stocks and bonds	Percent- age made to brokers and dealers	Banks	Loans on stocks and bonds	Percent- age made to brokers and dealers
No. 1.....	\$823,000,000	37	No. 11.....	95,000,000	42
No. 2.....	525,000,000	48	No. 12.....	89,000,000	35
No. 3.....	311,000,000	35	No. 13.....	63,000,000	31
No. 4.....	310,000,000	58	No. 14.....	49,000,000	30
No. 5.....	231,000,000	43	No. 15.....	33,000,000	62
No. 6.....	217,000,000	49	No. 16.....	31,000,000	48
No. 7.....	138,000,000	40	No. 17.....	16,000,000	28
No. 8.....	110,000,000	49	No. 18.....	15,000,000	14
No. 9.....	105,000,000	36			
No. 10.....	104,000,000	28	Total (18 banks).....	3,265,000,000	42

TABLE 22.—Proportion of bank security loans made to brokers—Continued

BANKS OUTSIDE NEW YORK CITY

Bank	State in which located	Loans on stocks and bonds	Percentage made to brokers and dealers
No. 1	Massachusetts	\$169,000,000	54
No. 2	do.	59,000,000	46
No. 3	do.	12,000,000	25
No. 4	Rhode Island	28,000,000	23
No. 5	New York	82,000,000	5
No. 6	Pennsylvania	56,000,000	10
No. 7	do.	30,000,000	11
No. 8	Ohio	113,000,000	34
No. 9	do.	36,000,000	21
No. 10	Illinois	548,000,000	57
No. 11	do.	54,000,000	31
No. 12	Michigan	47,000,000	10
No. 13	do.	38,000,000	5
No. 14	do.	7,000,000	8
No. 15	Minnesota	28,000,000	7
No. 16	do.	16,000,000	12
No. 17	do.	11,000,000	17
No. 18	Missouri	59,000,000	25
No. 19	Nebraska	1,000,000	0
No. 20	California	159,000,000	40
No. 21	do.	91,000,000	42
No. 22	do.	39,000,000	17
No. 23	do.	32,000,000	10
No. 24	do.	21,000,000	52
No. 25	do.	20,000,000	4
No. 26	Washington	1,000,000	9
Total (26 banks)		1,757,000,000	38

The percentage of security loans taking the form of advances to brokers and dealers for all the member banks of the Federal reserve system, divided according to central reserve city, other reserve city and country banks, as of the end of 1930, follows:

TABLE 23.—Percentage of all security loans advanced to brokers, all member banks

[Source: Member bank call report, Federal Reserve Board]

Banks in—	
New York City	41
Chicago	34
Other reserve cities	14
Country	5
Average, all	23

Brokers' loans of all kinds constituted 50 per cent of all security loans, including both bank and other sources, in October, 1928. A year later, at the peak of the stock-market inflation, they constituted 53 per cent of the total. In June, 1931, the proportion was reduced, however, to 22 per cent.

It will be seen that, outside of New York, the tendency is for the larger banks to advance a greater proportion of their security loans to brokers than the smaller institutions, whose security loans are not only a smaller percentage of total resources but are also made to individual local customers in the main.

3. *Loans for the account of others.*—It was noted at the beginning of this discussion of brokers' loans that the New York reporting member banks had fewer loans to brokers outstanding for their own account in October, 1929, than they did at the beginning of 1926. Owing to pressure on the part of the Federal Reserve authorities the banks

refrained from increasing the volume of such advances by them despite the rise in rates paid on such loans. Parenthetically, it should be noted that security loans to nonbrokers did rise sharply. On the other hand, loans to brokers for the account of others rose steadily and at an accelerated pace, until they amounted, in October, 1929, to a grand total of \$6,416,000,000 as computed above, or nearly 37 per cent of all security loans and fully 70 per cent of all brokers' loans.

No data have been available in the usual banking statistics on the origin of these loans for the account of others. It was known that they are placed, in the main, by a few institutions in New York for the regular commission of one-half of 1 per cent per annum on the amount handled. Loans were not taken, under the regulation adopted by the New York Clearing House, in amounts of less than \$100,000. On and after November 16, 1931, member banks of the New York Clearing House Association have been forbidden by that body to place loans for others than banks with brokers.

In order to secure definitive information on the sources of this vast volume of funds advanced by nonbanking lenders to brokers a special questionnaire was addressed to the large New York banks asking for a classification of sources as of the date when the largest volume of such funds was handled in 1929.¹

TABLE 24.—Sources of brokers' loans for the account of others

Bank	Highest amount handled, 1929	Per cent from business corporations	Per cent from investment trusts	Per cent from individuals	Per cent from foreign banks	Per cent from other foreign sources
No. 1.....	\$757,000,000	68		11	19	2
No. 2.....	631,000,000	49	16	30	3	2
No. 3.....	437,000,000	56	2	33	2	1
No. 4.....	360,000,000	57	18	23	1	1
No. 5.....	² 241,000,000	42	7	4	0.1	1
No. 6.....	153,000,000	73	0.1	17	8	3
No. 7.....	97,000,000	63	4	15	1	0
Total (7 banks).....	2,676,000,000	58	8	18	7.5	2

¹ Includes investment trusts.

² Includes loans from out-of-town banks of unstated amount.

As all of the banks mentioned attained their peak totals of brokers' loans handled for the account of others at about the same time, the distribution shown above is doubtless typical of the situation prevailing at the culmination of the stock market boom, and throws considerable light on the problems involved in any effort to control the expansion of such loans under similar circumstances in the future. The highest total of loans for the account of others reported by the New York banks was \$3,907,000,000, on October 2, 1929, so that the seven banks shown above handled approximately two-thirds of the total.

The conclusion indicated is that loans for the account of others originated in the main from business corporations, which were responsible for 58 per cent of the total shown by the seven banks in the table. If investment trusts be included, the total indicated for domestic corporations is 66 per cent, thus indicating that any effort to control the expansion of such loans through laws affecting lending

¹ Questionnaire No. 5, the text of which will be found in the introduction to this Part VII.

corporations directly would reach the bulk of such advances as made through the New York reporting member banks.

A further question asked was, "If you had not handled these funds for the lenders, is there any other channel through which they might have found their way into the call loan market?" In the majority of cases, it was stated that the funds could have been advanced to the broker direct or through a private banker. There is grave doubt in the minds of many well-informed observers, however, as to the willingness of large corporations to advance their funds through existing channels other than the large commercial banks, since the latter have regularly shown a willingness to increase loans for their own account to replace the loans of "others" when the latter are withdrawn, thus giving a de facto guarantee of the safety and liquidity of such advances. However, if the banks were prohibited from acting as agents in placing such funds, it is likely that higher rates during periods of widespread popular speculation would cause the banks or large private banking houses to develop special agencies for placing these loans for the account of others with adequate assurance of their safety.

During the latter stages of the stock-market boom it was said that substantial amounts of money were being placed in the call-money market through nonbanking channels, chiefly through the agency of the money brokers. A questionnaire was addressed to several firms¹ of money brokers to determine the nature and extent of such advances. The leading firm of money brokers in New York City reported handling a maximum of \$65,300,000 in brokers' loans for the account of others on any one day in 1929, but all of this was actually advanced through the banks, the firm acting merely as intermediary between lender and banks. No compensation was taken from the lenders for this service.

Another concern affiliated with a large Boston banking organization handled \$107,000,000 as a maximum amount for any day in 1929, but the details of the reply indicate that these funds were probably advanced for the account of out-of-town banks in New England, rather than for other nonbanking lenders. In general, the conclusion from these and other replies received is that in 1929, despite the fact that brokers' loans for the account of others attained an enormous aggregate in 1929, money brokers played an insignificant rôle. On the other hand, as shown in the monthly report of the New York Stock Exchange, private banking houses, foreign bank agencies and similar channels fed some \$1,500,000,000 at the peak to stock exchange members, both for their own account and for clients.

Brokers' loans for the account of others constitute a peculiar development in the credit structure, since, unlike bank loans, they do not give rise to a corresponding increase in bank deposits. They represent merely the transfer of already existing deposits to other accounts. Nevertheless, in practice they constitute potential liabilities of the banking system, since on their concerted withdrawal they are replaced by loans advanced for the account of the banks themselves, as shown by the October, 1929, experience.

From the broad point of view of credit analysis, loans for the account of others tend to have the same effect as new bank loans, through

¹ Questionnaire No. 3 the text of which will be found in the introduction to this Part VII.

increasing the velocity, although not the amount, of the bank deposits transferred. Funds placed on call for the account of nonbanking lenders usually represent inactive deposits of the latter, which are made active, or "energized," so to speak, through their transfer to brokers, and through the latter to sellers of securities. The increase in velocity does not necessarily affect business outside of the security markets, however, since the same fund may be traced via corporations issuing new securities through several loans for the account of others. Thus, Corporation A may place funds on the call market, which funds are borrowed by X to permit him to buy stock in Corporation B, an investment trust. The latter may in turn place the same funds on call immediately on their receipt, and they are then borrowed by Y to purchase shares of Corporation C, which may conceivably in turn lend a portion of this same fund through the call money market to Z. Thus this multiple increase in the aggregate of loans for the account of others, while tending further to build up an inflated and dangerous speculative structure in the security markets, does not necessarily affect general purchasing power to the extent indicated by the mere totals reported.

Furthermore, since loans for the account of others do not involve a corresponding creation of new bank deposits, no increase in Federal reserve credit is needed to support an expansion in such advances. Hence, they can, and in 1928 and 1929 did, expand freely in response to the attraction of high interest rates despite efforts by the Federal reserve authorities to restrain brokers' loan expansion. There is nothing in the existing credit control mechanism, except a general "hard money" policy, which is effective in keeping these loans for the account of others within bounds.

4. *Control of brokers' loans.*—The unprecedented expansion of brokers' loans in 1928 and 1929, accompanied as it was by spectacular advances in security prices, attracted widespread attention at the time and occasioned some effort to control them.

The first official cognizance of possible abuse of brokers' loans was taken as long ago as 1855, in a report of the Massachusetts Banking Commissioners, which inveighed against "loans on stocks, instead of discounts of promises representing something that has an intrinsic value." In more recent years we find little official reference to brokers' loans until the period of major inflation in the security markets beginning about 1926.

The Committee on Banking and Currency of the United States Senate held hearings on the subject of brokers' loans early in 1928, in the course of its consideration of Resolution 113, Seventieth Congress, first session, directing the Federal Reserve Board to bring about a contraction of loans for speculative purposes and to suggest legislation for controlling them in the future. This resolution, however, was particularly directed at preventing the use of Federal reserve credit as a basis for security loan expansion, rather than at curtailing excessive security loans as such. It stated:

Resolved, That it is the sense of the Senate that the Federal Reserve Board should immediately take steps to restrict the further expansion of loans by member banks for speculative purposes and as rapidly as is compatible with the financial stability of the Nation require the contraction of such loans to the lowest possible amount; and be it further

Resolved, That the Federal Reserve Board be directed to report to the Congress what legislation, if any, is required to prevent the future use of the funds and credit of the Federal Reserve system for speculative purposes.

Owing to the fact that Reserve bank credit supports approximately a tenfold load of member bank credit, and that the proceeds of the rediscount of one member bank, for whatever purpose made, tends to be shifted immediately to the reserve accounts of other banks, the effort to trace the use of Reserve credit in the expansion of security loans naturally was without result.

Gov. Roy A. Young expressed the views of the Federal Reserve Board on the situation as follows:

I am not prepared to say whether the brokers' loans are too high or too low. I do not think anybody else can say so. I am satisfied they are safely and conservatively made.

Now, if there is a further expansion of this brokers' loan account and it gets to the place where it is dangerous and borders on unwarranted speculation, I have enough confidence in the American banking fraternity to believe they can correct that situation themselves. My conclusion is that there is no constructive legislation that I can recommend to this committee at the present time.

The annual report of the Federal Reserve Board for 1928 again associates the question of brokers' loan control with that of Federal reserve credit as follows:

The Federal Advisory Council on November 22, 1928, recommended to the Federal Reserve Board with respect to "the proper function and use to be made of banking investments in brokers' loans," that "in so far as this refers to non-customer loans, the council is of the opinion that such investments are proper for member banks to make with surplus funds only, except for the purpose of meeting a temporarily disturbed situation. Member banks, however, should not borrow to carry these loans solely for the purpose of making a profit."

In its annual report for 1929, appearing shortly after the panic, the Board refers briefly to brokers' loans for the account of others, as follows:

Loans to brokers by nonbanking lenders, although they do not directly involve member banks, have none the less an effect on the banking situation, both because the banks are aware of the necessity of taking over such loans in case an emergency develops and because their existence and employment results in a much more active use of bank deposits.

Despite the very significant and mischievous rôle played by brokers' loans for the account of others during the stock-market inflation, no special steps were reported by the Federal Reserve authorities to investigate them for purposes of future control until the present investigation was ordered by the Senate Committee on Banking and Currency. At about that time, the Federal Reserve Bank of New York set on foot a thorough-going analysis of the brokers' loan situation, which has been furnished to the committee.

5. *Deflation in brokers' loans.*—The total of brokers' loans as reported by various sources declined by 77 per cent from October, 1929, the peak of the inflation period, to June, 1931, a period of 20 months. During this same period, security loans to other customers by all member banks dropped 8 per cent. It is thus evident that the burden of deflation weighs especially heavily upon the brokers' loan element in the security loan total, and that such loans can be cut down in amount much more rapidly and effectively than the security loans to nonbroker customers.

During the 20-month period from the stock-market panic to June, 1931, several stages of liquidation can be distinguished. The first, reflected in the bank statements from early in October to the end of 1929, is marked chiefly by a drastic deflation in loans "for the account of others," which had to be replaced in large measure for a few weeks and on very short notice by the New York City banks. This they were readily able to do, at the same time maintaining the call money rate at 6 per cent without change, by reason of liberal purchases of Government securities by the Federal reserve banks. Bank loans on securities directly to nonbroker customers also rose. The comparison in the security loan status of the beginning of October and the end of December, 1929, is as follows:

TABLE 25.—*Deflation in security loans, October 4, 1929, to December 31, 1929*

Source of loans	Oct. 4, 1929	Dec. 31, 1929	Change (per cent)
Member bank loans to brokers and dealers	\$2,824,000,000	\$2,463,000,000	-13
Bank security loans to other customers	7,875,000,000	8,450,000,000	+7
Loans to brokers and dealers by others	6,416,000,000	2,419,000,000	-62
Total	17,044,000,000	13,732,000,000	-19

The second stage in the deflation was a moderate reduction in bank security loans to customers, accomplished on a rising market in the spring of 1930, along with further sharp reductions in loans by others, which continued to decline rapidly through 1930 in view of the low rates paid on such advances. The contraction in all security loans during 1930 was distributed as follows:

TABLE 26.—*Deflation in security loans, 1930*

Source of loans	Dec. 31, 1929	Dec. 31, 1930	Change, per cent
Member bank loans to brokers and dealers	\$2,463,000,000	\$2,173,000,000	-12
Bank security loans to other customers	8,450,000,000	8,000,000,000	-5
Loans to brokers and dealers by others	2,419,000,000	587,000,000	-76
Total	13,732,000,000	10,760,000,000	-22

The third stage of deflation, during the first half of 1931, witnessed a more marked decline in bank loans on securities to nonbroker customers, as well as in brokers' loans by the banks. It will be noted that real deflation in these two categories actually got under way in drastic measure only after loans by other lenders had been reduced from well over \$6,000,000,000 to negligible amounts.

TABLE 27.—*Deflation in security loans, first half of 1931*

Sources of loans	Dec. 31, 1930	June 30, 1931	Change, per cent
Member bank loans to brokers and dealers	\$2,173,000,000	\$1,732,000,000	-20
Bank security loans to other customers	8,000,000,000	7,250,000,000	-9
Loans to brokers and dealers by others	587,000,000	366,000,000	-38
Total	10,760,000,000	9,348,000,000	-13

While the decline in the total outstanding volume of security credit was most rapid in the first stage of deflation during and immediately after the panic of 1929, the effects of the credit contraction on general business, aside from psychological factors, may well have been greater in the later stages of the deflation.

The basis of this assumption is that in the earlier stages the deflation was primarily in loans for the account of others, which include, as has been seen, considerable duplication of funds, so that there was not necessarily any corresponding decline in the velocity of the bank deposits as applied to general business use. On the other hand, as the deflation affected increasingly brokers' and other security loans made by the banks, in its later stages repayment meant a cancellation of bank deposits, which had a direct effect upon general purchasing power. While contraction in such loans was offset largely by increases in bank investments, chiefly United States Government bonds, there is good reason to believe that the velocity of the deposits created by these latter operations in securities is substantially less than the rate of turnover of deposits canceled through repayment of security loans by the banks.

PART III

BANK INVESTMENTS

1. *Expansion of bank investments, 1921-1930.*—Expansion of bank credit through the security markets may take either one of two forms. It may occur through loans on securities, considered in the first two parts of this report, or in direct investments in these securities by the banks. In the former case the risk of fluctuation in the values of the securities is borne, in the first instance, by the borrowers, and the bank by timely action can usually protect the principal of its loans. In the case of security investments, on the other hand, the risk attending price fluctuations is borne entirely by the bank itself, except where recourse is had to special protective devices, such as repurchase agreements or contracts of guaranty against loss.

Neither the national bank act of 1863, nor the numerous banking statutes in this country before that time, contemplated investments in securities by commercial banks. However, under an opinion of the Comptroller of the Currency, national banks did purchase bonds for investment without additional legislative authorization under section 5136 of the Revised Statutes, permitting them to discount and negotiate promissory notes, drafts, bills of exchange, and other evidences of debts. State banks in many instances have engaged in the purchase of securities on even a broader scale, in some cases being able to buy stocks as well as bonds for investment under State law.

Before the war, national banks held a substantial volume of United States Government bonds to secure national bank notes in circulation. At the end of 1914, all member banks held \$2,079,000,000 in bonds, of which \$760,000,000 were United States Government issues, held primarily for circulation purposes, and \$1,319,000,000 other securities. During the war, the banks largely expanded their holdings of Government bonds, purchasing them as investments, so that by the end of 1918 holdings of United States obligations largely exceeded other security investments.

The increase in security investments of all commercial banks during the decade 1921-1930 was as follows:

TABLE 28.—*Security investments, all commercial banks*

[Source: Annual Reports of the Comptroller of the Currency]

Class of banks	June 30, 1921		June 30, 1930	
	Amount	Per cent of total resources	Amount	Per cent of total resources
National banks	\$4, 025, 081, 000	20	\$6, 888, 171, 000	24
State banks	2, 438, 057, 000	17	2, 947, 712, 000	19
Trust companies	1, 942, 676, 000	24	3, 835, 746, 000	22
Total	8, 405, 814, 000	20	13, 671, 629, 000	22

The increase in the security investments of all commercial banks shown in the above table amounted to 63 per cent, which compares with an expansion of 50 per cent in their security loans, as reported by the Comptroller of the Currency, during this same period. The expansion of investments continued steadily from year to year until 1928, when a period of high interest rates and declining bond prices intervened to discourage the banks from adding to their bond portfolios. With the deflation in interest rates in 1930 the expansion in the bond portfolios of the banks was resumed at an accelerated pace.

Bond investments for national banks were given specific recognition in the McFadden Act of 1927, which provided that "the business of buying and selling investment securities shall hereafter be limited to buying and selling without recourse marketable obligations evidencing indebtedness * * * in the form of bonds, notes, or debentures commonly known as investment securities, under such further definition of the term 'investment securities' as may by regulation be prescribed by the Comptroller of the Currency."

Thus, the only real limitation on the types of bonds which can be purchased by national banks is the factor of marketability. The Comptroller of the Currency is given the final responsibility for determining what is marketable, and he has ruled that the term be understood in its very broadest significance. His regulation on the subject is as follows:

Under ordinary circumstances, the term "marketable" means that the security in question has such a market as to render sales at intrinsic values readily possible.

He further states that three factors would be given consideration in all cases in classifying a given security as marketable:

1. Sufficient size of entire issue to make marketability possible.
2. Such public distribution provided for as to insure marketability.
3. An independent trustee for the issue, either a bank or trust company.

These regulations appear to have been interpreted very liberally, so that virtually every public issue of bonds would qualify for national bank investment under them.

2. *Analysis of expansion.*—The increase in security investments of all banks from 1921 to 1930, divided as to member and nonmember banks, was as follows.

TABLE 29.—Security investments, member and nonmember banks

[Source: Annual Reports of the Comptroller of the Currency]

Year	National banks	State member banks	State nonmember banks	Total
1921.....	\$4,025,000,000	\$1,977,000,000	\$2,404,000,000	\$8,406,000,000
1922.....	4,563,000,000	2,454,000,000	2,162,000,000	9,179,000,000
1923.....	5,070,000,000	2,687,000,000	2,324,000,000	10,081,000,000
1924.....	5,142,000,000	2,821,000,000	2,645,000,000	10,608,000,000
1925.....	5,730,000,000	3,133,000,000	2,720,000,000	11,583,000,000
1926.....	5,842,000,000	3,281,000,000	2,746,000,000	11,869,000,000
1927.....	6,393,000,000	3,425,000,000	3,465,000,000	13,283,000,000
1928.....	7,147,000,000	3,611,000,000	3,805,000,000	14,563,000,000
1929.....	6,657,000,000	3,395,000,000	3,112,000,000	13,164,000,000
1930.....	6,888,000,000	3,534,000,000	3,229,000,000	13,671,000,000

The above table indicates that the expansion in investments was most marked for the State member banks, which showed a rise of 80 per cent in this item for the decade. National banks reported an expansion of 71 per cent in investment portfolios and State non-member banks 34 per cent.

The continued resort to security investments as a commitment for bank funds has been common to all groups of banks. This is indicated in the following table on holdings of national banks in central reserve city, other reserve city and country banks:

TABLE 30.—*Security investments of national banks, by groups*

[Source: Member bank call reports, Federal Reserve Board]

Bank groups	1921		1930	
	Amount	Per cent of total	Amount	Per cent of total
Central reserve city banks.....	\$629,599,000	16	\$1,159,760,000	17
Other reserve city banks.....	685,687,000	17	2,093,465,000	30
Country banks.....	2,509,615,000	67	3,634,940,000	53
Total.....	4,025,081,000	100	6,888,171,000	100

The extent to which member banks, in each of these bank groups, had invested their resources in securities at the end of 1930 is shown in the following table:

TABLE 31.—*Security investments of member banks, by groups*

[Source: Member bank call reports, Federal Reserve Board]

Bank groups	Number of banks	Security investments	Per cent of total resources
New York City banks.....	48	\$2,435,356,000	18
Chicago banks.....	14	517,586,000	20
Other reserve city banks.....	402	3,517,429,000	22
Country banks.....	7,588	4,518,652,000	29
Total.....	8,052	10,989,023,000	23

Country banks, it will be noted, have a larger proportion of their resources in bond investments than do city institutions, whereas the latter are more heavily involved in security loans. This reflects the relatively restricted demand for advances on security collateral in the smaller communities, and the less direct access of country banks to the financial centers, where the need for security loans is keenest. It also reflects the larger proportion of time deposits of the country institutions, as it is generally felt the receipt of such deposits justifies the making of less liquid commitments, including the purchase of securities that may not be readily marketable.

The nation-wide character of the expansion of bank investments is indicated in the following table, showing the increase from 1921 to 1931 for reporting member banks by districts:

TABLE 32.—*Investments of reporting member banks, by districts*

[Source: Statements of condition weekly reporting member banks in leading cities]

Federal reserve district	June 29, 1921	July 2, 1930	Increase, per cent
Boston	\$180,000,000	\$369,000,000	105
New York	1,337,000,000	2,431,000,000	82
Philadelphia	239,000,000	326,000,000	36
Cleveland	420,000,000	725,000,000	73
Richmond	126,000,000	180,000,000	43
Atlanta	72,000,000	135,000,000	88
Chicago	485,000,000	731,000,000	51
St. Louis	98,000,000	152,000,000	55
Minneapolis	40,000,000	125,000,000	213
Kansas City	91,000,000	220,000,000	142
Dallas	49,000,000	113,000,000	131
San Francisco	310,000,000	615,000,000	98
Total	3,447,000,000	6,120,000,000	78

3. *Types of securities purchased.*—Bank holdings of all classes of bond investments showed increases during the decade 1921–1930. The following table summarizes the growth in security holdings of all commercial banks in the United States during the period by the major types of securities held:

TABLE 33.—*Increase in investments of all commercial banks, by types of securities, 1921–1930*

[Source: Annual Reports of the Comptroller of the Currency]

Type of security	1921		1930	
	Amount	Per cent of total	Amount	Per cent of total
United States Government bonds	\$2,924,000,000	35	\$3,614,000,000	26
State, county, and municipal bonds	722,000,000	9	1,221,000,000	10
Railroad and public utility bonds	1,396,000,000	17	1,968,000,000	15
Other bonds, stocks	3,364,000,000	39	6,869,000,000	49
Total	8,406,000,000	100	13,672,000,000	100

It will be seen from the above table that practically half of the security investments of the banks were outside the Government, railroad, and public utility groups in 1930, whereas less than 40 per cent was so invested 10 years before. The increase in holdings outside of these groups was especially marked in the case of smaller institutions, as is seen from the following table showing the investments of national banks by groups as to each of these types of securities:

TABLE 34.—*Change in percentage distribution of investments, by groups of member banks, 1921–1930*

[Source: Member bank call reports, Federal Reserve Board]

Type of security.	Central reserve cities, per cent of total		Other reserve cities, per cent of total		Country banks, per cent of total	
	1921	1930	1921	1930	1921	1930
United States Government bonds.....	52	56	53	52	48	28
State, county, and municipal bonds.....	10	5	11	13	9	12
Railroad and public utility bonds.....	15	16	13	13	19	29
Other bonds, stocks.....	23	23	23	22	24	33
Total.....	100	100	100	100	100	100

Security investments of member banks are now reported in considerable detail. The distribution of these investments at the end of the first quarter of 1931 was as follows:

TABLE 35.—*Investments of all member banks, March 25, 1931*

[Source: Member bank call reports, Federal Reserve Board]

Type of security	Amount, Mar. 25, 1931	Per cent of total
United States Government bonds.....	\$5,002,000,000	42
State, county, and municipal bonds.....	1,554,000,000	13
Railroad bonds.....	1,004,000,000	8
Public utility bonds.....	1,103,000,000	9
All other bonds.....	1,285,000,000	11
Stock of Federal reserve banks.....	167,000,000	1
Other stocks.....	574,000,000	5
Corporation notes.....	214,000,000	2
Municipal warrants.....	214,000,000	2
All other.....	57,000,000	1
Foreign government bonds.....	369,000,000	3
Other foreign securities.....	336,000,000	3
Total.....	11,839,000,000	100

A detailed classification of member bank investments in securities as of the same date, March 25, 1931, again indicates the tendency for the smaller banks to buy groups of securities generally regarded as less marketable and secure.

TABLE 36.—*Percentage distribution of member bank investments, by groups of banks*

[Source: Member bank call reports, Federal Reserve Board]

Type of security	New York	Chicago	Other reserve cities	Country banks
United States Government bonds.....	55	56	49	27
State, county, and municipal bonds.....	13	7	14	13
Railroad bonds.....	8	2	6	11
Public utility bonds.....	3	4	6	16
All other bonds.....	5	6	10	16
Stock of Federal reserve banks.....	2	1	1	1
Other stocks.....	6	1	6	4
Corporation notes.....	2	1	2	1
Municipal warrants.....	0	15	1	2
All other.....	0	2	1	1
Foreign government bonds.....	4	3	2	4
Other foreign securities.....	2	2	2	4
Total.....	100	100	100	100

4. *Convertible bonds.*—Owing to the fact that national banks and many State institutions are not permitted to purchase stocks for investment, there has been some tendency to invest in stocks indirectly through the purchase of convertible bonds, or bonds with stock purchase warrants attached. In order to determine the extent to which such issues have been purchased by banks, the following question was asked:¹

What proportion of your holdings consists of convertible bonds, or bonds with common-stock purchase warrants attached?

A list of the 10 largest holdings of this character was also requested.

TABLE 37.—*Proportion of bond investments in convertible or option issues*

NEW YORK CITY BANKS		
Bank	Percentage in convertible and option issues	Nature of larger holdings of this type
No. 1.....	3.91	Railroad.
No. 2.....	.10	Do.
No. 3.....	4.09	Do.
No. 4.....	2.75	Hotel, railroad.
No. 5.....	.20	Coal, holding company.
No. 6.....	1.25	Chain store.
No. 7.....	3.00	Railroad.
No. 8.....	.54	Installment finance company.
No. 9.....	2.98	Railroad.
No. 10.....	4.45	Hardware manufacturing company.
No. 11.....	1.60	Utility, office equipment manufacturing company.
No. 12.....	1.00	Cement manufacturing company.
No. 13.....	3.61	Amusement company.
No. 14.....	5.00	Railroad.
No. 15.....	14.89	Do.
No. 16.....	1.30	Do.
No. 17.....	.67	Investment trust.
No. 18.....	15.00	Holding company.

BANKS OUTSIDE NEW YORK CITY			
Bank	State in which located	Percentage in convertible and option issues	Nature of larger holdings of this type
No. 1.....	Massachusetts.....	3.00	Razor manufacturing company.
No. 2.....	do.....	4.70	Utility.
No. 3.....	do.....	5.70	Investment trust.
No. 4.....	New York.....	7.96	Railroad.
No. 5.....	Ohio.....	13.00	Railroad, investment trust.
No. 6.....	do.....	11.00	Public utility, holding company.
No. 7.....	Michigan.....	.30	Railroad.
No. 8.....	Illinois.....	1.00	Public utility.
No. 9.....	do.....	2.20	Coal company, public utility.
No. 10.....	Missouri.....	1.12	Public utility.
No. 11.....	Minnesota.....	.80	Railroad.
No. 12.....	North Dakota.....	6.50	Public utility, investment trust.
No. 13.....	California.....	.54	Railroad, investment trust.
No. 14.....	do.....	1.60	Hotel, razor manufacturing company.

A number of out-of-town banks and one New York City institution reported no holdings of this kind whatsoever.

Despite the lack of restriction on this type of investment, such holdings at the end of 1930 constituted but a small proportion of the

¹ The full text of questionnaire No. 4, on bank security investments, is in the introduction to this Part VII.

total of bank bond investments. No case was found where convertible or option issues amounted to as much as 15 per cent of a bank's security portfolio.

Convertible issues as a class suffered quite severely in the decline in bond prices, outside the gilt-edge group, in 1930 and 1931. This resulted from the fact that this type of bond represents generally less well-secured issues, which possess conversion and warrant features as offsetting factors to attract the interest of investors. Several sample lists of 10 largest holdings of this character, with original cost and market values as of the end of 1930 compared, are presented, herewith. Needless to say, sharp further declines in market value in virtually every case took place in 1931.

Bank 1

Bond	Original cost	Market value December, 1930
Chicago, Rock Island & Pacific, 4½/1960	\$2,481,250	\$2,168,750
F. & W. Grand-Silver Stores (Inc.), 6/1940	2,395,312	2,395,312
Atchison, Topeka & Santa Fe, 4½/1948	2,184,380	1,845,000
Chicago & North Western, 4¾/1949	2,015,277	1,743,280
General Theatre Equipment, 6/1940	1,422,006	830,280
Metropolitan Stores, 6/1940	958,125	958,125
Baltimore & Ohio, 4½/1960	847,968	790,500
American International, 5½/1949	797,820	717,500
Texas Corporation, 5/1944	622,989	618,542
Southern Pacific, 4½/1969	479,131	486,250
Total	14,202,258	12,553,539

The decline of nearly 12 per cent which had taken place by the end of 1930 had increased to approximately 30 per cent by the late summer of 1931, assuming no change had taken place in these holdings in the interim. Two of the holdings, the F. & W. Grand-Silver Stores (Inc.), and Metropolitan Stores issues, had no markets, but similar issues sold at large discounts from par at that time.

Bank 2

Bond	Original cost	Market value December, 1930
Missouri Pacific, 5/1949	\$3,000,000	\$2,760,000
Texas Corporation, 5/1944	1,266,980	1,267,200
Southern Pacific, 4½/1949	1,021,835	1,044,690
Simmons Co., 5/1944	950,822	950,822
Alleghany Corporation, 5/1944	744,375	562,500
Baltimore & Ohio, 4½/1960	691,570	657,800
Chicago, Rock Island & Pacific, 4½/1960	634,141	563,300
Chicago & North Western, 4¾/1949	612,150	550,710
International Telephone & Telegraph, 4½/1939	554,711	395,000
Alleghany Corporation, 5/1950	430,972	333,740
Total	9,907,556	9,085,762

The above list, by August, 1930, showed a depreciation of about 28 per cent from original cost.

Bank 3

Bond	Original cost	Market values, December, 1930
Atchison, Topeka & Santa Fe, 4½/1948	\$433,680	\$421,200
Niagara Share Corporation, 5½/1950	404,652	384,000
Alleghany Corporation, 5/1944	313,520	252,750
Van Swerengin, 6/1935	312,908	270,580
Baltimore & Ohio, 4½/1960	308,690	288,750
Warner Bros. Pictures, 6/1939	298,502	223,500
Chicago & North Western, 4¼/1949	294,235	273,000
International Telephone & Telegraph, 4½/1939	282,300	225,000
Missouri Pacific, 5½/1949	214,053	199,000
American International, 5½/1949	201,857	188,000
Total	3,064,397	2,725,780

Depreciation in this case had increased to approximately 26 per cent by August, 1931.

Bank 4

Bond	Original cost	Market values, December, 1930
Cities Service, 5/1950	\$714,033	\$557,467
Van Swerengin Corporation, 6/1935	640,076	595,000
Associated Gas & Electric, 5½/1938	560,215	436,815
Kreuger & Toll, 5/1959	494,687	430,000
Alleghany Corporation 5/1944	468,779	420,000
Chesapeake Corporation 5/1947	455,182	451,287
Associated Gas & Electric, 4½/1949	377,125	279,000
Commercial Investment Trust, 5½/1949	354,933	325,655
Chicago, Milwaukee & St. Paul, 5/2000	343,206	176,680
International Telephone & Telegraph, 4½/1938	301,636	274,500
Total	4,709,872	3,946,404

The decline in this case of 16 per cent at the end of 1930 had been increased to some 37 per cent by the middle of 1931.

5. *Diversification.*—The published banking statistics include detailed data on the distribution of bank investments among different types of securities. They do not show, however, the extent to which diversification takes place in the individual institution as between individual issues.

The following table shows the percentage of its investments, other than United States Government bonds, placed in its largest single holding and its 10 largest holdings for each of a group of banks, based on replies to Questionnaire No. 4:

TABLE 38.—Percentage of investment funds in individual issues, outside United States Government, New York City banks

Bank	Percentage of total in largest individual holding	Nature of largest holding	Percentage of total in 10 largest holdings
No. 1.....	10	Municipal.....	40
No. 2.....	6	do.....	25
No. 3.....	4	do.....	23
No. 4.....	4	German industrial.....	22
No. 5.....	11	Foreign government.....	34
No. 6.....	14	Municipal.....	38
No. 7.....	4	Traction.....	17
No. 8.....	16	Municipal.....	41
No. 9.....	2	do.....	18
No. 10.....	12	Foreign government.....	35
No. 11.....	7	Municipal.....	27
No. 12.....	12	do.....	48
No. 13.....	16	Real estate.....	78
No. 14.....	7	Municipal.....	24
No. 15.....	8	do.....	43
No. 16.....	8	do.....	84
No. 17.....	7	Railroad.....	50
No. 18.....	21	Holding company.....	75

¹ All issues of one municipality lumped in reply.

Percentage of investment funds in individual issues, outside United States Government banks outside New York City

Bank	State in which located	Percentage in largest holding	Nature of largest holding	Percentage of total in 10 largest holdings
No. 1.....	Massachusetts.....	13	Foreign government.....	46
No. 2.....	do.....	5	Public utility.....	19
No. 3.....	do.....	13	Railroad.....	90
No. 4.....	Rhode Island.....	3	Foreign government.....	18
No. 5.....	New York.....	10	Holding company.....	23
No. 6.....	Pennsylvania.....	18	Traction.....	84
No. 7.....	do.....	7	Municipal.....	28
No. 8.....	Ohio.....	2	do.....	14
No. 9.....	do.....	5	Railroad.....	25
No. 10.....	Michigan.....	13	Hardware Manufacturing Company.....	48
No. 11.....	do.....	14	Municipal.....	48
No. 12.....	do.....	11	Sugar Company.....	40
No. 13.....	Illinois.....	7	Municipal.....	30
No. 14.....	do.....	29	do.....	76
No. 15.....	Missouri.....	8	Federal intermediate credit banks.....	29
No. 16.....	Wisconsin.....	3	Industrial.....	20
No. 17.....	Minnesota.....	11	Municipal.....	42
No. 18.....	do.....	8	do.....	21
No. 19.....	do.....	5	do.....	30
No. 20.....	North Dakota.....	3	do.....	20
No. 21.....	Nebraska.....	4	Railroad.....	16
No. 22.....	California.....	6	Municipal.....	26
No. 23.....	do.....	5	do.....	22
No. 24.....	do.....	2	do.....	12
No. 25.....	do.....	13	do.....	32

6. *Marketability.*—The factor of marketability of security investments is conditioned by a number of factors, of which listing is merely one. It has been said that whereas listing tends to enhance marketability of stock issues, it may mean lessened marketability for bonds, because of the fact that market sponsorship may be discouraged thereby. At any rate, concerted liquidation of bond investments caused many very drastic declines in 1930 and 1921, both in the listed and unlisted groups. Listed issues for the most part have the advantage, however, of known quotations at which actual transactions take place.

The following tables show the proportion of security investments listed on the New York Stock Exchange and other exchanges for a number of banks, as shown in replies to Questionnaire No. 4:

TABLE 39.—Proportion of bond investments listed

NEW YORK CITY BANKS

Bank	Percentage listed on New York Stock Exchange	Percentage listed on other exchanges	Percentage un-listed	Bank	Percentage listed on New York stock Exchange	Percentage listed on other exchanges	Percentage un-listed
No. 1.-----	61	2	37	No. 10.-----	50	12	38
No. 2.-----	73	5	¹ 22	No. 11.-----	73	6	21
No. 3.-----	77	2	21	No. 12.-----	25	1	74
No. 4.-----	90	4	6	No. 13.-----	9	2	89
No. 5.-----	42	6	52	No. 14.-----	76	6	18
No. 6.-----	80	0	20	No. 15.-----	42	7	51
No. 7.-----	83	2	15	No. 16.-----	18	1	81
No. 8.-----	45	1	54	No. 17.-----	95	5	0
No. 9.-----	83	7	10	No. 18.-----	81	15	4

¹ Reply states "balance of holdings are mostly short-term State, municipal, and corporate securities not listed but having an active market."

BANKS OUTSIDE OF NEW YORK CITY

Bank	State in which located	Percentage listed on New York Stock Exchange	Percentage listed on other exchanges	Percentage un-listed
No. 1.-----	Massachusetts.-----	51	23	26
No. 2.-----	do.-----	60	19	21
No. 3.-----	do.-----	75	13	12
No. 4.-----	Rhode Island.-----	85	3	12
No. 5.-----	New York.-----	69	8	23
No. 6.-----	Pennsylvania.-----	83	4	13
No. 7.-----	do.-----	60	10	30
No. 8.-----	Ohio.-----	50	13	37
No. 9.-----	do.-----	65	-----	¹ 35
No. 10.-----	Michigan.-----	75	5	20
No. 11.-----	Illinois.-----	22	1	37
No. 12.-----	do.-----	76	5	19
No. 13.-----	Missouri.-----	26	9	65
No. 14.-----	Minnesota.-----	70	30	-----
No. 15.-----	do.-----	83	1	16
No. 16.-----	North Dakota.-----	50	35	15
No. 17.-----	Nebraska.-----	30	-----	70
No. 18.-----	California.-----	74	-----	26
No. 19.-----	do.-----	70	30	-----
No. 20.-----	do.-----	46	-----	54

¹ Estimates 80 per cent of total "readily marketable." It is interesting to note that this is a national bank and that the McFadden Act laid stress on "marketable obligations" as suitable for banks investment.

The lack of marketability appears most marked in the case of smaller industrial and real estate mortgage bond issues, and several foreign short-term securities. Issues of this kind, without a previously established market, can be disposed of only with the greatest difficulty during periods of deflation in the bond market, when this quality may be of special importance.

7. *Accounting for security investments.*—In view of the large proportion of total banking assets placed in bonds, the method of carrying such investments in the banks' condition statement becomes a matter of first-rate importance. At times of stable or rising bond prices, the bond accounts give no trouble in this respect, but in a

period of deflation, such as 1930-31, the market value of the bond portfolio may decline far below original cost.

Several alternative methods have been followed by banks in stating their bond investments in their condition statements. These include:

1. Original cost.
2. Original cost, with amortization of premiums and accumulation of discounts to maturity.
3. Original cost, with a partial reserve against market depreciation.
4. Composite market value of the entire portfolio, permitting appreciation in some issues to offset depreciation in others, in so far as it exists.
5. Cost or market, whichever is lower.

Two questions on the subject of accounting for security investments were included in the committee's questionnaire. These were:

Are the amounts of bond holdings based on original cost, cost with allowance for amortization to maturity, or prevailing market price? and

Do you ever make allowance for unrealized appreciation or depreciation in your bond accounts?

Replies from 19 New York City banks were as follows:

TABLE 40.—*Accounting for bond investments, New York City banks*

Bank	Bond investments, end of 1930	Accounting method used
No. 1.....	\$392,000,000	Original cost, with a reserve account for depreciation.
No. 2.....	308,000,000	Cost, with "allowance for depreciation if and when necessary."
No. 3.....	263,000,000	Cost. Only "exceptional cases of depreciation written off."
No. 4.....	248,000,000	Up to Dec. 31, 1930, United States Governments at par, others at cost or market, whichever lower. At Dec. 31, 1930, total investment account at market.
No. 5.....	146,000,000	Cost with allowance for amortization. "Occasional" allowance for depreciation.
No. 6.....	124,000,000	Prevailing market price.
No. 7.....	97,000,000	Cost.
No. 8.....	87,000,000	Net cost. In published statement, security items shown "at or below market."
No. 9.....	85,000,000	With amortization allowance.
No. 10.....	68,000,000	Cost, less a reserve of \$696,100 for depreciation.
No. 11.....	41,000,000	Actual cost. "Depreciation sometimes charged to profit and loss account."
No. 12.....	31,000,000	Cost with allowance for amortization.
No. 13.....	30,000,000	Prevailing market price.
No. 14.....	24,000,000	Original cost.
No. 15.....	14,000,000	Cost or market, whichever was lower, used in 1929 and 1930.
No. 16.....	13,000,000	Prevailing market price.
No. 17.....	11,000,000	Original cost.
No. 18.....	5,000,000	Do.
No. 19.....	5,000,000	Do.

Of the 19 institutions whose replies are summarized above, 6 only appear to give full weight to market values in reporting the bond-investment account in their statements.

Accounting for bond investments, out-of-town banks

Bank	State in which located	Bond investments, end of 1930	Accounting method used
No. 1	Massachusetts	\$45,000,000	Original cost. "Depreciation or bonds occasionally taken when requested by national bank examiners. Reserve set up in December, 1929, for depreciation of general bond list."
No. 2	do	37,000,000	Cost, less reserve for depreciation.
No. 3	do	3,000,000	Cost. Makes allowance for depreciation in recent years.
No. 4	Rhode Island	43,000,000	Cost. Unrealized depreciation provided for by reserves.
No. 5	New York	48,000,000	Cost. "At times we set aside reserves for depreciation."
No. 6	Pennsylvania	72,000,000	Allowance for depreciation, but not for appreciation.
No. 7	do	6,000,000	Original cost.
No. 8	Ohio	59,000,000	Original cost, "except in few individual cases where securities were charged down."
No. 9	do	14,000,000	Cost with allowance for depreciation.
No. 10	Michigan	34,000,000	Cost with amortization to maturity.
No. 11	do	8,000,000	Cost or market, whichever is lower, except United States Government.
No. 12	Illinois	270,000,000	Cost with amortization to maturity.
No. 13	do	23,000,000	Cost. "Make reserves from time to time against depreciation."
No. 14	Missouri	32,000,000	Cost with allowance for amortization.
No. 15	Wisconsin	2,000,000	Cost. Premiums charged off.
No. 16	Minnesota	32,000,000	Cost.
No. 17	do	31,000,000	Cost. Allowance for depreciation.
No. 18	do	21,000,000	Cost.
No. 19	North Dakota	2,000,000	Cost. Reserve for depreciation.
No. 20	Nebraska	10,000,000	Cost, with allowance for amortization.
No. 21	California	247,000,000	Cost, with amortization at premiums.
No. 22	do	136,000,000	Cost. "Make allowance for depreciation."
No. 23	do	70,000,000	Cost.
No. 24	do	24,000,000	Do.
No. 25	do	21,000,000	Cost. "Specific securities may be written down."

Of the 25 banks outside New York City whose replies are summarized above, 2 adopt the method of carrying bonds at cost or market, whichever is lower. In addition, eight other banks make some provision against unrealized appreciation by setting up reserves.

The determination of market values is frequently a difficult matter, especially where a large proportion of the bond portfolio consists of unlisted and not readily marketable securities. Even in the case of those banks which follow the practice of writing down their portfolios to market values, large blocks of bonds which could be sold only with difficulty, and then perhaps at large concessions, are carried at cost for want of another available basis of valuation. This applies in particular to real estate and smaller industrial issues, as well as some municipals.

Efforts of banking supervisory authorities to encourage or enforce the practice of writing down bond investments showing substantial depreciation to market value levels are understood to have been taken in bad part by many institutions. The theory advanced in such cases is that a bank investment once made may be held until maturity, so that market value may be ignored in valuing the portfolio. During the years 1930 and 1931, however, when prices of others than gilt-edge bonds were declining sharply for the most part, banks which sought to liquidate bonds on a large scale to meet demands on them frequently faced the necessity of taking heavy losses. In other instances, where liquidation was not necessary, the published statement gave a misleading view of what could be realized on the security portfolio, because of the general decline in values which was not reflected in the condition statement.

In several States the policy of the supervisory authorities has been to insist on at least partial writing down of bond investments which have depreciated if the institution is strong enough to stand it. Such a policy often leads to unequal treatment of individual banks.

8. *Losses on bank investments.*—Until the major deflation period in the bond market in the latter part of 1930 and 1931, losses on bank security investments were reported as being of moderate proportions. According to statistics on earnings of all member banks, issued by the Federal Reserve Board, such losses were as follows down to the end of 1930:

TABLE 41.—*Earnings and losses of all member banks*

[Source: Federal Reserve Bulletin]

Year	Net earnings and recoveries	All losses	Losses on stocks, bonds, etc.	Percentage of losses on stocks, bonds, etc., to all losses
1926.....	\$639,013,000	\$207,520,000	\$35,909,000	17
1927.....	655,702,000	208,693,000	37,284,000	18
1928.....	721,062,000	217,194,000	45,293,000	21
1929.....	851,987,000	295,473,000	95,465,000	32
1930.....	671,816,000	365,314,000	100,028,000	-----

In the great majority of cases, such losses do not include unrealized depreciation, as was seen in the previous section. A large number of institutions, it is generally understood, dislike to sell securities which have declined in price in large number, because of the adverse effects of such a move upon earnings. Therefore, over a period of time, and especially in times of deflation in bond prices, the unrealized losses tend to assume substantial proportions.

A number of banks were asked to list their 10 largest bond holdings, with original cost and market valuations as of the end of 1930. Several of these lists are presented herewith.

Bank 1 (New York City)

Bond	Original cost	Market value, December, 1930
City of Detroit, 2.68/1931.....	\$7,502,140	\$7,509,375
Argentine Nation, 5/1931.....	4,510,575	4,477,500
Federal Intermediate Credit Bank, 3/1931.....	2,999,063	3,000,000
Stock Purchase Plan Corporation, 5/1934.....	2,970,000	2,970,000
St. Louis-Southwestern, 4/1932.....	2,796,500	2,800,000
Pennsylvania Co., 4/1931.....	2,599,895	2,596,701
North Carolina, 2.46/1931.....	2,552,017	2,550,000
Federal Intermediate Credit Bank, 3/1931.....	2,240,297	2,252,813
St. Louis, Iron Mountain & Southern, 5/1931.....	1,300,121	1,298,668
Alberta, 3½/1931.....	1,002,242	1,002,500
Total.....	30,481,650	30,457,557

In the list of bank 1, it is interesting to note that the holding of St. Louis-Southwestern Railway Co., consisting of bonds of the par value of \$2,800,000 and costing \$2,796,500, constituted 56 per cent of the entire issue of \$5,000,000 offered publicly. Despite its early maturity on June 1, 1932, this issue declined in the summer of

1931, to a little above 60, at which price a loss of \$1,116,500, or nearly 40 per cent was indicated.

Bank 2 (New York City)

Bond	Original cost	Market value December, 1930
City of Paterson, 4¼/1938-49	\$5,275,731	\$5,206,000
Southern Railway development and general 4/1956	4,099,333	4,300,000
Missouri Pacific convertible 5½/1949	3,000,000	2,760,000
Northern Pacific refunded and improvement, 6/2047	2,843,312	3,300,000
Deutsche Standard Works, 6/1930-39	2,700,000	2,700,000
New York Central equipment trust, 4½/1931-39	2,557,293	2,610,000
Florida East Coast, 5/1974	2,335,658	477,000
Great Northern general, 4½/1977	2,308,541	2,305,690
International Agricultural Corporation, 5/1942	1,959,946	1,677,000
Interborough Rapid Transit, 7/1932	1,510,681	1,669,860
Total	28,590,495	27,005,550

These 10 largest holdings, which showed a depreciation of something over 5 per cent at the end of 1930, sustained material further price recessions in several cases during 1931.

Bank 3 (New York City)

Bond	Original cost	Market values, December, 1930
I. G. Farbenindustrie (in marks)	\$3,173,809	\$3,173,809
Chicago, Milwaukee & St. Paul	1,999,009	1,117,250
National Hotel of Cuba	1,808,365	1,808,365
Erie Railroad	1,646,037	1,381,580
German Central Bank for Agriculture	1,437,992	1,261,370
International Telephone & Telegraph	1,379,661	1,088,055
Wabash Railroad	1,232,293	1,167,090
Rhine-Westphalia Electric Power Co.	897,065	868,940
Chile Copper Co.	1,058,416	992,750
Canadian Pacific	1,048,198	1,058,138
Total	15,680,844	13,917,347

Bank 4 (New York City)

Bond	Original cost	Market value, De- cember, 1930
Argentine, 5/1931	\$9,375,000	\$9,375,000
Middle West Utilities Co., various rates and maturities to 1932	3,938,863	3,918,374
Fox Film Corporation, 6/1931 (held under repurchase agreement)	2,880,000	2,250,000
Buncombe County, N. C., various rates and maturities to 1931 (\$890,000 par amount under repurchase agreement)	2,633,314	2,415,150
Kingdom of Spain peseta gold loan, 5/1940	2,500,000	2,125,000
Federal Intermediate Credit Bank, 3/1931	2,350,000	2,350,000
State of Alabama, various rates and maturities to 1934	1,828,759	1,832,687
City of Akron, Ohio, various rates and maturities to 1933	1,805,488	1,793,080
State of Mississippi, 5½, various maturities to 1933	1,384,340	1,378,673
Town of Bloomfield, N. J., various maturities to 1969 (held under repurchase agreement)	1,206,000	1,206,000
Total	29,901,770	28,643,964

This bank shows a distinct leaning toward short-term issues for its portfolio. Leaving out an issue of municipals held under repurchase agreement, and the Spanish gold-loan holding, the entire list would

mature within five years, and the bulk of it within two. The Argentine short-term note holding, the maturity of which on October 1, 1931, excited much comment and uneasiness, is one of the largest single holdings outside of United States Government bonds reported by any one bank.

Bank 5 (New York City)

Bond	Original cost	Market value December, 1930
Republic of Cuba, 5½/1931	\$5,333,333	\$5,333,333
Simmons Co., 5/1944	1,845,000	1,845,000
New York City, various issues	1,815,557	1,795,445
Passaic, N. J., 4½/1941-69	1,448,370	1,448,370
Commerz & Privat Bank, 5½/1937	1,244,313	1,160,000
City of Chicago tax notes, 5½/1931	1,004,902	1,000,000
General Gas & Electric Corporation, 4½/1931	995,000	990,000
Associated Telephone & Telegraph, 5½/1955	840,000	840,000
City and county of San Francisco, 4½/1947-76	790,000	790,000
Province of Nova Scotia, 4½/1930	783,000	775,000
Total	16,099,475	15,978,148

Bank 6 (New York City)

Bond	Original cost	Market value December, 1930
New York City corporate stock	\$1,842,672	\$1,840,300
Provinces of Santa Fe (Argentine), 6/1931	995,000	1,000,000
Phillips Petroleum, 5¼/1939	737,360	773,000
Chicago, Rock Island & Pacific A, 4½/1952	553,985	525,000
New York State Bonds	505,000	525,000
Fox Film, 6/1931	490,000	450,000
Federal farm loan, 4½/1942	500,000	470,000
Rheinische Bahn Gesellschaft (Germany), 8½/1931	500,000	500,000
Trustees of St. Patrick's Cathedral (Roman Catholic Diocese, New York), 5¼/1952	500,000	500,000
Province of Tucuman (Argentine), 7/1931	500,000	500,000
Total	7,124,017	7,088,300

Bank 7 (New York City)

Bond	Original cost	Market value December, 1930
Concord Estates Corporation, guaranteed notes, 6/1933 ¹	\$4,620,000	\$4,620,000
Associated Gas & Electric Co., 5/1932	4,066,655	4,066,655
New York City, 4/1930	3,121,943	3,131,810
Stern Bros., 6/1947	2,432,000	1,567,800
Benenson City Terminal Corporation, 6½/1933	2,431,570	2,415,000
Gotham National Building (Inc.), 6/1941	1,850,000	1,850,000
Warner Bros. Pictures, 6/1939	1,215,225	898,843
500 Fifth Avenue Corporation, 6½/1949	1,034,038	1,015,200
Elks Building, Brooklyn Lodge No. 22, serial 5½	879,131	863,170
Brooklyn-Manhattan Transit, 6/1968	482,644	494,381
Total	22,133,206	21,022,859

¹ Entire issue held. Note by bank says, "Consider them worth face value."

In the above list, the predominance of real-estate issues, constituting about half of the total of 10 largest holdings, is marked. The lack of marketability of such issues is a significant factor in considering their suitability as bank investments.

Bank 8 (New York City)

Bond	Original cost	Market value December, 1930
Dominion of Canada.....	\$2,799,000	\$2,775,000
Province of Cordova.....	1,980,000	1,980,000
City of Chicago.....	1,168,000	1,155,000
United Merchants Manufacturers (Inc.).....	1,047,000	1,039,000
Saco-Lowell Shops.....	792,000	792,000
Walter M. Lowney Co. (Ltd.).....	791,000	791,000
Province of Silesia.....	618,000	420,000
Minnesota & Ontario Paper Co.....	561,000	561,000
West Palm Beach.....	484,000	484,000
Province of Buenos Aires.....	483,000	375,000
Total.....	10,723,000	10,372,000

Bank 9 (Buffalo)

Bond	Original cost	Market value December, 1930
Peter Cooper Corporation, 4½/1935.....	\$2,865,000	\$2,865,000
New York, Chicago & St. Louis, 4½/1928.....	608,337	571,875
Hewitt Rubber, 6/1935.....	600,000	540,000
Niagara Falls Power, 6/1932.....	544,466	533,000
New York, 4¼/1978.....	524,375	516,250
Hackensack Water Co., 5/1932.....	498,850	498,850
Public Service of Northern Illinois, 4½/1980.....	477,486	477,500
Niagara Share Corporation, 5½/1950.....	404,652	384,000
Great Northern, 4½/1977.....	393,937	394,000
Canada, 4/1960.....	385,837	383,000
Total.....	7,302,940	7,253,475

Bank 10 (Pittsburgh)

Bond	Carr.ed on books	Market value December, 1930
Interborough Rapid Transit, 5/1966.....	\$3,583,273	\$4,810,000
Alleghany County, Pa., 4¼ (purchase group).....	3,268,886	3,268,895
Alleghany County, Pa., 4¼ (account No. 2).....	2,461,480	2,461,480
Union Gulf Corporation, 5/1950.....	3,143,990	4,145,280
Chicago Board of Education, 6 per cent warrants.....	1,000,000	1,000,000
Montreal, 3½.....	999,286	1,002,500
Canadian National Railways equipment, 4½.....	830,996	836,550
Canada Public Service, 5.....	656,984	655,688
Baltimore & Ohio equipment trust 6.....	557,121	586,460
Union Coal & Coke, 5.....	6,184	1,342,480
Total.....	16,508,200	20,109,333

This last-mentioned bank has an unusual bond portfolio among those reported, carrying several large holdings at figures considerably lower than any which had prevailed at any time in the market. As an extreme case, the \$1,384,000 par value of Union Coal & Coke 5's are carried at only \$6,183.75, despite the fact they consistently sold near their par value. Another similar case were the \$4,064,000 of par value of Union Gulf Corporation 5's, which for the most part were consistently quoted at a premium above par. Extensive participation by this bank in underwriting activities, and the apparent use of profits therefrom to write down book cost of blocks of such issues retained as investments, explain its peculiar ability to acquire blocks of bonds at such low figures.

The 10 largest holdings at the end of 1930 had a stated market value 22 per cent above the valuation at which they were carried on the books of the bank.

Bank 11 (Cleveland)

Bond	Original cost	Market value December, 1930
Akron, 4½/1940-52.....	\$774, 203	\$774, 203
Cities Service, 5/1950.....	714, 034	557, 468
Van Sweringen Corporation, 6/1935.....	640, 077	595, 000
Associated Gas & Electric, 5½/1938.....	560, 215	436, 815
Kreuger & Toll, 5/1959.....	494, 688	430, 000
Alleghany Corporation, 5/1944.....	468, 779	420, 000
Chesapeake Corporation, 5/1947.....	455, 183	451, 288
Tokio Electric Light, 6/1953.....	443, 325	435, 000
Associated Gas & Electric, 4½/1949.....	377, 125	279, 000
Associated Electric, 4½/1953.....	352, 266	337, 500
Chicago, Milwaukee, St. Paul & Pacific adjustment, 5/2000.....	343, 206	176, 680
Total.....	5, 623, 301	4, 892, 954

The depreciation of these 11 holdings by August, 1931, had increased to approximately 24 per cent of cost.

Bank 12 (Chicago)

Bond	Original cost	Market value December, 1930
Detroit tax notes.....	\$7, 810, 870	\$7, 812, 655
Cuba certificates, due 1931.....	5, 022, 880	5, 000, 000
Chicago special-assessment warrants.....	3, 443, 675	3, 459, 295
Chicago corporate tax warrants.....	2, 517, 000	2, 466, 660
Chicago board of education warrants.....	2, 335, 000	2, 288, 300
Cook County tax warrants.....	3, 568, 728	3, 503, 500
Cook County judgments.....	3, 133, 000	(¹)
New York City notes.....	3, 253, 364	3, 250, 000
Middle West utilities notes, due 1931-34.....	2, 289, 088	2, 253, 260
West Chicago park commissioners' tax warrants.....	1, 400, 000	1, 365, 000
Total.....	34, 773, 605	34, 562, 670

¹ No market. Judgment note validated by circuit court, payable at par from next county appropriation bill.

It will be noted that this bank restricts itself almost entirely to very short municipals for its 10 largest holdings. These, being payable from current taxes, possess to a large extent the characteristic of liquidity, although a ready outside market may not be available in every case.

Bank 13 (Los Angeles)

Bond	Original cost	Market value December, 1930
East Bay municipal utility districts.....	\$3, 747, 313	\$3, 830, 200
Montreal treasury bill, 3½.....	2, 008, 331	2, 007, 500
British Columbia, 3¾.....	2, 000, 000	2, 000, 000
Central Investment Corporation, 6.....	1, 251, 780	1, 255, 625
Los Angeles electric plant, 4.....	1, 701, 719	1, 735, 763
Manitoba, 4½.....	1, 498, 363	1, 496, 250
Los Angeles County water works, 6.....	1, 071, 328	1, 073, 170
Los Angeles harbor improvement, 4¾.....	1, 060, 550	1, 061, 690
Detroit tax, 2¾.....	1, 001, 217	1, 001, 217
California, 4.....	878, 955	883, 000
Total.....	16, 219, 556	16, 349, 415

9. *Repurchase agreements.*—In a number of instances a bank-security investment is more properly classified as a security loan. This occurs when, in connection with the investment, a contract is made with the seller of the security or securities to repurchase it at a stated price and within a stated period of time. Such repurchase agreements have been extensively resorted to in recent years.

From the viewpoint of banking regulation, the repurchase agreement is of special interest in two ways. First, it might conceivably be utilized to circumvent section 5200 of the Revised Statutes limiting loans made by national banks to one interest to 10 per cent of their capital and surplus, and cognate statutes in the laws of many States governing State-chartered institutions. When securities are purchased with contract to resell, the resulting transaction is not regarded in law as a loan, and so would not come under the limitation provided in the statute for loans.

In the second place, such agreements when largely resorted to obscure the actual status of a bank; and these agreements are used at times for window-dressing purposes by individual banks. The investment account is swollen and the collateral-loan account reduced by the amount of the resale agreements. In addition, substantial liabilities may exist in the form of repurchase contracts not revealed in the regular statement of condition.

In order to secure data on the extent to which the repurchase agreement is now resorted to the following questions were asked in questionnaire No. 4.

What was the total amount of security holdings held by you under repurchase agreements during each of the past four years, showing United States Government bonds and other securities separately?

What was the maximum amount of such repurchase agreements outstanding at any one time in each of these four years?

The following table shows the aggregate amount of securities reported as held by each of the banks addressed under repurchase agreements during 1930 and the maximum amount so held at any one time during that year:

TABLE 42.—*Securities held under repurchase agreements in 1930*
NEW YORK CITY BANKS

Bank	Total investments, end of 1930	Total under repurchase agreements		Maximum under repurchase agreements	
		United States Government	Other securities	United States Government	Other securities
No. 1	\$392,253,000	\$19,088,000	\$183,965,000	\$1,244,000	\$54,114,000
No. 2	308,002,000		24,822,000	(1)	(1)
No. 3	263,899,000	184,822,000	130,512,000	92,000,000	18,896,000
No. 4	248,020,000	124,692,000	156,657,000	35,108,000	34,759,000
No. 5	146,199,000	107,963,000	89,698,000	7,369,000	14,934,000
No. 6 ²	124,016,000		12,593,000		9,600,000
No. 7	96,635,000	45,000	14,591,000	45,000	2,243,000
No. 8	86,720,000		7,565,000		6,789,000
No. 9	85,172,000				
No. 10	67,812,000	14,134,000	9,930,000	633,000	3,689,000
No. 11	41,201,000	4,390,000	13,053,000	2,000,000	3,280,000
No. 12	31,087,000	3,563,000	14,044,000	959,000	3,073,000
No. 13	30,107,000		2,130,000		1,817,000
No. 14	24,439,000		(1)		3,537,000
No. 15	13,508,000		103,000		475,000
No. 16	13,154,000		415,000		415,000
No. 17 ²	11,174,000	8,668,000	1,272,000	5,178,000	542,000

¹ Information not available.

² Figures apply to 1929.

TABLE 42.—*Securities held under repurchase agreements in 1930*—Continued

BANKS OUTSIDE NEW YORK CITY

Bank	State in which located	Total investments, end of 1930	Total under repurchase agreements		Maximum, under repurchase agreements	
			United States Government	Other securities	United States Government	Other securities
No. 1.....	Massachusetts.....	\$45, 102, 000		\$6, 288, 000		\$4, 721, 000
No. 2.....	do.....	36, 618, 000	\$2, 512, 000	2, 407, 000	\$2, 512, 000	2, 087, 000
No. 3.....	New York.....	47, 803, 000				
No. 4 ²	Pennsylvania.....	72, 108, 000				
No. 5.....	Ohio.....	58, 836, 000		105, 000		105, 000
No. 6.....	Michigan.....	34, 182, 000		2, 969, 000		3, 045, 000
No. 7.....	Illinois.....	269, 576, 000	Nominal.	Nominal.		
No. 8.....	do.....	22, 771, 000		3, 087, 000		1, 012, 000
No. 9 ²	Minnesota.....	30, 596, 000	2, 000, 000	1, 786, 000	5, 000	1, 785, 000
No. 10.....	Nebraska.....	10, 030, 000		195, 000		100, 000
No. 11 ²	California.....	246, 538, 000				
No. 12.....	do.....	69, 701, 000		260, 000		200, 000

² Figures apply to 1929.

The replies received clearly indicate that repurchase agreements on bank investments are most commonly used in New York City.

The questionnaire also asked:

What were the chief reasons for utilizing the repurchase agreement in preference to advancing direct security loans in these cases?

The answers to this question are summarized as follows:

1. Accommodation of customers: Such accommodation apparently covers cases where security dealers and syndicates, wishing to obtain credit beyond the legal limit of 10 per cent of the bank's capital and surplus, utilize this device. Also, the repurchase agreement is preferred by customers because they can obtain the full value of their securities thereby, rather than merely a stated percentage, as is usual with security loans. Also, greater flexibility as to the period of the loan is feasible than with time loans, while the repurchase agreement is preferable to a call loan from the borrower's standpoint.

One bank states, "It is customary to carry for dealers in Government and municipal bonds (which form the bulk of this item) on repurchase rather than on loan." Several other institutions indicate that most such transactions are made with dealers in municipal bonds, where protection in the form of a margin of collateral value over and above the amount of the advance is not regarded as necessary.

2. A better rate of return to the bank. The bank usually retains the full coupon rate of interest on the bond, and in addition where the bond issue is tax free, no income tax need be paid on such return, whereas interest received on loans is so taxable. Several banks stressed this income-tax exemption in their replies as of first importance. The customer can afford to pay a higher rate than on loans because his loan equals the full value of the collateral.

3. Simplify accounting for dealer customers in the case of nontaxable securities.

4. Various special reasons: A bank in New England says, "Chief reason we believe is desire of taxpayers to adjust their portfolios to conform to various State laws in order to decrease their taxable holdings or increase their holdings of nontaxables."

Another institution explains a single transaction of this kind thus, "The company wished the bonds available for its sinking fund at a future date but did not wish to buy them in advance of the sinking fund date."

A western bank says, "The borrowers wish to avoid showing borrowed money on their statements."

In several cases of group banks the large banks report buying bonds under repurchase agreement from other banks only for the purpose of aiding them to meet special demands for accommodation.

A number of banks specifically indicate that the repurchase agreement is resorted to only on the request of customers, and that the bank does not actively prefer them over loans.

10. *Investments and time deposits.*—The expansion of bank security investments is usually ascribed primarily to the increase in savings and other time deposits in the hands of commercial banking institutions. The Comptroller of the Currency ruled that there is nothing in the national bank act to prevent a bank from opening a savings or thrift department as long ago as 1903, and the Federal reserve act specifically authorized the banks to accept savings deposits, which were given preferred treatment as to reserve requirements with a flat 3 per cent reserve provision.

Time deposits have shown a steady increase, especially since the war. During the decade 1921–1930 the increase in time deposits of all banks compared as follows with the increase in investments:

TABLE 43.—*Increase in time deposit and investments of all banks*

[Source: Annual Reports of the Comptroller of the Currency]

Date	Time deposits	Investments
June 30, 1921.....	\$9,769,454,000	\$8,405,814,000
June 30, 1930.....	20,216,314,000	13,671,629,000
Increase, per cent.....	107	63

¹ This figure is probably too low by \$1,000,000,000 or more, because of inadequate classification of State bank deposits. This factor, when allowed for, cuts the gain in time deposits for the decade to approximately 88 per cent.

It has already been seen that country banks have invested a substantially larger part of their total resources in securities than have the city institutions, and they also have gone more heavily into real estate loans. The country banks also have a much larger proportion of time deposits, however, as shown in the following table at the end of 1930:

TABLE 44.—*Time deposits and investments, by groups of member banks*

[Source: Member bank call report, Federal Reserve Board]

Bank groups	Investments and real estate loans		Time deposits	
	Amount	Per cent of resources	Amount	Per cent of all deposits
New York City banks.....	\$2,583,000,000	19	\$1,296,000,000	19
Chicago banks.....	538,000,000	21	510,000,000	32
Other reserve city banks.....	5,128,000,000	33	5,202,000,000	49
Country banks.....	5,974,000,000	39	6,538,000,000	56
Total.....	14,223,000,000	32	13,546,000,000	36

The possession of a large proportion of time deposits is often regarded as justifying a bank in investing a greater part of its assets in securities and real-estate loans than would otherwise be considered conservative. One reason advanced for this view is that the bank retains the right to demand notice of 30 or 60 days in advance of withdrawals, thus securing a respite during which slower assets can be disposed of in case of concerted demands for funds on the part of time depositors. In practice this provision may be valueless for the commercial bank, however, as refusal to pay out time deposits on demand tends to impair confidence in the institution, and thus leads to a "run" which is joined by the demand as well as the time depositors. The collapse of four substantial banks in Toledo, Ohio, in August, 1931, was directly attributable to this condition.

On the other hand, the velocity of turnover of time deposits is unquestionably much less than that of demand deposits. In normal times this would justify a bank in making commitments in "slower" assets with its time deposits, but experience on several successive occasions has shown that in periods of deflation and impaired confidence depreciation in security investments, combined with withdrawals of time deposits, may become a major cause of bank failures. Such experience indicates that liquidity of assets remains a necessity for commercial banks, regardless of the proportion of time deposits obtained.

11. *Further restrictions on bank investments.*—A further question included in the questionnaire was as follows:

Do you think the present restrictions on bank investments in securities adequate? If not, state suggestions for change.

The almost universal response was that present restrictions were sufficient. One large New York bank qualified such an answer by saying that they were adequate for central reserve cities, implying that banks outside New York and Chicago should be further restricted in their security purchases.

A New England bank states, "Management will be always the principal factor, but comptroller should have any reasonable increase in his powers or appropriations that he desires." No indication is given as to the direction in which such extension of the comptroller's powers is thought desirable. A more radical suggestion from another New England bank is that "Commercial banks with savings departments should be required to invest savings deposits in legal securities." This suggestion, however, necessarily seems to involve the segregation of savings deposits, a broader question than the regulation of bank investments as such.

A bank in Philadelphia answers:

Law can not take the place of management. It has been too easy to get into the banking business, and too many bankers have had little or no experience in times of depression until the present time. Larger capital of banks should be required, and the banks should not be permitted to organize in towns where business and conditions in the territory do not warrant.

A reduction in the number of banks is thus preferred to specific further limitations on investments.

The president of a large bank in the Northwest replies:

I think present restrictions on bank investments in securities are adequate. No unusually strict or arbitrary rule would improve the situation. It is necessary that a bank have some leeway in order that it may properly conduct its business, if the management is sound, and no legislation can protect a bank with unsound management.

A large California institution states:

We believe restrictions at present are adequate and it would be difficult to cure poor judgment by more drastic restrictions. Further, greater restrictions would tend toward the employment of more funds in loans, which would deprive banks of diversification obtainable in security purchases and desired liquidity.

PART IV

SECURITY AFFILIATES

1. *Origin of security affiliates.*—American banking, from its early days, has been subject to a degree of public regulation unknown in other economically advanced countries. Recurrent epidemics of bank failures through the nineteenth century, as well as the system of unit banking, tended to confirm the popular opinion that such regulation was needed, and caused an extension of its scope and character. Above all, the tendency to separate commercial banking from the merchandising of securities early became manifest. Such episodes as the failure of the second Bank of the United States in 1841 after it had become a Pennsylvania State-chartered institution, a result of unwise and frozen security operations, merely served to increase the desire of legislatures to prevent the banks from engaging in investment banking activities. To legal restrictions on the power of the banks to engage in investment banking may be ascribed the great development of corporations affiliated with banks in recent years. In countries like Germany and France, where such restrictions are not in force, no need is felt for incorporation of separate entities by the banks to engage in the security business. In Great Britain, on the other hand, despite the lack of restriction, the force of precedent has been such that the great commercial banks have voluntarily refrained from entering directly into the business of buying and selling securities.

The earliest examples of the affiliate relationship was furnished by the organization on the part of individual banks of other banking corporations, to carry on types of business which the parent institution did not, or could not, perform. Thus, the First National Bank of Chicago established the First Trust & Savings Bank, to specialize in trust business and thrift accounts, which the national bank act at that time did not specifically authorize or facilitate for institutions chartered under it.

The first security affiliate on record was organized in 1908 by the First National Bank of New York City.¹ The method adopted in organizing this company was followed as a model by many other banks subsequently. The First Security Co. was organized as a corporation endowed with general powers, having a capitalization of \$10,000,000, equal to that of the bank. The bank then declared a cash dividend of 100 per cent, which, however, was not actually disbursed to its stockholders. Instead, with the prior approval of the shareholders, this sum was directly subscribed to the stock of the security corporation, which was thus made fully paid and was deposited under a trust of which six senior officers of the bank were made trustees. Shareholders of the bank then had indorsed on their stock certificates a statement that they had a beneficial interest in an

¹ See Commercial and Financial Chronicle, Feb. 29, 1908, p. 522.

equal number of shares of the security affiliate, which were to be inseparable from those of the bank.

The letter sent by President George F. Baker, of the First National Bank, to its shareholders was as follows:

DEAR SIR: It is deemed to be for the interests of the stockholders of this bank that a security company, such as has proved advantageous in the case of several other banks, should be organized for the purpose in part of transacting for its patrons certain lines of profitable business, which, though often transacted by bankers, are not expressly included within the corporate powers of national banks. Among these are the acquiring and holding of real estate, securities, stocks, and other property.

To this end it is desired to secure the assent in writing of our stockholders to a plan of organizing a security company under the name of the First Security Co., with a paid-up capital of \$10,000,000, the stock to be issued to and held by six trustees, who shall be the president, vice presidents, and cashier of the bank. These trustees shall exercise the powers of ownership of the stock, shall elect the same board of directors as that of the bank, shall collect all dividends and pay the same over to the bank for immediate distribution to its shareholders, who have assented to this plan.

Upon receiving the assent of the stockholders the bank purposes to make a special dividend of 100 per cent (\$10,000,000) to be received by the trustees, and be applied to the payment of the capital stock of the security company, which stock shall be held by the trustees for the benefit of the shareholders of the bank assenting to the plan.

Upon each certificate of every assenting stockholder of the bank there shall be the indorsement that appears on the following page.

The formal agreement for incorporation, assent, etc., has been carefully prepared by our counsel, and has been approved by our directors, who have assented and recommend your assent thereto.

Your proportionate share of the bank's assets will be in no wise changed. Kindly sign and return promptly the inclosed power or call at the bank and sign the statement.

The form of indorsement referred to in the above letter, to appear on the certificate of bank stock, was as follows:

The registered holder of the within certificate is entitled, for and in respect of each and every share of the stock of the First National Bank of the City of New York represented thereby, to share equally and ratably with all other holders of stock certificates of the bank similarly indorsed, according to their several interests, in the dividends or profits, or in the case of dissolution, in the distribution of capital, of the First Security Co., a corporation of the State of New York, organized in pursuance of a certain written agreement date February 14, 1908, between George F. Baker and others, trustees, J. P. Morgan and others, stockholders; such interest of the owner of the within certificate, and of all like certificates, similarly indorsed, being subject to all terms, conditions, and limitations of said agreement; such ratable interest to be sold or transferred ratably only by the transfer upon the books of the bank of one or more of the shares of the stock of the bank represented by a bank-stock certificate bearing this indorsement; and all of the interest in and to or in respect of said security company or its capital stock, represented by bank stock certificate bearing this indorsement, shall pass ratably with, and only with, the transfer of such shares of the bank represented by such bank-stock certificate, and upon transfer thereof upon the books of the bank; and an interest in the security company attached to any share of the bank shall be alienable only in connection with such transfer of such bank stock.

No holder of the within certificate or any transferee of any share thereby represented shall be entitled in lieu thereof to demand or receive from the bank a new certificate except with the indorsement thereon; and a transfer of any share of bank stock represented by the within bank stock certificate shall be made by any other holder thereof only to a transferee accepting therefor a new certificate bearing this indorsement.

No right to vote upon or in respect of any stock of the security company passes to or shall be exercised by the holder of the within certificate, such voting right being reserved to and by the trustees or their successors.

The National City Bank, also of New York City, followed the lead of the First National in 1911, and during the following decade most of the other large banks in the city and in other centers followed suit. The significance of bank security affiliates and their operations was known to the public in only a most general way, until the failure of the Bank of United States in December, 1930, clearly indicated the disastrous results that could follow upon a flagrant abuse of this device, such as took place in that case.

2. *Definition of security affiliates.*—A great diversity of practice exists among the banks possessing security affiliates as to methods of organizing and operating them. Little standardization is noted in this field, in fact, which makes generalizations concerning such organizations difficult.

In defining a security affiliate for its questionnaire,¹ the Senate subcommittee of the Committee on Banking and Currency stated:

For the purpose of this questionnaire, a security affiliate shall be defined as a corporation—

- (1) A part or all of the stock of which is deposited in trust for the benefit of stockholders of the bank; or
- (2) The shares of which are sold in units in combination with shares of the bank; or
- (3) A controlling interest in which is held by the same interests which control the bank; or
- (4) A controlling interest in which is held by the bank; or
- (5) A controlling interest in which is held by some other security affiliate of the bank.

A more detailed definition is presented in the report of the commission appointed by Governor Roosevelt, of New York State, to make a study of the banking law of the State, which resulted in making security affiliates of State banks and trust companies subject to examination by the superintendent of banks in order to determine more fully the position of such institutions. The proposal of the commission was:

For the purpose of determining whether a corporation is subject to examination by the superintendent of banks in order to obtain full information as to the financial condition of a bank or trust company there shall be deemed to be affiliated with a bank or trust company.

(1) Any corporation of which such bank or trust company directly or indirectly owns or controls a majority of the voting shares of its capital stock or a lesser number of such shares if such lesser number shall amount to more than 50 per cent of the shares voted for the selection of directors at the preceding annual meeting of such corporation; or any corporation of which such bank or trust company in any other manner directly or indirectly controls the election of a majority of its board of directors.

(2) Any corporation which directly or indirectly owns or controls a majority of the shares of capital stock of such bank or trust company or a lesser number of shares if such less number shall amount to more than 50 per cent of the shares voted for the election of directors at the preceding annual meeting of such bank or trust company; or any corporation which in any other manner directly or indirectly controls the election of a majority of the board of directors of such bank or trust company;

Any corporation of which a majority of the voting shares of its capital stock, or a lesser number of shares if such lesser number shall amount to more than 50 per cent of the shares voted for the election of directors at the preceding annual meeting of such corporation is directly or indirectly owned or controlled by the same or substantially the same stockholders as directly or indirectly own or control a majority of the shares of capital stock of such corporation subject to the provisions of this chapter or a lesser number of shares if such lesser number shall amount to more than 50 per cent of the shares voted for the election of

¹ For full text of Questionnaire No. 2 on Security Affiliates, see the Introduction to this report.

directors at the preceding annual meeting of such bank or trust company: *Provided, however,* That either (a) there shall then exist or within the preceding 2-year period have existed business transactions or relations (of any kind, character, or description other than stock ownership) between such corporation and such bank or trust company, or (b) such bank or trust company shall then own, have outstanding loans secured in whole or in part by or be in any manner interested in the stock or securities of such corporation or in any property in which such corporation is in any way or to any extent interested or within the preceding 2-year period shall have had such ownership, loans, or interest.

(3) Any corporation the election of a majority of the board of directors of which is or may be directly or indirectly controlled by any instrumentality, agency or arrangement that directly or indirectly controls the election of a majority of the board of directors of such bank or trust company.

(4) Any corporation a majority of the directors of which shall be directors of such bank or trust company or of which a majority of the executive committee of its board of directors are directors of such bank or trust company.

Any corporation the board of directors of which shall comprise a majority of the board of directors of such bank or trust company or the executive committee of the board of directors of which shall comprise a majority of the executive committee of such bank or trust company.

Any corporation all or substantially all of whose executive officers are executive officers of such bank or trust company.

Any corporation whose executive officers comprise substantially all of the executive officers of such bank or trust company.

Any corporation the business or policy of which is dominated or controlled, in whole or in part, by a bank or trust company, whether by contract or otherwise.

Any corporation which dominates or controls, in whole or in part, the business or policy of a bank or trust company whether by contract or otherwise: *Provided, however,* That either (a) there shall then exist or within the preceding 2-year period have existed business transactions or relations (of any kind, character or description) between such corporation and such bank or trust company, or (b) such bank or trust company shall then own, have outstanding loans secured in whole or in part by or be in any manner interested in the stock or securities of such corporation or in any property in which such corporation is in any way or to any extent interested or within the preceding 2 year period shall have had such ownership, loans, or interest.

(4) Any corporation, association, or partnership having business transactions or relations with a bank or trust company the examination of which on application of the superintendent of banks and on notice to such company shall be determined by a justice of the Supreme Court to be necessary or expedient in order to ascertain whether the capital of a bank or trust company is impaired or whether the safety of depositors with such bank or trust company has been imperiled.

For all the purposes of the foregoing definition—

All corporations similarly owned or controlled shall be regarded as a single corporation and if as a single corporation subject to examination each such corporation shall be deemed to be an affiliated corporation.

Stock held in the name of nominees of any bank, trust company, or other corporation or otherwise for the benefit of any bank, trust company or other corporation shall be deemed to be stock owned or controlled by such bank, trust company, or other corporation.

The above definition is considerably broader than that used by the subcommittee in its questionnaire. However, if literally applied it would take in all kinds of enterprises in the management of which banks take an active interest, for it includes "any corporation" where the bank "directly or indirectly controls the election of a majority of its board of directors."

The definition used by the subcommittee would cover virtually every usual case, with the exception of bank-holding companies, in which case the security company controls the bank, instead of the reverse.

3. *Organization of security affiliates.*—There are four common methods whereby banks may provide capital for their security affiliates. These are:

(1) Declaration of a cash dividend by the bank, which is specifically utilized to subscribe pro rata for shares in the security affiliate. This, as has already been seen, was the method adopted by the First National Bank in organizing its pioneer security affiliate, and has been the most common procedure since. In that case each stockholder specifically authorized the utilization of his dividend for this purpose. In later cases such action has been authorized by a general vote of shareholders, thus avoiding the necessity for unanimous consent in advance.

An interesting question is raised by the possibility of individual shareholders refusing to waive their cash dividend, and insisting upon receiving it in lieu of the stock of the affiliate. No such instance of refusal is on record, however.

(2) Organization of the affiliate as a wholly owned subsidiary of the bank, through the bank subscribing for its shares. This method is possible only where the bank has the right to purchase stocks. In New York State, where trust companies have such a privilege, several of the large security companies affiliated with banks are directly owned subsidiaries of trust companies.

(3) Offering of new bank stock to existing shareholders at a large premium over the par value, part or all of the premium being actually subscribed to stock of the affiliate. Thus, a bank whose shares are selling at \$700 each may offer additional shares to its shareholders at \$500, of which \$200 will be allocated to the capital and the surplus of the bank and the balance of \$300 utilized to subscribe to the stock of the security affiliate.

(4) Direct offering of stock in the security affiliate to the bank's shareholders. This method has been least favored, except for the organization of investment trusts under the auspices of the banks, because it does not facilitate the establishment and maintenance of identity of shareholders for the bank and the security affiliate.

In practice one of the major problems in the organization of a security affiliate is the permanent maintenance of identity of shareholding interests in the two institutions. The usual methods whereby this is accomplished are the following:

(1) The stock of the affiliate is deposited in trust for the proportionate interest of the shareholders of the bank. It is customary to indicate this proportionate interest on the certificates of the bank's shares. Since no shares of stock of the security affiliate go into public circulation, it does not become possible to transfer them to other names than those of the bank's stockholders.

(2) The stock of the affiliate is printed on the same certificate with the stock of the bank, so that the two are transferred together. Suitable provisions appear on the certificate and elsewhere to prevent a valid transfer of one equity without the other. Where this is done, the security affiliate has a list of stockholders of record which is the equivalent of the shareholders' list of the bank. Technical disadvantages, such as dual transfer taxes, etc., have been advanced by lawyers as militating against this method in comparison with the first.

(3) The stock of the affiliate is fully owned, except for directors' qualifying shares if needed, by the bank, where the power to own such shares is given by law, as with trust companies and state banks in certain jurisdictions.

The security affiliates may be organized in any State, and several of them operated by New York banks are organized in Delaware, because of more satisfactory charters available there. The directors and officers of the security affiliate may or may not hold similar posts in the bank. In some cases, a completely different set of individuals hold such posts in the two affiliated institutions, but it goes without saying that, through identity of stock ownership, there is identity of real control over the two.

4. *Functions of security affiliates.*—An analysis of the operations of a number of typical security affiliates reveals a wide variety of activities. The more important functions which they exercise are the following:

(1) Wholesalers of security issues, purchasing entire offerings or participating in purchase and banking groups which acquire whole issues of securities from governmental bodies or corporations.

(2) Retailers of securities, maintaining corps of salesmen and often branches in other States than that in which the bank operates for the distribution of stocks and bonds to institution and private investors.

(3) Holding and finance companies, carrying blocks of securities for control or otherwise, which the bank could not or would not list among its own investments.

(4) Investment trusts, buying and selling securities acquired purely for investment or speculative purposes.

(5) An assets realization company, to take over from the parent bank loans and investments which prove doubtful or nonliquid.

(6) A medium for supporting the market for the bank's own stock.

(7) A real-estate holding company.

In most cases the security affiliates have exercised a combination of these functions, and in some instances they have exercised all of them. A majority of the banks possessing security affiliates have but one such organization, but in other cases more than one such corporation has been organized, at times with a specialization of function among them. Where a group of affiliates is built up in this way, their affairs frequently become interlocked through mutual loans and stockholdings, so as to make any subsequent separation difficult, even if thought desirable.

An analysis of the portfolios of a typical group of security affiliates indicates that the business of retailing securities seldom involves a large measure of risk. The security inventory carried in this connection, while it may include a relatively large number of individual issues, seldom ties up more than a moderate fraction of the resources of the affiliate, and the rate of turnover, even in comparatively inactive periods in the security business, constitutes an additional source of protection for the security company against being tied up with any large volume of securities that can not be marketed without serious loss.

On the other hand, the wholesale underwriting of securities does tend at times to leave the security affiliates with big unsold commitments that, in times of rapidly declining prices, may result in large losses of at least a temporary nature. At the end of 1930, for example, several of the larger security affiliates still had commitments amounting to several millions of dollars in each case in Bethlehem Steel Corporation common stock, an issue of 800,000 shares of common stock of which company they had underwritten in the fall of

1929. It so happened that the stock offering of this company to its shareholders, underwritten by these security companies, called for payment at the end of October, 1929, coincident with the stock-market panic of that year. Shareholders apparently took little of this stock, so that it was left very largely in the hands of the underwriting bankers. The offering price to the stockholders of the company was \$110 per share, from which a commission of several points was allowed the underwriters. In at least two major cases the underwriting commitments taken over were not disposed of to any extent by the end of 1930, and meanwhile the market price of the stock declined by more than 60 per cent from the quotation at which the underwriters acquired the issue.

The portfolios of some of the security affiliates indicate that the profits of years of operations can be more than wiped out through two or three unprofitable commitments of this kind, at least on the basis of quotations prevailing during a depression period.

Activities of a bank's security affiliate as a holding or finance company or an investment trust are also fraught with the danger of large losses during a deflation period. Bank affiliates of this kind show a much greater tendency to operate with borrowed funds than do organizations of this type which are independent of banks, the reason being that the identity of control and management which prevails between the bank and its affiliate tends to encourage reliance upon the lending facilities of the former.

When the affiliate acts as a receptacle for slow or doubtful assets of the bank, its existence is of apparent aid in maintaining the liquidity of the parent institution, especially where the capital of the affiliate is provided by stockholders and not by the bank itself. However, when it becomes necessary to help finance the affiliate through loans from the bank, there is no real benefit to the bank from its operations, since the bank itself then advances the funds to hold these doubtful assets. Furthermore, such transfer of doubtful assets to an affiliated corporation, by giving the bank an appearance of liquidity which is greater than the facts of the case warrant, may encourage assumption of other commitments that might not be desirable in the light of losses already indicated in the portfolio of the affiliate. In fact the mere existence of an affiliate which might be made the receptacle for unwise loans and investments when needed tends to reduce the degree of caution exercised by bank managements, there is reason to believe.

Activities of affiliates in supporting a bank's own stock or in holding real estate have both been the source of substantial loss in individual cases. Taken as a whole, however, it would appear that the security affiliates of the banks studied in connection with the committee's questionnaire ordinarily engaged in such activities to a moderate extent only. It is well to remember, however, that it was precisely this type of activity, and especially that first mentioned, which brought on the disastrous collapse of the Bank of United States in New York in 1930, and contributed to several large bank failures elsewhere. The bank-merger movement of the last few years has at times resulted in specially large commitments in a bank's own stock, as efforts are made to advance the price of the stock of a bank in order to make it more attractive in an exchange for shares of another institution. Also, certain mergers have involved commitments by the absorbing institution that shares of the bank being absorbed would be purchased by the security affiliate of the former if desired, and such arrange-

ments have at times resulted in the affiliate acquiring quite large blocks of the bank's shares.

5. *Analysis of typical security affiliates.*—The period of security-market deflation which began in October, 1929, created an unfavorable situation for the security affiliates of the banks. The usual sources of income from originating and distributing securities tended to dry up, while sharp declines occurred in the market values of these issues which were already held in their portfolios. Summaries of the situations faced by several such organizations as indicated by replies to questionnaire No. 2 on security affiliates are presented in the following cases:

Bank 1: The chief security affiliate of this bank had some 500 individual holdings. Nearly one-half of the total stated value of the security holdings consisted of two issues, representing all of the capital stock of two other affiliates. Each of these, on the basis of market prices of their own holdings, had net asset values far below the sums at which they were carried on the books of the chief affiliate. This would not allow for the substantial good will of these two subsidiary affiliates, however, since they were more than mere investment companies.

Aside from these two subsidiaries, there were several blocks of shares with a cost of \$1,000,000 or more in the portfolio of the chief affiliate of this bank, and in the majority of such cases substantial depreciation in market price had taken place by the end of 1930.

Bank 2: The security affiliate of this bank divides its holdings into two groups—trading accounts and inactive accounts. The trading accounts include about 350 bond issues, mostly small amounts apparently purchased or held in connection with a retail security distribution business. About 75 stock issues are also held in trading accounts, of which two only are of substantial size. One of these latter is the stock of an industrial which had been underwritten in connection with an offering to its shareholders, and the second is the stock of the bank itself. These two holdings together showed a depreciation of 25 per cent from cost on December 31, 1930, and at the values then prevailing constituted 15 per cent of the total stock and bond holdings of the affiliate. In the inactive account, there was one very large holding without a market, and nine others with an aggregate cost of approximately \$31,000,000 and a stated market value at the end of 1930 of about 35 per cent less.

The inactive accounts, which were apparently operated as an investment trust-holding company, constituted the larger portion of the portfolio of this security affiliate.

Bank 3: The security affiliate of this bank appeared to operate in large measure as an investment trust dedicated to the principle of long-pull investment. At the end of 1928 its holdings showed an appreciation in market value of more than 100 per cent over cost. At the end of 1929 the appreciation shown was little above 50 per cent. At the end of 1930 such appreciation had dwindled to about 15 per cent, and by the middle of 1931, assuming no substantial changes in the portfolio during the first six months of the year, market value and cost were nearly the same. However, the reported income of this company was quite large in each year, averaging about 50 per cent on its capital, and indicating that its wholesale underwriting and other operations were consistently profitable.

Bank 4: The security affiliate of this bank carries its security holdings in two chief account groups—syndicate, joint, and carrying accounts; and secondly, merchandise accounts. Municipal and general holdings are shown separately for each account group. At the end of 1930, after deducting the reserve account set up from earnings, the aggregate market value of its security holdings was stated to have been less than 5 per cent below the book value.

This security affiliate had only one really large commitment, a block of shares in a large industrial whose offering to stockholders it had underwritten. At the end of 1930 this one holding had depreciated by considerably more than 50 per cent in market price.

Bank 5: The security affiliate of this bank restricts its activities very largely to the distribution of high-grade securities. Its commitments in individual issues are moderate in size for the most part. The books are kept on a market-value basis, reflecting both appreciation and depreciation, and owing to apparent care with which the inventory of securities is kept down, it was able to end the year 1930 with a profit of more than \$1,000,000 after all adjustments to market.

Bank 6: This institution reported two affiliates, a security company and an investment trust, the latter being controlled by the former. The security company, which owned some \$20,000,000 of stocks and bonds at the end of 1930, had a diversified bond list and a shorter list of stocks, on several of the latter of which severe shrinkages in market value had occurred. Thus, on five stock holdings which together had a cost equal to about 70 per cent of the total original cost of the security portfolio, a decline of more than 50 per cent in market value had taken place by the end of 1930. The security affiliate also reported a substantial indebtedness to the investment trust affiliate, and on the basis of market prices prevailing at the end of 1930 the market value of the holdings of the security affiliate had declined so far as apparently to eliminate its capital and paid-in surplus on this basis of computation.

Bank 7: The security affiliate of this bank had done a large business in wholesaling, as well as retailing, securities. It held some 300 separate issues. As of the end of 1930 the stock accounts showed a depreciation of almost 50 per cent from cost, the bond accounts more than 20 per cent and substantial paper losses were also indicated on unclosed syndicate accounts. In this instance also, if securities be taken at market value, the elimination of the capital and surplus of the affiliate would be indicated.

Among the banks outside of New York City which possessed security affiliates of substantial size, the following references to special cases may prove of interest:

Bank 8: This is a large Eastern bank which possesses an affiliate doing both a security and an acceptance business. The security holdings amount to more than \$40,000,000 and fall into two main classes—investments and inventory accounts, the latter being destined for early sale. The investments account for about 30 per cent of the total, and to a substantial degree consist of holdings in affiliated financial institutions. The inventory accounts consist of several hundred different issues, for the most part of very high grade. Taking the portfolio as a whole, the depreciation suffered by the end of 1930 was much below the average for such companies.

Bank 9: About 20 per cent of the securities held by the affiliate of this bank, located in Chicago, consisted of small blocks of bonds,

apparently in process of distribution. The balance consisted of stocks, and of the latter more than one-half was a block of 1,000,000 shares of the common stock of an investment trust affiliated with the bank. The second largest holding, amounting to nearly 20 per cent of the total investment list, was the common stock of the bank itself. In other words, about two-thirds of the total security holdings of the affiliate as carried on the books consisted of but two issues, on the larger of which there was a depreciation of about 70 per cent by the middle of 1931, while on the stock of the bank itself, the smaller of the two, a depreciation of about 65 per cent had taken place.

Bank 10: The great bulk of the portfolio of the affiliate of this bank which operates in the West, consists of stocks of affiliated financial organizations and bonds of an affiliated mortgage company. A holding company which controls the bank also has a diversified list of security holdings which is made public.

Bank 11: About two-thirds of the portfolio of the security affiliate of this bank consists of one item—capital stock of the bank itself. However, the affiliate has virtually no loans payable, its own capital funds being almost exclusively used by it in its operations. The second largest item in the portfolio is the stock of a real estate company. The two items together constitute nearly 90 per cent of the total.

6. *Results of security affiliate operations.*—The financial results of the operation of security affiliates during the period following the stock market collapse of 1929 were on the whole unfavorable. Losses of any substantial size were not reported in every case, the chief exceptions being those organizations which restricted themselves to the distribution of high-grade bonds.

The determination of the earning power of security affiliates in any one year as in the case of all companies whose assets consist chiefly of securities held for investment, is complicated by variations in the market values of stock and bond holdings. Several affiliates reported large earnings in 1930, but at the same time suffered severe shrinkage in the quoted market values of their portfolios. During 1931 such shrinkage was largely extended further in most cases.

As a rough indication of the results of operations of security affiliates during 1930, the following data is presented. Lack of quoted markets on many items in the security portfolios of certain of the affiliates makes the determination of the extent of portfolio shrinkage a practical impossibility in certain cases. Reported earnings, as shown below, have also been reduced in many cases by specified adjustments of various kinds.

TABLE 45.—*Results of operation of security affiliates, 1930*

Bank	Reported earnings	Approximate decline in market value of portfolio for year	Bank	Reported earnings	Approximate decline in market value of portfolio for year
No. 1.....	\$6,989,628	¹ \$12,500,000	No. 8.....	\$133,593	\$4,000,000
No. 2.....	2,380,691	¹ 12,500,000	No. 9.....	2,018,956	10,000,000
No. 3.....	5,032,968	29,562,330	No. 10.....	2,289,011	2,500,000
No. 4.....	1,249,517	4,608,835	No. 11.....	369,127	1,500,000
No. 5.....	1,067,922	(?)	No. 12.....	224,210	1,200,000
No. 6.....	3,099,902	13,235,000	No. 13.....	133,874	45,239
No. 7.....	44,569	851,000	No. 14.....	10,944	950,000

¹ Several large holdings having no markets not included in computation.
² Books kept on market-value basis.

It will be seen from the above computation that with two exceptions none of the security affiliates included in the list avoided a net loss for the year, if declines in the quoted values of holdings be allowed for, and in some cases the losses as thus defined reached quite substantial proportions, especially if probable values of issues without quoted markets be considered.

7. *Syndicate participations.*—In view of the fact that syndicate participations in connection with the origination and wholesaling of securities are subject to a special degree of risk during periods of declining security prices, because of the relatively large commitments involved, the banks addressed by the subcommittee were asked to state the aggregate amount of syndicate and other participations of security affiliates during each of the past four years, as well as maximum participations of this kind. The replies for the year 1930 were as follows:

Syndicate participations of security affiliates, 1930

Bank	Aggregate participation	Maximum participation	Bank	Aggregate participation	Maximum participation
No. 1.....	\$417, 052, 855	\$33, 987, 105	No. 9.....	\$2, 026, 410	\$800, 000
No. 2.....	583, 193, 357	20, 000, 000	No. 10.....	111, 495, 933	8, 000, 000
No. 3.....	38, 424, 627	34, 353, 911	No. 11.....	17, 189, 520	4, 852, 000
No. 4.....	452, 979, 000	18, 300, 000	No. 12.....	19, 000, 000	1, 100, 000
No. 5.....	150, 602, 750	¹ 15, 000, 000	No. 13.....	² 201, 244, 694	(³)
No. 6.....	260, 867, 029	15, 000, 000	No. 14.....	19, 348, 400	3, 151, 250
No. 7.....	102, 547, 000	12, 900, 000	No. 15.....	5, 050, 000	2, 541, 500
No. 8.....	10, 855, 000	¹ 3, 750, 000			

¹ Applies to 1929.

² Retail sales only.

³ Not available.

The replies to this questionnaire indicate that security affiliates follow the practice of assuming syndicate commitments which amount in the aggregate to many times their capital and surplus, and that individual commitments of this kind may amount to from 25 to more than 100 per cent of such capital and surplus in certain cases.

One security affiliate further indicates the nature of its 1930 participations in detail as follows:

1. Underwriting.....	\$27, 175, 442
2. Original terms.....	314, 692, 574
3. Purchase group.....	0
4. Banking group.....	76, 464, 590
5. Selling syndicate.....	164, 860, 751

Total..... 583, 193, 357

In this computation, duplications exist because of the fact that selling and banking group participation in many cases cover the same issues as those purchased on "original terms" from the Government or corporation which puts out the offering in the first instance. Another large security affiliate reports its participations over the past four years were as follows:

Year	Purchase group	Special and banking groups	Underwriting syndicates	Selling syndicates	Joint accounts	Selling groups
1927.....	\$222, 170, 964	\$145, 877, 500	\$7, 165, 400	\$34, 510, 000	\$48, 444, 146	\$163, 866, 900
1928.....	178, 856, 915	108, 163, 450	49, 072, 147	27, 618, 000	36, 704, 490	106, 899, 100
1929.....	133, 644, 668	142, 672, 804	87, 297, 021	11, 385, 000	38, 089, 000	99, 851, 321
1930.....	134, 389, 000	122, 909, 000	36, 609, 000	23, 894, 000	34, 365, 000	100, 842, 000

The banks addressed were also asked to list the five largest syndicate or group operations in which their security affiliates participated during 1929. Replies to this question indicate the varied nature of these major commitments. Thus one bank reports the five largest participations of its affiliate, together amounting to \$75,963,695, as follows:

1. Market stabilizing account formed during the crisis of 1929.
2. Texas Corporation 5 per cent convertible bonds.
3. International Hydroelectric, 6/1944.
4. Canadian International Paper, 6/1949.
5. City of Chicago Board of Education 6 per cent tax anticipation notes.

The affiliate of another large Eastern institution reported that its five largest participations in 1929 amounted to \$94,194,165. They were as follows:

1. Bethlehem Steel Corporation (28 per cent interest in original underwriting group to underwrite sale of 795,000 shares to stockholders).
2. Bethlehem Steel Corporation (28 per cent interest in original underwriting group to underwrite sale of 600,000 shares to stockholders).
3. American Cyanimid Co. (underwriting entire issue of 808,359½ shares of common B stock).
4. Texas Corporation (20 per cent interest in purchase group on \$100,000,000 5 per cent debenture issue).
5. P. Lorillard Co. (underwriting entire issue of 545,024 shares of common stock).

The security affiliate of another large bank reported the following five as its largest participations for 1929:

1. New York Central short-term revenue bills.....	\$16, 750, 000
2. Offering of shares of an affiliated investment trust.....	15, 000, 000
3. Offering of shares of an oil holding company.....	11, 695, 000
4. Republic of Cuba serial 5½ per cent certificates.....	8, 001, 000
5. Richfield Oil 6's.....	6, 250, 000
Total.....	57, 696, 000

8. *Relations of security affiliates to banks.*—From the viewpoint of banking regulation, the operations of the security affiliates can be of interest only in so far as they affect the activities and soundness of the banks with which they are affiliated. Basically, there can be no objection to the stockholders of a bank engaging in any other business they prefer with their own funds. However, if such activities tend to affect directly the position and soundness of the bank itself, they then become of prime importance in the regulation of banking.

Reasoning a priori, a number of ways in which the operations of a security affiliate can affect the position of the parent bank may be distinguished. These may be summarized as follows:

(1) The security affiliate may borrow money from the parent bank. This relationship, which is very prevalent, is discussed more fully in the following section.

(2) The affiliate may sell securities to the bank or another of its affiliates under repurchase agreements, or vice versa.

(3) The bank is closely connected in the public mind with its affiliates, and should the latter suffer large losses it is practically unthinkable that they would be allowed to fail. Instead, the bank would normally support it by additional loans or other aid, thus becoming more deeply involved itself. The knowledge that the affiliate has suffered large losses may in itself be sufficient to cause unfavorable rumors, however unjustified, to spread about the bank.

(4) The bank, to relieve the affiliate of excess holdings, may purchase securities from it. In one case of a large New York institution, for example, two blocks of foreign bonds, aggregating approximately \$5,000,000, which were included in the portfolio of the affiliate as of the end of 1929 were given in the list of five largest holdings of the parent bank at the end of 1930.

(5) The bank may lend much more freely to customers on issues sponsored by the security affiliate, in order to facilitate their distribution, than it would otherwise do. Also, it may prove more difficult to insist upon the maintenance of adequate margins on these security loans than on other such advances, in view of the fact that customers are encouraged to make the loans by the bank's own affiliate.

(6) The good will of the bank with its depositors may be adversely affected to a serious degree when the latter suffer substantial losses on security issues purchased from the affiliate. Because of the tendency of the selling organization of the affiliate to consider the bank's depositors as its preferred list of sales prospects, this condition may become an important handicap to a bank during a major period of security market deflation.

(7) Operations by the affiliate in the market for the bank's own stock may cause undesirably wide fluctuations in the latter. Also, efforts made in some cases to push the sale of the bank's stock through the affiliate to depositors of the institution hurts the position of the bank when its shares suffer a major market decline subsequently.

(8) Wide variations in the net asset value, earning power, and dividend-paying ability of security affiliates tend to make bank stock price fluctuations much greater than would otherwise be the case.

(9) The existence of the affiliates may induce the bank to make unwise commitments, in the knowledge that in case of need they can be shifted to the affiliates, and thus be removed from the bank's condition statement.

(10) Knowing its access to the resources of the bank in case of need, security affiliates in their turn may tend to assume various commitments less cautiously than do private investment banking houses.

(11) In the case of a trust company or a bank with a trust department, the possession of a security affiliate may adversely affect the independence with which fiduciary activities are exercised.

In actual practice, the operations of a number of security affiliates have affected the parent institutions to a greater or lesser degree in several of the ways outlined above. The most direct manner in which the affiliate may impair the liquidity of the bank is through the first-mentioned method of borrowing.

9. *Bank loans to security affiliates.*—In the first part of this report on security loans, some data was presented on the extent to which banks make advances to their affiliates. In its questionnaire covering the operation of the affiliates the subcommittee asked a list of banks addressed to state the maximum loans outstanding at any one time to affiliates during the years 1929 and 1930, as well as the average indebtedness of these organizations to the parent banks in those years. The proportion of such indebtedness which was secured by collateral was also asked. The answers to these questions are tabulated herewith.

TABLE 47.—Loans by parent banks to security affiliates, 1929 and 1930

Bank	Maximum indebtedness of affiliates to banks during year		Average indebtedness of affiliates to banks		Percentage of indebtedness secured	
	1929	1930	1929	1930	1929	1930
No. 1.....	\$16,294,284	¹ \$54,839,881	\$1,802,335	\$28,813,049	100	57
No. 2.....	36,757,742	34,487,742	4,636,573	14,545,779	32	47
No. 3.....	25,020,000	24,970,000	10,715,000	14,493,000	100	100
No. 4.....	16,500,000	23,700,000	691,000	326,000	-----	-----
No. 5.....	19,172,276	25,504,967	12,022,500	10,387,663	100	100
No. 6.....	10,500,000	5,500,000	174,151	735,137	100	100
No. 7.....	7,100,000	6,550,000	2,662,400	3,916,500	100	100
No. 8 ²	20,570,000	18,970,000	14,574,300	14,946,600	100	100
No. 9.....	2,134,000	13,878,000	30,000	4,417,000	-----	87
No. 10.....	2,800,000	4,120,000	1,483,333	3,174,583	100	-----
No. 11.....	21,000,000	21,000,000	12,000,000	17,000,000	100	100
No. 12.....	-----	600,000	-----	25,000	-----	-----

¹ Of which \$44,241,523 were loans to the chief security affiliate from the parent and affiliated banks.
² Most of this indebtedness was from the security affiliate to the investment trust affiliate.

Loan lines of banks to affiliates are at times not covered, in whole or in part, by specific collateral, as seen from the last two columns of the above table. Where loans exceed 10 per cent of the bank's capital and surplus, legal restrictions are avoided by having such excess secured by United States Government bonds, by having more than one affiliate, and, thirdly, by the use of the repurchase agreement.

The banks addressed were asked also to state the total amount of securities purchased by them from their security affiliates under repurchase agreements over a period of years. The use of this contractual device involves, of course, a further close tie between the bank and its affiliate.

The replies of those banks which reported making such agreements with affiliates, with numerical designations corresponding to the preceding table, follow.

TABLE 48.—Repurchase agreements of parent banks with security affiliates, 1929 and 1930

Bank	Total repurchase agreements with affiliates		Maximum repurchase agreements with affiliates		Remarks
	1929	1930	1929	1930	
No. 1.....	\$2,441,251	\$39,689,064	\$701,833	\$23,002,210	Tax-exempt municipals. From syndicates of which affiliate was manager.
No. 2.....	57,488,371	116,310,018	23,542,809	24,172,888	
No. 6.....	391,623	363,048	391,623	363,048	Mainly governments and municipals.
No. 7.....	92,938,685	-----	16,116,910	-----	
No. 8.....	-----	9,656,000	-----	2,870,000	
No. 9.....	425,000	2,974,000	425,000	2,974,000	

The relative extent to which security affiliates operate with borrowed capital, including loans from sources other than the parent bank, is indicated in the following table (repurchase agreements not included):

TABLE 49.—Sources of funds of security affiliates, end of 1930

Bank	Capital and borrowed funds of affiliate	Capital and surplus: Percentage of total	Borrowed funds: Percentage of total
No. 1.....	\$137,414,000	79	21
No. 2.....	93,467,000	76	24
No. 3.....	61,370,000	36	64
No. 4.....	34,341,000	83	17
No. 5.....	17,792,000	39	61
No. 6.....	23,291,000	76	24
No. 7.....	35,015,000	66	34
No. 8.....	23,140,000	38	62
No. 9.....	60,939,000	43	57
No. 10.....	41,440,000	53	47
No. 11.....	6,955,000	96	4
Total, 11 banks.....	535,164,000	64	36

If all of the above security affiliates had written down their security holdings to market values by charges against surplus, or capital if necessary, the proportion of loan to own capital would have been very much larger than shown above.

The loan relationship as it exists between the bank and its affiliate differs from that prevailing with the general run of the bank's customers in an essential respect. When dealing with its affiliate, the bank is really dealing with itself, in view of the identity of ownership and management that is established. As a result, there tends to be a breaking down of those limitations on the extension of credit which the bank sets up in other cases to guard against the making of excessive or poorly-secured loans.

10. *Dividends of affiliates.*—Concrete evidence of the manner in which a change in security market conditions affects the position of security affiliates is furnished by the dividend policies of such organizations during the period 1929–1931. Where stock of the affiliate is held in trust for shareholders of the bank, or where shares of the two institutions are printed on the same certificate, each declares dividends separately, payable to the same list of shareholders. In most, but not all, of such cases, announcement is made of the dividend paid by each institution. In other instances the aggregate amount of the dividend is announced publicly, rather than the amount contributed by each institution.

Where the affiliate is a direct subsidiary of the bank, with the latter owning its shares outright, dividends declared by it are paid directly to the bank. In such cases, it is not usual for publicity to be given the amount of the dividend.

The following banks announced changes in rate of dividends paid on shares of affiliates during 1931:

TABLE 50.—Dividends paid on New York bank stocks, 1931

Bank	Annual dividend rate, beginning of 1931			Annual dividend rate, middle of 1931, all paid by bank
	Paid by bank	Paid by affiliate	Total	
Chase National Bank.....	\$3.00	\$1.00	\$4.00	\$4.00
First National Bank.....	20.00	80.00	100.00	100.00
Bank of America.....	4.00	.50	4.50	2.00

In addition, several affiliates of trust companies made reductions or commissions of dividends previously paid directly to parent banks, both in 1930 and 1931.

11. *Regulation of security affiliates.*—The first extended reference to security affiliates of banks by a regulatory authority is found in the Report of the Comptroller of the Currency for 1920. Mindful of the effects on such organizations of the security market deflation of that year, the comptroller made the following statement:

“SECURITIES COMPANIES” AS ADJUNCTS TO NATIONAL BANKS OFTEN A MENACE

Some “securities companies” operating in close connection with, and often officered by, the same men who manage the national banks with which they are allied, have become instruments of speculation and headquarters for promotions of all kinds of financial schemes. Many of the flotations promoted by the “securities corporations” which are operated as adjuncts to national banks have proven disastrous to their subscribers, and have in some instances reflected seriously not only upon the credit and the standing of the “securities companies” by which they are sponsored, but also in some cases have damaged the credit and reputation of national banks with which the “securities companies” are allied.

It has been established clearly by decisions of the United States Supreme Court that a national bank can not, except as authorized by the Federal reserve act, hold the stock of other national banks or the stock of other corporations; but these adjunct or auxiliary companies whose stockholders are identical with the stockholders of the national banks with which they are connected by various ties and devices frequently deal actively in stocks, and they also sometimes acquire the ownership or control of other banks, National and State, through their stock purchases.

In times of rising prices and active speculation some of these auxiliary corporations have made large profits through their ventures and syndicate operations, but their losses in other periods have been heavy, and they have become an element of increasing peril to the banks with which they are associated. The business of legitimate banking is entirely separate and distinct from the kind of business conducted by many of the “securities corporations,” and it would be difficult, if not impossible, for the same set of officers to conduct safely, soundly, and successfully the conservative business of the national bank and at the same time direct and manage the speculative ventures and promotions of the ancillary institutions. These varying institutions demand a different kind of ability and experience on the part of those who manage them, and the two types of business when combined with one management are likely to be operated to the advantage of neither.

A national bank lends not only its own capital, but the money of its depositors, and in doing this is not expected to tie up its funds in long-time and unliquid loans in doubtful ventures. The “securities companies” theoretically invest and speculate with their own funds—that is to say, the funds supplied by their own stockholders—not with the funds of depositors; but as a matter of fact, experience shows that “securities companies” often draw and absorb large sums of money from the allied national banks, and sometimes also borrow heavily from other national banks which operate other “securities companies,” and so on, in an endless chain of reciprocal borrowing and mutual lending for the accommodation of speculative cliques.

These ancillary companies are being used with increasing frequency for promotion of speculation and for dealing in bonds and stocks, often those of new and unseasoned issues, and which are attended with improper hazard risk, and as a means of enabling banks to do, indirectly through their instrumentality, things which they can neither safely nor lawfully do directly.¹

This forceful statement of the situation was without effect at the time, although later the comptroller sought, and in many cases secured, permission to examine security affiliates as part of the examination of banks. However, he did not demand this as of right, and in some instances such permission was refused as not coming within his province.

In New York State, where most of the large security affiliates are to be found, sentiment on the subject was aroused among bankers, as well as the general public, by the effects of the stock market deflation in 1929-30, and later by the collapse of the Bank of United States, with its 59 different affiliates. The superintendent of banks was given legal authority in 1930 to examine bank affiliates by an act of the State legislature.

¹ Report of the Comptroller of the Currency, 1920, pp. 55-56.

PART V

EXAMINATION OF SECURITY LOANS AND INVESTMENTS

1. *Bank examinations.*—There are three kinds of examinations to which commercial banks may be subjected. The first, which applies to all banks, is the examination prescribed by Federal or State statute. In the case of national banks, this is carried out by the Comptroller of the Currency, while for State institutions the respective State departments of banking perform this function.

A second kind of examination is that made by the Federal reserve banks of their member institutions. Such examination is less formal, and usually much less complete, than in the case of the examinations prescribed by statute for the legally-constituted authorities already referred to. This is a natural consequence of the fact that the Federal reserve examination is designed in the main to determine the soundness of rediscounts or advances secured by United States Government bonds made by the reserve bank to its members, as well as the soundness of the member institutions in relation to the activities of the Federal reserve bank as collecting agent for out-of-town checks.

The Federal Reserve Bank of Chicago describes its practices in the examination of member banks, which appear to be typical for the system, as follows:

Supervision of national banks rests with the Comptroller of the Currency, and of State banks with the State banking departments. Copies of the reports of examination of all national banks are filed with us by the comptroller's representatives, and copies of reports of examinations of all member State banks by the respective State banking departments, five States being represented. All reports are carefully analyzed by agent's department, and a complete report made thereon in each case, with its own classifications and conclusions.

Our field work in actual examinations is confined to a limited number of State banks, principally the smaller institutions. A special examination is made for our own account of all State banks applying for membership. In addition, we are in contact with all member banks in the district through frequent calls by men in our bank relations department, from whom we get much valuable information as to management of banks and general conditions.

A third kind of examination is that carried out by a limited number of local clearing houses. Originally designed to protect the members of a clearing house from losses they might incur from the failure of a member, whose checks they might freely receive for deposit and immediate credit, such examinations have in some cases become quite comprehensive. In the case of the New York Clearing House, for example, the examination of members has become so thorough, and insistence upon compliance with recommendations made is so great, that such examination is now regarded as considerably more significant than that of the statutory authorities, while the examination by the Federal reserve bank in that district has tended to become more and more perfunctory, reliance being placed upon the other examining agencies for the most part by the reserve bank. The fact that no banks belonging to the New York Clearing House has ever been

closed because of insolvency is attributed in part to the effectiveness of its system of examination.

The increased importance of security loans, investments, and security affiliates in the operations of commercial banks has made these items loom larger in recent years in any comprehensive examination of the condition of individual banks. The subcommittee addressed a questionnaire to bank examiners of the three classes mentioned to determine their practices with regard to loans and investments.

2. *Soundness of security loans.*—The first question asked was:

What criteria do you use in analyzing the soundness of security loans?

The Comptroller of the Currency described the criteria used by his office as follows:

We rely largely upon market quotations for the valuations of all stocks and bonds actively traded in on the exchange. Concentrations on specific issues are noted and speculative issues. Loans secured by real-estate mortgage notes or by other personal security should be supported by independent appraisals or by an appraiser designated by the bank. In the event of any instance where such appraisals are not to be found in the bank's files the examiner discusses the situation fully with the managing officers and directors of the bank being examined. In the substandard bank it frequently happens that the examiner experiences considerable difficulty or is unable to obtain the desired information and must rely largely upon his intuition in arriving at the value of such securities.

It will be noted that difficulty is encountered in enforcing these standards of the comptroller on the substandard bank. Similar complaints have been voiced by State regulatory authorities, both in this and other connections, creating a problem of enforcing standards which these authorities have set up in their examinations. Suit for forfeiture of charter, or frequent examinations of banks, are the devices now available for enforcement, but neither proves effective if the desire is to remedy a bad condition quickly without jeopardizing the position of the bank.

The Federal reserve banks, in their reply to this question, indicate that they seek to determine chiefly the adequacy of collateral. In some cases, diversification of collateral is also stressed, while the St. Louis Reserve Bank is alone in that it seeks to determine whether a program of liquidation of security loans has been arranged by the bank with the borrower. A few banks also watch carefully loans to officers and employees. The replies from the Federal reserve banks are as follows:

Boston.—The bulk of such loans are secured by listed or readily marketable securities so that the value of the collateral can be readily established. In the case of loans having an adequate margin of collateral, usually no further investigation is made. If the value of the collateral is insufficient or difficult to determine, the character and standing of the borrower is investigated. If loans are found of undue size, or if there is an undue concentration in the securities of a single company or a single industry, it is called to the attention of the officers for correction.

New York.—That the loans are sufficiently margined by marketable securities with no undue concentration in any one issue or type of collateral. Margin requirements would vary somewhat according to the type of collateral supporting the loan, current prices and the degree of diversification. For example, a margin of 20 per cent would be considered sufficient where a loan is secured by listed stocks of high class railroads, public utility or industrial corporations, and when prices are not above real values. At times when prices appear to be above intrinsic values and out of proportion to past earnings, the margin requirement would be increased proportionately. Also in cases where the loan is secured by

stocks of less desirable character or where the diversification is poor, margin requirements would be materially increased.

Philadelphia.—The first step employed in analyzing the soundness of security loans consists of the appraisal, as of the date of the examination, of the securities which are held as collateral to each secured loan. Such appraisals are based on current quotations of issues which are listed on the major security exchanges of the country or world; bid prices, as reported by security houses which are from time to time in the market for the issues, are accepted in the cases of inactive issues and issues which are not listed. When large loans are involved, secured wholly or to a major extent by inactive issues, we endeavor to secure bid quotations from sources independent of the security houses which sponsored the issues and are understood to be interested in making a market for them. In such cases, if the relative importance of the security value warrants the step, the financial condition of the corporation whose stock or bonds are being appraised is examined into by means of the analysis of its current balance sheet and operating statements. If adequate data are not available in support of important inactive issues which are collateral to large loans, the loans are listed in a separate schedule of the report, the collateral is detailed and the suggestion or request is made that definite information be obtained in support thereof. If the total of such loans, collateraled by inactive issues, is relatively large and the information with respect thereto is inadequate or unsatisfactory, this matter becomes a subject of criticism and is followed up in an endeavor to secure its correction.

In addition to the making of appraisals of the issues securing loans, an investigation is made in each examination to determine whether undue concentration exists in the stocks or bonds, or both, of one company or affiliated group, in one industry, or in the companies or industries of one restricted geographical section. Investments in, or loans made on the security of stocks or bonds issued by corporations with which officers, directors, or employees of the banks are affiliated, are ascertained and set forth in separate schedules of the report. Particular efforts are made to secure satisfactory appraisals of such of these issues as possess no ready market if the amounts involved are more than nominal.

Cleveland.—Current market quotations as of the date of examination. The financial responsibility of the maker is also considered.

Richmond.—Ample margin and diversification of securities. Also usual restriction as to limitation of credit.

Atlanta.—The market quotations on the collateral pledged are used in analyzing the soundness of security loans.

Chicago.—Marketability of collateral pledged, as well as probable intrinsic value; general reputation of borrower, as well as collectibility of loan, based on borrower's financial standing.

St. Louis.—Obtain current market value and determine adequacy of margin considering character of the collateral. Consider borrower's business and financial responsibility; also purpose of loan and period that the borrower has been accommodated. Ascertain if a program of liquidation has been agreed upon. Also if collateral pledged are securities in which any officer, director, or employee is interested, ascertain who received benefit of proceeds.

Minneapolis.—The current market value of the securities behind the loan.

Kansas City.—Stability, marketability, yield, sufficiency, of original issue to make general marketability possible at all times. Distribution of the issue, and, on occasions, the provisions made by house of issue to support the issue.

San Francisco.—Market information. Statement of corporation when available. Poor's Manual. Standard Statistics.

Only a limited number of clearing houses maintain examination departments. Replies from seven such organizations were as follows:

Boston Clearing House Association.—The distribution, marketability, and value of the collateral; secondly, the responsibility of the borrower.

New York Clearing House Association.—Statements, earnings record, marketability, and character of collateral.

Philadelphia Clearing House Association.—The market quotations of securities involved.

Clearing House Association of the Banks of Cleveland.—On active securities I use market transactions and quotations of the various stock exchanges. Beyond this is the personal equation of the borrowers.

Chicago Clearing House Association.—All factors are taken into consideration when analyzing a collateral loan, i. e., intrinsic value and marketability of the collateral held; the character of the borrower and his paying ability aside from the collateral pledged.

Denver Clearing House Association.—Daily market quotations.

Los Angeles Clearing House Association.—The adequacy of the security, marketability and stability of the collateral, the amount or size of loan, and, in isolated cases, history and financial strength of both the collateral and the borrower.

3. *Securities without active markets.*—The second question asked was:

How do you arrive at a valuation of stocks and bonds having no regular market quotations?

The Comptroller of the Currency replied as follows:

Such securities require an analysis of the financial and earnings statements of the company issuing them and consideration of the character of the business in which the company is engaged. Future prospects and relationship of the borrower to the issuing company are considered. In this connection, there are instances where we find that the securities are absolutely sound as to value but for one thing or another have no marketability and are for that reason undesirable as collateral to bank loans.

The Federal reserve banks similarly indicate that special analyses of securities to determine their worth may be resorted to where issues are without quoted markets, although there is no clear indication as to how frequently such studies are made. The replies follow:

Boston.—If no current quotation can be found in the regular quotation services resource is had to the credit files of the bank, consultation with the officers, and, such other sources of information as are available including manuals, descriptive circulars of issuing houses, etc. Statements are analysed, and in the absence of a better figure, the book value or liquidating value is used.

New York.—A valuation would be fixed upon the basis of audited or certified statements of the corporation if available. Consideration would also be given the general credit standing and reputation of the company.

In the case of bonds, the security is generally one or more of the following types:

1. A mortgage upon real property.
2. A collateral trust with securities pledged with a trustee.
3. Debenture bonds based upon the general credit of the issuing corporation.

In determining values, consideration is given the following:

1. In the case of mortgage and collateral bonds, the real value of the security actually pledged.
2. In the case of debenture bonds, the equity back of the bonds and the terms of the indenture protecting the equity.
3. In all cases consideration is also given to the earnings of the company, sinking-fund provisions if any, and other provisions for repayment of the issue, the character of the industry, and the progress trend.

If a bond meets all of these tests satisfactorily, it would generally be appraised at its cost or face value, whichever is less. If any one or more of these factors appeared unsatisfactory, the appraisal would be fixed accordingly. Consideration would also be given to the proportion of bonds of this class in relation to the total portfolio.

In the case of stocks, consideration would be given to the following factors:

1. Real equity back of the stock.
2. Whether or not there were senior securities and if so, the relation of their equity to the total equity.
3. Ratio of quick assets to current liabilities.
4. Relation of operating profits to sales and to capital.

If all the factors were favorable, a valuation would be fixed mainly based upon the equity and the earnings. Generally speaking very few unlisted stocks are found in the investment account of banks. The unlisted stocks found among the collateral for loans are generally those of local industries with respect to which information is usually available. Margin requirements with respect to such securities would be much higher than with respect to listed securities. If any considerable portion of the assets of a bank were based upon such security or collateral, the condition would be subject to criticism.

Philadelphia.—The extent of independent investigation into the intrinsic value of inactive issues depends in every case upon the relative importance of such issues

to the condition of the bank, as well as upon any special considerations which may develop. In any event, investments in and loans on issues which possess no ready, dependable market, are set out in detail in the report so that the subject may receive such action as may be deemed desirable in each instance.

Cleveland.—Bid and asked quotations for inactive issues are obtained if possible. If procurable, the most recent financial statement of the issuing company is analyzed, and the indicated book value of the securities together with the company's earning power over a given period is used as a basis for determining values.

Richmond.—Appraisal by officers and directors and analysis of financial and operating statements when available.

Atlanta.—Quotations secured from a reputable local dealer in stocks and bonds are used in arriving at the valuation of securities having no regular market quotations. Where this information is not available, such credit information as can be secured is used in this connection.

Chicago.—Character and reputation of concern issuing securities. Financial and operating statement over a period of years. Consideration given to line of industry represented, its current trend, and position maker of security occupies in field. Inquiries made through brokers and other reputable concerns as to values, if volume or conditions seem to justify such inquiry.

St. Louis.—Stocks: Make a complete analysis of the latest financial statement, also earnings reports for the past several years. Inquire as to character of the management of the corporation and endeavor to obtain last sale price or bid.

Bonds: Analyze all data available taking into consideration the appraised value of the properties, sufficient insurance if real estate, location, income, maturities, and sinking fund provisions. Ascertain if securities have been issued by proper trustee or agent.

Minneapolis.—Financial statement of the corporation issuing the stocks or bonds; character of its assets, record of its earnings and nature of business.

Kansas City.—On the basis of current financial statements, together with such other credit information pertaining to the character of the management, stability, yield, anticipated future development, and its past record, as well as general economic conditions affecting that particular industry.

San Francisco.—By analysis of issuing corporation's statement. Inquiry at brokers dealing in unlisted securities or through other credit channels usually available to examiners.

Replies on the methods of valuation of stocks and bonds having no regular market quotations from the clearing houses follow:

Boston Clearing House.—By analyzing financial and operating statements of the corporations and through information obtained from outside sources.

New York Clearing House Association.—Statements, earnings and dividend record.

Philadelphia Clearing House Association.—Bond and stock brokers can in many cases supply such information. In other cases information can be secured from parties identified with the security in question.

Clearing House Association of the Banks of Cleveland.—On inactive securities I use over-the-counter transactions and quotations, brokers' and bankers' markets, the manuals and standard statistics services. On local, unlisted securities I utilize financial, operating, and dividend statements of the issuing companies. On local, unlisted collateral trust, mortgage, and leasehold bonds, I analyze those trusts that are held within our clearing house bank and trust companies.

On real estate mortgages, I make an individual examination of supporting documents, utilizing appraisals made by appraisers satisfactory to me.

We are one community of banks that some years ago adopted a set of standardized forms of financial statements for borrowers. Few loans of any size or holdings of material blocks of stock are passed at a value, unless complete financial and operating statements are available.

Chicago Clearing House Association.—Intrinsic valuation of securities not having a market is determined by three factors namely: (1) The strength and general reputation of the concern issuing the securities; (2) the intrinsic values as reflected in the financial statement of the company; (3) the earning power. (This last condition generally reflects the character and efficiency of the management.)

Denver Clearing House Association.—Inquiry is made of sources believed to be familiar with the issues.

Los Angeles Clearing House Association.—By financial statement of the corporation issuing the stock, past history and earning record and future prospects,

and the class of business in which the corporation issuing the stock pledged is engaged. If this information is not at hand, then no value whatsoever can be placed on the collateral.

4. *Undermargined security loans.*—Three questions were asked on the subject of undermargined loans. These were:

Do you find evidence of many security loans with collateral of a value less than the amount of the loan?

Are these mainly in small or large banks?

How do you handle security loans, the value of the collateral of which is less than the amount of the loans?

The Comptroller of the Currency replied as follows:

There have been many such loans found in the past year due to a declining market. It is believed that a larger number of such loans have been found in the smaller banks. While the larger banks will show a larger aggregate in dollars, valuations are taken care of more promptly in the larger institutions. In the smaller banks customers are apt to be slower to respond to calls for additional collateral.

Collateral loans which are undersecured are shown in detail in reports of examination. The management is instructed to obtain partial payment or additional collateral. Unless the officers can give reasonable assurance that the maker is financially responsible, regardless of the collateral, a loan is usually estimated for the deficiency, and unless the condition of the bank as a whole is reasonably good the examiner undertakes to get correction during examination.

The Federal reserve banks reported that undermargined loans were not found in excessive amounts at the end of 1930, the period of the investigation although the stock market deflation had made them larger than usual on that date. The proportion of such loans was said to be greater for the smaller banks in the Northeast, while in the South and West the small banks had relatively fewer inadequately secured loans, because of the fact that they abstained from the security loan field in general.

Practice differs in handling such undermargined loans in the examination, according to the replies. Some reserve bank examiners separate the loan into a secured and an unsecured part, and the latter is analyzed on the basis of the borrower's general credit. Others seek rather to get more collateral or have the amount of the loan reduced. Where this can not be done, the portion of the loan regarded as inadequately margined is classified as a slow, doubtful, or bad asset, according to circumstances.

The replies were as follows:

Boston.—There are some such loans, but the total is small in comparison with the assets of the banks. Prior to the market break the large banks watched their margins a little more carefully than the smaller banks, but at present such loans are found in both classes of banks in about the same proportion.

The ability of the borrower to pay or reduce his loan is investigated. If it is apparent that he can pay the unsecured portion within a reasonable time out of his income, the loan is classed as slow and the bank allowed time to work it out. If it appears that he can not reduce his loan within a reasonable time, the unsecured portion is classed as doubtful or a loss and the bank is asked to charge it off.

New York.—Undermargined loans are occasionally observed, but the number of them and the amount involved have not been sufficient to present any problem. Loans predicated mainly on real estate equities have given many banks serious concern and in not a few cases have resulted in substantial losses. Real estate values in some localities have declined to a point where the first mortgages, which are usually held by savings banks, insurance companies, and building and loan associations, leave little equity in the property.

Many of the real estate loans the security for which is now inadequate, judged by present real estate values and conditions, appeared to be justified at the time they were made, based on sales of property that were then taking place. This,

of course, is due to the present general depression in real estate which has resulted in many mortgage foreclosures.

It is not possible to classify completely the banks having such loans, but generally speaking it is our observation that the medium-size banks are more apt to have loans of this type than are either the small country banks or the large city banks. In the small country banks, due mainly to their restricted loaning limit to one borrower, very few loans are observed with collateral of a value less than the amount of the loans.

Appraisal of unsecured portion of the loan is based on responsibility of borrower as shown by statement or other evidence of ability to liquidate loan, consideration being given to the general reputation of the borrower, his ability to lodge additional collateral, as well as his present earning capacity.

Philadelphia.—The number and relative amounts of the so-called short collateral loans revealed in the reports of examinations of member banks in the third Federal reserve district are, generally speaking, surprisingly small considering the current level of security prices and the extremely sharp declines which have occurred during the past 16 months. I know of very few cases among our member banks where such loans have seriously embarrassed the banks.

We find some "short collateral loans" in both large and small member banks without important distinction. As a rule, however, the larger banks have more efficient management of the collateral-loan department and watch the collateral values more closely, at the same time looking to the collateral for security and liquidation of the loans rather than to any other assets or the earning power of the borrower. The smaller banks do not usually provide as careful a supervision over their collateral loans; they are inclined to attach considerable importance to the general financial standing and earning power of the borrowers and therefore more frequently permit collateral loans to become short of collateral, relying on the character and ability of the borrower to liquidate the loan from resources apart from the collateral pledged.

These loans are set out in a special schedule which details the name of the borrower, amount of loan, list of collateral and appraised value, and amount of shortage. The aggregate of the shortage is also shown. The financial condition, character, and earning power of each borrower are inquired into and statements are analyzed where available. The portion of each loan which is not covered by collateral is then given a special classification, if warranted by the information secured or because of the lack of definite, reliable information, of slow, doubtful, or estimated as a loss, depending on the circumstances surrounding each case.

Cleveland.—Evidence found of many loans with collateral less than the amount of the loan. In greater proportion since the market break of October, 1929. More in large banks than in small.

Richmond.—No large volume of inadequately collateralized security loans, but a noticeable increase in this class of paper since October, 1929. Chiefly in larger banks; not many security loans in country banks.

Loans are criticized and where makers are not regarded as solvent or having some financial responsibility, the unsecured portion of loans is classified as doubtful or loss.

Atlanta.—Very few security loans with collateral less than the amount of the loan are found. These are mainly in large banks, as very few security loans are found in small banks in this district.

The bank is required to secure additional collateral from the maker if the coverage is inadequate.

Chicago.—Under existing conditions quite a number of loans have short margins, but in view of the liquidation in security values the volume is small. In cities where industry predominates the volume is proportionately similar to the larger cities. Agricultural and nonindustrial centers have lesser volume.

Where collateral value is less than loan, character, reputation, and ability of borrower to repay loan is considered. If unsecured part is questionable, bank is expected to make adjustment. Under existing conditions, a tolerant attitude is generally taken.

St. Louis.—A small proportion of loans in some banks is found to be inadequately secured, mainly in small banks.

Review the loan in detail with the directors and officers. If the loan is large review also with borrower. If the borrower's financial responsibility is limited and demands for additional collateral have not been met, a charge off is required in an amount that will leave the loan fully secured and provide a satisfactory margin. If the borrower is represented to be responsible and demand for additional collateral has not been made, the loan is criticized account of insufficient

collateral and lack of credit data. The banker's estimate of the borrower's net worth is accepted until next examination.

Minneapolis.—Not many undermargined loans. Mainly in the medium sized and larger banks.

If the financial statement of the note maker shows that he is not entitled to credit in the amount of the unsecured portion, the line is set up in the criticized assets and the portion not properly secured is classified as slow, doubtful or loss, as the circumstances indicate.

Kansas City.—Amount very nominal; mainly in the large banks.

Unless supported by a current financial statement with a satisfactory showing or a good indorser, that portion of the loan about which there is a question is set out as being of doubtful value, and if it is reasonably possible to determine a definite loss, the amount so determined is classified as a loss.

San Francisco.—Percentage usually found to be small. Proportionally about the same in small and large banks.

If borrower's financial statement does not justify loan, the unsecured proportion is listed as a loss to be charged off, or otherwise secured.

The clearing-house examiners, who generally appear to follow the same practices as those of the Federal Reserve banks, replied as follows:

Boston Clearing House.—No evidence of many undermargined loans. Larger proportion in small banks.

Handling of such loans in examinations depends upon the earning power and financial responsibility of the borrower.

New York Clearing House Association.—Not very many undermargined loans. Both in large and small banks.

Inquire into the other resources of the borrower and estimate their value.

Philadelphia Clearing House Association.—Relatively small number of such loans just now.

We urge the banks to secure a reduction of the loan or additional collateral.

Clearing House Association of the Banks of Cleveland.—Not many of this class of loans are found, although at this time, under present market conditions, more are found than usual, and margins of collateral value are narrower. We have no small banks among our association members.

When encountered, I give the loan a collateral value, represented by the liquidating value of the collaterals pledged. The balance of the loan is then regarded by me as an unsecured obligation and is subjected to the same analysis as are all unsecured loans, namely, a competent financial and operating statement of the borrower, together with such information bearing upon the "personal equation," as may be secured from the bank's officers or from outside sources. If on this basis the loan is classed as good, it is so passed. If a definite loss is determined, it is the practice to provide reserves to cover or to charge off against profits:

If the value is slow, or problematical, or undetermined, it is so scheduled in the examiner's report, and the aggregate of such values set up against the examiner's showing of net worth, where it will command the attention of the bank's management and be carried forward for reviewal and reinvestigation at the time of the succeeding examination.

Chicago Clearing House Association.—While a considerable number of loans are found with short margins, they are surprisingly few when considering the drastic liquidation of security values which has taken place in recent months. Loans of this type are no more prevalent in large than in small banks.

A tolerant attitude is taken by this office on loans secured by sound securities even though present market quotations might reflect a short margin; to do otherwise would be to question the future of this country. The character of the borrower and his own paying ability is likewise considered in loans of this kind.

Denver Clearing House Association.—I have found some loans where the value of the collateral was less than the amount of the loan but the deficiency in most instances was not of sufficient amount to cause concern. I believe that these are mainly in the larger banks.

Request is made that the amount of the loan be reduced or additional collateral obtained.

Los Angeles Clearing House Association.—Under present conditions, there are more undermargined collateral loans than usual, but relatively they are not very serious. Their occurrence in large and small banks is about proportionate. This is more according to community than the size of the bank.

The unsecured portion of the collateral loan is considered as other unsecured advances and upon investigation of the borrower's financial condition, if same is not warranted, the bank is requested to charge to its profit and loss account the unsecured part of the loan.

5. *Examination of investments.*—As seen in Part III of this report, it is the custom among the great majority of banks to carry their investments at cost in their statements of condition, with occasional allowance for depreciation and write-offs for bonds that default. In making an examination of a bank, when the basic soundness of its position must be determined regardless of what the statement of condition shows, the market value of the investments has been the prime criterion used by examiners in making their reports.

In order to obtain more detailed information on the method of valuation followed by examiners, the following questions were addressed to them:

Do you take the cost or market value of investments in examining the condition of a bank? Is there any other valuation basis you use?

The Comptroller of the Currency replied as follows:

The present market value. No consideration is given to the cost of a bank's investments except in determining the difference between the value at which the bank is carrying them and the market value at the time of examination. No other valuation basis is used.

In September, 1931, the Comptroller of the Currency issued instructions to his examiners providing for the classification of bonds into 13 grades in their examination reports. The four highest, characterized as "highest grade," "high grade," "sound," and "good," were specifically exempt from any charge-offs for depreciation, regardless of market price, unless a default had occurred on them. The remaining nine grades, ranging from "fair" to hopeless defaults, were to be marked down to market prices by charge-offs of 25 per cent of the depreciation semiannually, until the book value was equal to the market price. Issues in default were to be marked down to the market value at once. The depreciation was to be deducted from the net worth of the banks examined, as previously.

These instructions were issued because of the drastic decline in bond prices, and the fear that excessive rigor in applying the market value basis in examination would force the closing of institutions on account of temporary impairment of capital. Accordingly, with a return to more stable conditions in the bond market, it is questionable whether this ruling would continue in its existing form.

Examiners were instructed to determine the grade of each bond through taking the lowest rating given by four statistical agencies. The grades mentioned by the comptroller were converted into the ratings of these agencies in his instructions. Obligations of the United States, as well as general obligations of States, counties, and municipalities, were made exempt from any charge-offs for depreciation as long as no default had occurred on them.

Under the comptroller's ruling, the banks were also given the option of making their condition statements conform to these regulations. Where they do so, they may write up bonds belonging to the four highest grades to par, while writing down the others as indicated. By following the ruling, some banks may thus raise the aggregate valuation of their bond portfolios over the old basis of cost. The comptroller's ruling was thus a pioneer effort to shift the criterion

of examination of a bank's bond investments from market value to something akin to "intrinsic" values.

The Federal reserve banks replied to the query as follows:

Boston.—Market value. If no current quotation can be found, recourse is had to the credit files of the bank, consultation with officers, etc., as with loans on unlisted collateral.

New York.—For the purpose of appraising the assets of a bank and determining the amount of its net capital funds, its investments in securities are appraised at their market value regardless of cost, and in cases where no market value is available, the value is arrived at on the basis described in answer to question No. 2 (with reference to examination of security loans backed by unlisted collateral).

In the case of appraising the banking house, which if owned by the bank may be considered as an investment, it is allowed at its book value unless that value appears to be excessive, in which case it is allowed at what is considered to be a fair valuation. Such property is not ordinarily allowed at more than its book value.

Philadelphia.—In our report the investment schedule shows the book value and appraised market value of each issue owned which enjoys a ready, ascertainable market. The difference between the aggregate of these figures is shown as appreciation or depreciation and included in the adjustments to the capital account as a result of the examination.

Inactive investments are appraised in the same manner as are inactive issues which are collateral to loans. In cases where satisfactory market values can not be secured the issues are appraised as completely as is possible on the basis of available information, the assigned values are designated as "nominal" as distinguished from quoted or market values and a special schedule, a subdivision of the investment section of the report, is prepared of these items so that their total book and market values may be readily ascertained. Where warranted by the circumstances, a portion of all of the book value of inactive issues may be classed as slow, doubtful, or estimated to be a loss.

Cleveland.—Investment values are determined on the basis of market values when obtainable. For unlisted securities, same method of appraisal is employed as indicated for collateral loans backed by such issues.

Richmond.—Market value. Cost or appraisal used for inactive and unlisted securities.

Atlanta.—Market value of investments used in examining the condition of a bank, except that cost is used where cost is less than market value.

Chicago.—Market value is considered first. If depressed market, a liberal attitude is taken, especially if securities are high grade and bank is strong. For issues without active markets, same procedure as in loans with such securities as collateral.

St. Louis.—Market value. In addition to market quotations, bond ratings furnished by Standard Statistics Co. are used. Also outside inquiry is made of investment bankers and others.

Minneapolis.—Market value. Marketability is one of the main considerations. An investment security with no market or even a narrow market is criticized.

Kansas City.—Market value. Character and history considered in determining whether bank should be required to charge down to market value.

San Francisco.—Market value with due consideration to past range of price. Do not use any other valuation basis.

The replies from the clearing-house examiners were as follows:

Boston Clearing House Association.—Market value. Financial condition of corporation taken into consideration.

New York Clearing House Association.—Market, if well seasoned. If comparatively new, earning value and character of management.

Philadelphia Clearing House Association.—Market value.

Clearing House Association of the Banks of Cleveland.—On arriving at a statement of a bank's liquidating value, I take the market value of investments. The difference between cost and market value must not, however, necessarily be classifiable as a loss. Accordingly, I take into consideration the grades of the various securities. I classify them as to grade, present an analysis of them, and upon the basis of my gradings and analyses, the difference is classed by me either as ultimately solvent, as problematical, as questionable, as at present undeterminable, or as a loss to be charged off.

In my statement of the bank's physical condition these classifications are set up against my statement of the bank's net worth, and if definite losses are determined, they are provided for.

Chicago Clearing House Association.—When a depreciation is shown between cost and market values the banks are requested to set up reserves to cover as rapidly as possible.

If no quoted market is available, investments are classified on a basis of intrinsic values based on earning power supporting same.

Denver Clearing House Association.—The market value at the time of examination.

Los Angeles Clearing House Association.—Market value.

6. *Losses on investments.*—In order to throw light on the types of investments from which the banks have latterly been suffering the largest losses, the following question was addressed to the examiners:

On which type of investment do you find that the banks you examined have suffered the most severe losses?

The answers refer to the situation prevailing early in 1931. Later in that year bonds, except the very highest grade groups, suffered a general and very sharp decline.

The Comptroller of the Currency replied:

On the low-grade bonds and issues paying a higher rate of interest, which some banks purchased on account of inexperience or deemed it necessary to purchase during recent years to enable them to cover the high rate of interest being paid on savings deposits. Depreciation on high grade, highly rated issues has been comparatively small.

The replies from the Federal reserve banks were:

Boston.—Over a period of years the losses in traction securities have been quite prominent. At the present time the heaviest depreciation is in second-grade industrial and foreign bonds.

New York.—Generally speaking, banks in this district have suffered their greatest losses as a result of their investments in bonds. In the case of member banks other than national banks where State laws permit investments in stocks, we have noted a few instances where very substantial losses may result from such investments. Generally speaking, however, even where State laws permit, banks do not invest very largely in stocks.

Banks have suffered losses as a result of investments in practically every type of bond. This condition results from a number of factors:

1. The desire for the high yield which is frequently made necessary by the payment of too high a rate of interest on deposits.

2. Failure to investigate properly and check issues before purchase.

3. General inability and lack of experience with respect to the purchase of bonds. Among the bonds showing the most severe depreciation in values are those issued by small industries, public-utility holding companies, bonds originating in certain foreign countries, and those based upon the security of real estate, such as hotels, office buildings, and apartment houses.

Philadelphia.—Stocks for State member banks. Considering member banks as a whole, State and National, in the light of the current position, the heaviest losses or depreciation have been experienced on stocks and bonds owned, viz, "investments." Capital loans, including loans based directly or indirectly on real-estate equities, have also made important contributions to losses sustained.

Cleveland.—Foreign issues, southern municipals, and leasehold bonds.

Richmond.—Foreign securities, secondary or speculative bonds, and voluntary and involuntary investments in real estate.

Atlanta.—The most severe losses or depreciation in the investment accounts of banks in this district have been sustained in second-grade public-utility and industrial corporation bonds. Severe losses have been sustained also in foreign bonds.

Chicago.—Real-estate loans, those made originally on too liberal basis or taken as junior liens as only security available on existing debt. Repurchase of real-estate loans sold to customers has proven a serious problem with many banks. Bonds now show material depreciation, particularly foreign bonds.

St. Louis.—Drainage district and levee bonds and also low-grade foreign and domestic industrial bonds.

Minneapolis.—Foreign bonds.

Kansas City.—Losses too nominal to warrant a comparison.

San Francisco.—Unlisted securities. Irrigation bonds have contributed quite largely, and in the country banks, securities of local enterprises.

The replies received from clearing house examiners were as follows:

Boston Clearing House Association.—Convertible issues purchased at large premiums.

New York Clearing House Association.—Loans.

Philadelphia Clearing House Association.—Commercial paper, bonds other than high grade, and occasionally bank stocks that have depreciated in value.

Clearing House Association of the Banks of Cleveland.—Commercial or unsecured loans.

Chicago Clearing House Association.—Real estate loans conforming to the restrictions of the Federal Reserve Act have not been the cause of losses to the banks. However, more losses have been sustained in the past 10 years both in city and country banks upon loans collateraled by junior real estate mortgages or unsecured loans dependent upon real estate security held by the borrower than among other class of losses. This condition applies to both city and farm property and such loans have no proper place in a well managed commercial bank.

Denver Clearing House Association.—The greatest depreciation in investment accounts is noticed in the bonds of public utility corporations, bonds of other corporations (mostly industrial) and bonds of railroad companies, in the order named.

Los Angeles Clearing House Association.—Oil securities, irrigation and reclamation issues, and foreign bonds.

7. *Loans on stocks and bonds of real estate holding companies.*—In view of the growing practice of incorporating large real estate projects as corporations, which raise their funds by selling stocks and bonds just like other enterprises, the possibility arises that banks may get tied into the real estate situation unduly through advancing loans on the security of such issues. Accordingly, the following questions were asked:

Have you noted any security loans based upon stocks or bonds of real estate holding companies in the portfolios of banks within your jurisdiction?

What proportion of all security loans is based upon real estate holding company securities, in your opinion?

What is your attitude toward such loans and how do you determine their soundness in examination?

The Comptroller of the Currency replied:

Negligible, probably less than 1 per cent.

As a rule, such loans are found to be to men of the promoter or speculator type and while these men usually show financial statements in large figures, it frequently happens that their assets prove to consist of equities carried at highly inflated values. The bank's files usually contain an appraisal of the property based upon the estimated sale value and this is almost invariably found to be high.

The Federal reserve banks reported findings such loans in insignificant volume among security collateral advances, and to be critical of them. Their replies follow:

Boston.—There are a few such loans, constituting a very small fraction of 1 per cent of all security loans.

If a current quotation can be found and there is an adequate margin of collateral, no criticism is made. If current quotations can not be obtained, the same procedure is followed as with other loans on collateral without an active market.

New York.—Loans of this kind are occasionally noted, but in the case of most banks they are comparatively few. It is seldom that the proportion of such loans in a particular bank is sufficiently large to cause concern.

Such loans are not looked upon with favor due to general lack of liquidity and difficulty of determining real value. Their soundness is determined by marketability, valuation of properties, location, income and margin of safety. Criticism, if any, would be based upon the amount of such loans as compared to the total loans of the bank, as well as upon the character of each particular loan.

Philadelphia.—The number and importance of such loans in our member banks are negligible.

If the securities of the real estate holding companies which we find serving as collateral to loans are listed on one or more of the principal exchanges and their market is broad and substantial, we simply appraise them and ascertain whether the values are sufficient to adequately protect the loans. If the issues are inactive or do not enjoy a broad, free market, we examine into the condition and management of the issuing corporation, endeavoring in this way to form a reasonable opinion as to the intrinsic merits of the securities. However, regardless of intrinsic merit, we incorporate in our reports detailed information as to all important loans secured by issues which do not have a satisfactory market, and in cases where the concentration on loans of this character is sufficient to cause current or potential concern, corrective influences are brought to bear on the managements responsible for the condition.

Cleveland.—While a large number of loans is predicated on real estate values, the amount of loans to real estate holding companies and the amount based upon the real estate holding companies' securities is negligible.

Where possible the appraised value of the real estate is used. Where no such information is available it is necessary to depend upon the information given by the committees or officers in charge of this class of loans. Unless we are reasonably sure that this class of loans is basically sound and granted for legitimate business purposes we feel that they should be discouraged.

Richmond.—Not more than 5 per cent of all security loans are based upon real estate holding company securities.

Attitude unfavorable as to loans secured by stocks of real estate holding companies as property is usually mortgaged. The loans secured by bonds or mortgages are usually slow. Soundness determined by estimate of equity on the basis of officers' and directors' appraisal.

Atlanta.—Some have been noted in several of the larger banks of this district. The proportion of all security loans based upon real estate holding company securities is very small.

Such loans are not regarded favorably. Unless the collateral is readily marketable, we endeavor to determine the value of the city real estate owned by the holding company. If farm land is owned, the market value of the average quality of the type of land held is determined, upon which the value of the holding company securities is based.

Chicago.—Only nominal amount of loans based on bonds or stocks of real estate holding companies. Limited number of country banks hold loans of holding companies formed to buy real estate which had been acquired. (A considerable number of banks hold too large a volume of loans based on real estate equities.)

Attitude toward such loans unfavorable.

St. Louis.—Securities of this type appear to have been distributed mostly among the small investors and used as collateral on small individual loans in the majority of cases. The amount is relatively small.

If soundness appears questionable, a critical attitude is assumed in connection with loans secured by stocks or bonds of real estate holding companies.

Stocks: Make a complete analysis of the latest financial statement, also the earnings reports for the past several years. Inquire as to the character of the management of the corporation and endeavor to obtain last sale price or bid.

Bonds: Analyze all data available, taking into consideration the appraised value of the properties, sufficient insurance, location, income, maturities and sinking fund provisions. Ascertain if securities have been issued by proper trustee or agent.

Minneapolis.—A very small percentage, probably less than 2 per cent. Such loans are scrutinized carefully. If the security does not have a wide market, consideration is given to the class of property back of the security, its cost, probable sale value, record of its net earnings, etc.

Kansas City.—Very few loans of this type, probably averaging less than 1 per cent. The financing of real-estate holding company securities in this district is confined almost entirely to so-called real-estate loans in which the first lien on a specific property is included in a single note, and to so-called real-estate bonds

which are secured by a mortgage or deed of trust covering a specific property. The use of real-estate holding company securities, bonds in particular, is usual y in connection with the financing of office buildings, apartments, etc., and the greater bulk of this class of financing is accomplished through investment houses located outside the district.

Attitude toward such loans critical. Where there appears to be a question of the soundness of loans dependent on such collateral an effort is made to get reliable information as to the value of the real estate and the relationship of income to fixed charges, sinking-fund requirements, etc.

San Francisco.—Real-estate bonds are not unusual in California. Found to a lesser extent in other States of this district. Proportion of total security loans estimated very small.

Considered undesirable as bank loans, as being of a capital nature and usually nonliquid. Soundness determined by character and appraisal of real estate pledged and the marketability of securities.

The clearing house replies were:

Boston Clearing House Association.—Practically nil, about one-fiftieth of 1 per cent. Not in favor of this type of loan unless the collateral is readily marketable. Soundness determined by ascertaining the value of the real estate back of the securities.

New York Clearing House Association.—Most of the real estate loans are based on equities, and usually are not secured by stock or bonds of a holding company.

In the banks examined, about 8 per cent of all loans (and mortgages), secured and unsecured, I find to be based on real estate (mostly equities¹ without collateral). This would be equivalent to about 27 per cent of the capital, surplus, and profits of these banks and trust companies. Of this 27 per cent, about 8 per cent is in investment mortgages and 19 per cent on second mortgages, real estate stocks, and unsecured loans against equities, chiefly the latter. Of the 8 per cent of total loans, 2¼ per cent are investment mortgages and 5¾ per cent are equity loans.

From statements of the makers and estimates of the value of their equities, the quality of these loans is determined. In these times equity loans are mostly slow, and should be reduced, especially where the total (aside from conservative first mortgages) is above the average figures as noted above.

Philadelphia Clearing House Association.—Not any material amount. Where properties are local, it is in most cases possible to secure an appraised value on same. We do not criticize when only small amounts are held by the bank.

Chicago Clearing House Association.—Not found to any noticeable extent.

Denver Clearing House Association.—Very few loans based upon such securities have been found; at the moment I can recall only one such stock and that was a part of miscellaneous collateral. I am of the opinion that stocks and bonds of such companies held by banks in this territory are not in sufficient amounts to be of consequence.

Los Angeles Clearing House Association.—A nominal volume of loans is based on real estate holding company securities, probably less than 5 per cent. Loans collateralized by this class of security are naturally very low in repayment, but in this district the banks do not take this kind of collateral to any great extent.

¹ Real estate equity loans are stated to include the following: (1) Real estate bonds junior to first mortgage; (2) bonds of real estate holding companies junior to first mortgage; (3) bonds of other corporations based on real estate subject to first mortgage; (4) real estate holding company stocks; (5) stocks of other corporations whose assets are chiefly real estate; (6) unsecured loans to real estate companies, operators, owners, or any other individuals, firms, or corporations, whose eventual payment may depend on sale of real estate, i. e., where maker has not other available liquid resources sufficient to cover liabilities.

APPENDIX

The provisions in the banking law of New York State governing the examination of security affiliates by the State department of banking is as follows:

For the purpose of determining the financial condition of a corporation subject to the provisions of this chapter and of obtaining full information for the purpose of such determination, the right of examination shall extend to and include corporations affiliated with any corporation subject to the provisions of this chapter under examination, and for such purpose the following are deemed to be corporations affiliated with a corporation subject to the provisions of this chapter.

(1) Any corporation of which such corporation subject to the provisions of this chapter directly or indirectly owns or controls a majority of the voting shares of its capital stock or a lesser number of such shares if such lesser number shall amount to more than 50 per cent of the shares voted for the election of directors at the preceding annual meeting of such corporation; or any corporation of which such corporation subject to the provisions of this chapter in any other manner directly or indirectly controls the election of a majority of its board of directors;

or

(2) Any corporation which directly or indirectly owns or controls a majority of the shares of capital stock of such corporation subject to the provisions of this chapter or a lesser number of shares if such lesser number shall amount to more than 50 per cent of the shares voted for the election of directors at the preceding annual meeting of such corporation subject to the provisions of this chapter; or any corporation which in any other manner directly or indirectly controls the election of a majority of the board of directors of such corporation subject to the provisions of this chapter; or

Any corporation of which a majority of the voting shares of its capital stock, or a lesser number of shares if such lesser number shall amount to more than 50 per cent of the shares voted for the election of directors at the preceding annual meeting of such corporation is directly or indirectly owned or controlled by the same or substantially the same stockholders as directly or indirectly own or control a majority of the shares of capital stock of such corporation subject to the provisions of this chapter or a lesser number of shares if such lesser number shall amount to more than 50 per cent of the shares voted for the election of directors at the preceding annual meeting of such corporation subject to the provisions of this chapter; or

Any corporation the election of a majority of the board of directors of which is or may be directly or indirectly controlled by any instrumentality, agency or arrangement that directly or indirectly controls the election of a majority of the board of directors of such corporation subject to the provisions of this chapter; or

Any corporation a majority of the directors of which shall be directors of such corporation subject to the provisions of this chapter or of which a majority of the executive committee of its board of directors are directors of such corporation subject to the provisions of this chapter; or

Any corporation the board of directors of which shall comprise a majority of the board of directors of such corporation subject to the provisions of this chapter or the executive committee of the board of directors of which shall comprise a majority of the executive committee of such corporation subject to the provisions of this chapter; or

Any corporation all or substantially all of whose executive officers are executive officers of such corporation subject to the provisions of this chapter; or

Any corporation whose executive officers comprise substantially all of the executive officers of such corporation subject to the provisions of this chapter; or

Any corporation the business or policy of which is dominated or controlled, in whole or in part, by a corporation subject to the provisions of this chapter, whether by contract or otherwise; or

Any corporation which dominates or controls, in whole or in part, the business or policy of a corporation subject to the provisions of this chapter whether by contract or otherwise.

Provided, however, that as to any corporation specified in this subdivision (2) either (a) there shall then exist or within the preceding 2-year period have existed business transactions or relations (of any kind, character or description) between such corporation and such corporation subject to the provisions of this chapter, or (b) such corporation subject to the provisions of this chapter shall then have outstanding loans secured in whole or in part by the stock or securities of such corporation or by any property in which such corporation is in any way or to any extent interested or within the preceding two-year period shall have had such loans; or

(3) Any corporation, association or partnership having business transactions or relations with a corporation subject to the provisions of this chapter the examination of which on application of the superintendent of banks and on notice to such company shall be determined by a justice of the supreme court to be necessary or expedient in order to ascertain whether the capital of a corporation subject to the provisions of this chapter is impaired or whether safety of depositors with such corporation subject to the provisions of this chapter has been imperiled.

For all the purposes of the foregoing definitions:

All corporations similarly owned or controlled shall be regarded as a single corporation and if as a single corporation subject to examination each such corporation shall be deemed to be an affiliated corporation.

Stock held in the name of nominees of any corporation subject to the provisions of this chapter or other corporation or otherwise for the benefit of any corporation subject to the provisions of this chapter or other corporation shall be deemed to be stock owned or controlled by such corporation subject to the provisions of this chapter or other corporation.

Examinations may be made and inquiries instituted or continued in the discretion of the superintendent after he has taken possession of the property and business of any such corporation, banker or broker, under the provisions of section 57 of this article until it shall resume business or its affairs shall be finally liquidated in accordance with the provisions of this article.

If the examination shall be made by the superintendent, or by one or more deputies or examiners who are compensated by salary only, no charge shall be made except for necessary traveling and other actual expenses.

The superintendent shall have power also, either personally or by his deputies or examiners, to subpoena witnesses, to compel their attendance, or administer an oath, and to examine any person under oath before him or before a deputy or examiner duly designated for such purpose, and in connection therewith to require the production of any books or papers relevant to the inquiry. If a person subpoenaed to attend such inquiry fails to obey the command of a subpoena without reasonable excuse or if a person in attendance upon such inquiry shall, without reasonable cause, refuse to be sworn or to be examined or to answer a question or to produce a book or paper when ordered so to do by the officer duly conducting such inquiry, or if a corporation, association, partnership, or individual fails to perform any act required hereunder to be performed, he shall be guilty of a misdemeanor and in addition thereto compliance with the above provisions may be imposed pursuant to section 406 of the civil practice act. Any officer participating in such inquiry and any person examined as a witness upon such inquiry who shall disclose to any person other than the superintendent of banks the name of any witness examined or any other information obtained upon such inquiry, except as directed by the superintendent, shall be guilty of a misdemeanor.

If any person shall ask to be excused from testifying or producing any book or paper or other document before the superintendent or before any person duly designated by him to conduct any such investigation upon the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him may tend to incriminate him or degrade him or to subject him to a penalty or forfeiture and shall notwithstanding be directed by the superintendent or by the person duly designated by the superintendent to conduct any such inquiry to testify or to produce such book, paper, or document, he must none the less comply with such direction, but in such event he shall not thereafter be prosecuted or subjected to any penalty or forfeiture for or on account of any trans-

action, matter, or thing concerning which he may testify or produce evidence, documentary or otherwise, pursuant thereto, and no testimony so given or produced shall be received against him upon any criminal action, suit or proceeding, investigation, inquisition, or inquiry: *Provided, however,* No person so testifying shall be exempt from prosecution or punishment for any perjury or other false statement committed or made by him in his testimony given as herein provided for.

Any individual, copartnership, unincorporated association, or corporation which refuses to permit examination or investigation in accordance with the terms of this section shall forfeit to the people of the State the sum of \$200 for every day, after the date of such refusal, that such individual, copartnership, unincorporated association, or corporation continues to refuse to permit such examination or investigation.¹

¹ Section 39, as amended by chapter 678, Laws of 1930.