1914 FIFTIETH ANNIVERSARY 1964

FEDERAL RESERVE BANK OF NEW YORK

MONTHLY REVIEW

JUNE 1964

Contents

Volume 46 No. 6

The Federal Reserve System After Fifty Years*

By WILLIAM F. TREIBER
First Vice President, Federal Reserve Bank of New York

Again it is a great pleasure for us in the Federal Reserve System to meet with the members of the New Jersey Bankers Association and to share our thoughts on matters of mutual interest.

Monday of this week marked the fiftieth anniversary of the incorporation of the Federal Reserve Bank of Philadelphia and the Federal Reserve Bank of New York. Your organization, the New Jersey Bankers Association, antedates us by more than a decade.[1] Despite our comparative youth, attainment of the half-century mark is an important event for the Federal Reserve System and, indeed, I think it is for the United States.

ENACTMENT OF FEDERAL RESERVE ACT

The Federal Reserve came into being because of adversity. Following the panic of 1907, as is well known, the Congress created a National Monetary Commission to investigate the country's banking system and to recommend legislation. The Commission recommended the establishment of a single institution to perform the central banking functions of the country. This proposal gave way to the idea of the present regional system of Reserve Banks combined with a Government board in Washington. The Federal Reserve Act, embodying this plan, was signed by President Wilson on December 23, 1913, and the Federal Reserve Banks opened for business the following year.

ELASTIC CURRENCY. The purpose of the Act, as stated in its title, was "To provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes".

All national banks were then, as now, members of the Federal Reserve System. State banks meeting certain standards could become members, and many did, of course. Every member bank was required to maintain certain reserves in its Reserve Bank. The amount of required reserves was a stated percentage of the deposits on the books of the member bank. As banks made loans and created additional deposits in the banking system, required reserves also rose. A bank could get additional reserves by borrowing from the Federal Reserve Bank against the pledge of its customers' promissory notes.

Federal Reserve notes, which were obligations of the United States issued by the Federal Reserve Banks, became the dominant currency of the nation. Member banks could freely exchange their reserve balances at the Reserve Banks for Federal Reserve notes. For example, when the bank's depositors wished to withdraw cash, the bank could draw on its reserve account at the Reserve Bank to get Federal Reserve notes; if it needed to replenish its reserve account, it could do so by borrowing on its customers' paper. The establishment of the Federal Reserve System provided the desired elasticity in the supply of currency and did away with recurrent money panics. That was a great accomplishment; today we take it for granted.

EVOLUTIONARY ASPECTS OF FEDERAL RESERVE

The Federal Reserve System is a living organism built on the banking and credit structure as it existed fifty years ago, and as it has been modified in the light of developments, needs, and experience over half a century. In his inaugural address on March 4, 1913, President Wilson said:

* An address before the sixty-first annual convention of the New Jersey Bankers Association, Atlantic City, New Jersey, May 21, 1964.

[1] The Association was organized January 10, 1903.

> We shall deal with our economic system as it is and as it may be modified, not as it might be if we had a clean sheet of paper to write upon; and step by step we shall make it what it should be, in the spirit of those who question their own wisdom and seek counsel and knowledge, not shallow self-satisfaction or the excitement of excursions whither they can not tell.[2]

The framers of the Federal Reserve Act, debating and compromising in a political and economic struggle that lasted several years, produced in the Act a flexible charter that provided for an organization capable of change and growth. Although the Act has been amended many times, the System has been able to adapt itself to new conditions without seeking new legislative instructions to care for every new condition. For example, many of the changes made by the Banking Acts of 1933 and 1935 were statutory recognition of changes that had already evolved in the System. Similarly, a decade before the enactment of the Employment Act of 1946, Federal Reserve officials had recognized a responsibility to promote monetary and credit conditions that would encourage high levels of production and employment. In more recent years, acting within the framework of the Federal Reserve Act, the Federal Reserve has developed a variety of arrangements with foreign central banks and has entered into foreign currency transactions in order to protect the dollar in international financial markets.

PRIMARY FEDERAL RESERVE OBJECTIVE

Today the primary objective of the Federal Reserve is to advance the public interest by contributing, to the greatest extent possible, to the fulfilment of our national economic goals. These goals include: (1) maximum sustainable economic growth, (2) reasonable price stability, (3) maximum practicable employment, and (4) equilibrium in international payments.

The Federal Reserve promotes these economic goals by influencing the volume, availability, and cost of the reserves of the member banks. It exerts such influence through three principal instruments of general application: (1) discount operations, (2) open market operations, and (3) changes in reserve requirements. In the early days of the Federal Reserve System, the reserves created by the Reserve Banks arose primarily out of discount operations. Today they arise primarily out of open market operations. Authority to change reserve requirements as an instrument of credit policy had its origin in the Banking Act of 1935.

Policy decisions with respect to these three instruments are not concentrated in any one of the three principal components of the Federal Reserve System. Changes in the discount rate are initiated by the directors of the Federal Reserve Banks, subject to review and determination of the Board of Governors of the Federal Reserve System in Washington. Open market operations are directed by the Federal Open Market Committee. Reserve requirements are fixed by the Board of Governors, or the Federal Reserve Board as it is frequently called.

ROLE OF FEDERAL OPEN MARKET COMMITTEE

In developing credit policy to promote our national economic goals, the Federal Open Market Committee has evolved as the heart of the Federal Reserve System. The Committee is composed of the seven members of the Federal Reserve Board, the President of the Federal Reserve Bank of New York, and four other Reserve Bank Presidents chosen in rotation. The Committee customarily meets every three weeks. In practice, all Federal Reserve Bank Presidents attend all meetings of the Committee. All members of the Committee and all the Reserve Bank Presidents who are not members participate freely in the discussions at the meetings, commenting on business and credit conditions and international financial developments, and expressing their views as to appropriate credit policy and its implementation. Because of the close interrelation of the three principal instruments of credit policy, the use of the various instruments is discussed even though the Committee has jurisdiction only with respect to open market operations.

Each Reserve Bank President brings to the discussion not only the findings of his Bank's research staff which has special concern with economic and financial developments in his District, but also information and judgments on the part of the Bank's directors and other business and banking leaders in the District. Thus, information gleaned throughout the United States and opinions formed on the basis of a variety of contacts with Government leaders and with lenders and users of credit in every section of the country are melded with the analysis of national data in the formation of national credit policy.

Everyone in attendance at a meeting of the Committee does not assess business and credit conditions and international financial developments in the same way. Every-

[2] 50 Cong. Rec., Part I, p. 3 (1913). The first part of the quotation, i.e., through the words "should be", appears on a bronze plaque in the lobby of the Federal Reserve building in Washington.

one does not propose the same prescription for credit policy. Yet the method used and the practices followed do constitute a mechanism calculated to produce a balanced judgment in an area where exactness is impossible and where careful and deliberate judgment on all available facts is essential.

STRUCTURE OF SYSTEM

From time to time it has been suggested that the Federal Reserve be made directly responsible to the Executive Branch of the Government. Some critics who seem to be overly concerned with simplicity in an organization chart have suggested that, while the System is working pretty well, nevertheless its efficiency could be improved by some kind of streamlining.

I suppose someone bent on textbook chart-making might urge a substantial revision of the United States Constitution to simplify what may appear to be a complicated Governmental structure, and to promote greater efficiency in Government. I would venture to suggest, however, that the separation of powers among our three branches of Government, as provided in the Constitution, has been an important factor in the development of our nation and the preservation of the individual freedom of its people. The basic question is, "How well does the present system work?"

While some persons may consider the structure of the Federal Reserve System cumbersome as they read the language of the Federal Reserve Act dealing with the System's component parts, I submit that the evolution of the System has produced a well-balanced and effective mechanism for policy formation.

INDEPENDENCE OF SYSTEM

We frequently hear questions about the independence of the Federal Reserve System. Some say it is too independent; some say it is not sufficiently independent. I think we should always bear in mind that the Federal Reserve System is not, and should not be, independent from the Government. Whenever stress is placed upon the need for independence of the System, it is independence within the Government. In the administration of monetary policy the Federal Reserve System is an agency of the Congress, established to carry out the responsibility for that task which, under the Constitution, belongs to the Congress but which the Congress cannot administer from day to day. In the nature of things, Congress has to delegate some segments of its power to agencies which it has created. The System must, and does, seek to carry out the basic policy of Congress, and Congress can change that policy at any time. When we talk about the independence of the Federal Reserve System, we are talking about the independence to make day-to-day decisions which will best serve to carry out the basic policy established by the Congress.

Two months ago the Secretary of the Treasury, appearing before a Congressional committee, discussed the relationship of the Treasury and the Federal Reserve. He said:

> . . . experience over many years and in many countries has taught the wisdom of shielding those who make decisions on monetary policy from day-to-day pressures. The day of private central banks operating without regard to Government policy is long since gone, and quite properly so. But around the world, almost all countries still find it useful to maintain independence for their central banks within the Government.
>
> Independence naturally implies the right to disagree; and not only to disagree, but to act on the basis of different judgments. Some differences between the Treasury and the Federal Reserve may from time to time be a fact of life. But this need not be distressing. The necessity to test policy proposals against the views of an independent Federal Reserve is, I believe, the best insurance we can have that the claims of financial stability will never be neglected.[3]

We in the Federal Reserve share the Secretary's views on the need for an independent "Fed". In my own experience of nearly thirty years in the System, the independence of the "Fed" within the Government, in addition to its other advantages, has been an important factor in achieving an effective organization staffed by competent and imaginative persons.

AREAS FOR LEGISLATIVE CONSIDERATION

There are, however, other areas in which changes in the Federal Reserve Act do appear to merit consideration. I would comment briefly on four such areas. These are reserve requirements, eligibility requirements, the mandatory regulation of interest rates, and Federal bank super-

[3] *The Federal Reserve System After Fifty Years,* Hearings before the Subcommittee on Domestic Finance of the House Committee on Banking and Currency on H.R. 3783, H.R. 9631, H.R. 9685, H.R. 9686, H.R. 9687, and H.R. 9749, 88th Cong., 2d Sess. (1964), Vol. 2, p. 1232.

vision. Finally, I would like to say a few words about the banking structure in New Jersey.

RESERVE REQUIREMENTS. In my view, all commercial banks—both member and nonmember—should be subject to the same basic reserve requirements. The major purpose of legally required reserves today is to serve as a fulcrum for monetary policy. Deposits in nonmember banks are just as much a part of the money supply of the United States as deposits in member banks. Yet, the reserve requirements applicable to member banks and to nonmembers are frequently quite different. Reserve requirements imposed on nonmember banks by the laws of the respective states tend to be less onerous than those applicable to member banks. In some states, the level of requirements is lower for nonmember banks. In some, the form in which reserves may be held is more favorable to nonmember banks. For example, in some states reserves may be held partly in the form of securities and, therefore, may earn interest. These differences in reserve requirements tend to confer a competitive advantage on nonmember banks by permitting them to offer more attractive terms to borrowers and depositors, or to earn higher profits than member banks can earn in similar circumstances.

Since the basic purpose of reserve requirements is to provide a mechanism for the promotion of our national economic goals, all commercial banks should participate on a similar basis. Such participation could be attained by compulsory membership of all commercial banks in the Federal Reserve System or by requiring that all commercial banks be subject to the same reserve requirements. Membership in the Federal Reserve System brings with it, of course, the privilege of access to Federal Reserve discounts and advances—a valuable privilege in time of need.

Membership also brings the duty to remit at par for checks drawn upon the member bank. Par clearance has been the rule in New Jersey for decades. Universal par clearance is highly desirable but, unfortunately, even after fifty years of effort the goal is far from attainment. Compulsory membership would materially affect the 1,600 banks that do not now remit at par. To require at this time full membership for all commercial banks, with immediate universal par clearance as a consequence, would provoke needless controversy.

The capacity of the Federal Reserve to make monetary policy effective, and the promotion of equity among different classes of commercial banks, would be served by requiring that all commercial banks, both member and nonmember, be subject to the same reserve requirements without, however, requiring that all commercial banks be members of the Federal Reserve System. If nonmember banks are subjected to the same reserve requirements as member banks, perhaps the nonmember banks should have the same access to Federal Reserve discounts and advances as do member banks. This is the recommendation made by the Committee on Financial Institutions (the "Heller Committee") in its report of April 10, 1963 to the President of the United States.

At the same time, for the purpose of eliminating many of the inequities and administrative difficulties in the present reserve requirements, the Committee recommended a graduated system of reserve requirements to replace the present system which involves different reserve requirements for reserve city banks and for "country" banks. Under such a graduated system every bank would maintain a low reserve against the first few million dollars of its demand deposits, a higher reserve against its deposits above this minimum amount and up to a substantial figure, and a still higher reserve against any demand deposits above the latter amount. This recommendation certainly merits careful study.

ELIMINATION OF ELIGIBILITY REQUIREMENTS. The time has come, I think, to repeal the present provisions of the Federal Reserve Act regarding the eligibility of paper for discount by the Reserve Banks, and to authorize the Reserve Banks to make advances to member banks on their promissory notes secured to the satisfaction of the Reserve Banks, subject to regulations of the Board.

The original Federal Reserve Act authorized the Reserve Banks to discount only certain types of paper arising out of "actual" commercial or agricultural transactions, subject to specified maturity limitations. The concept underlying this limited authority was that the liquidity of commercial banks could be assured only if the loans made by them were short term and self-liquidating in character. Related to this "real bills" concept was the assumption that the pledging of such discounted paper by the Reserve Banks as security for the issuance of Federal Reserve notes would automatically regulate the volume of money; it was expected that the volume of money would expand and contract directly in response to the varying credit needs of the economy, as reflected by the volume of short-term borrowing by commercial and agricultural enterprises.

For many years it has been generally recognized that the concept of an "elastic currency", based on short-term self-liquidating paper, is no longer in consonance with banking practices and the needs of the economy. The narrow, technical requirements of the law regarding "eligible paper" serve no useful purpose. It is preferable to place emphasis on the soundness of the paper offered as

security for advances and the appropriateness of the purposes for which member banks borrow. Bills[4] recommended by the Federal Reserve and now before the Congress would make such a change.

REGULATION OF INTEREST RATES. The Federal Reserve Board is required by the Banking Act of 1933 to specify the maximum rate of interest that may be paid by member banks on savings and time deposits. The Federal Deposit Insurance Corporation has a similar responsibility with respect to insured nonmember banks. Presumably the purpose of the requirement was to help assure sound banking —to deter banks from seeking assets with higher yields but of lower quality in order to pay high interest rates on deposits.

As a nation we are generally committed to the proposition that competition should be fostered and that the public interest is better served when the forces of supply and demand are permitted to reflect themselves in prices. We look to market forces to promote a satisfactory allocation of resources. Must we have a continuing regulation of interest rates to insulate them from market forces?

There have been substantial improvements in bank examination and supervision in the three decades since the Banking Act of 1933. Federal deposit insurance has virtually removed the possibility of panic runs on banks. Stock market credit has been regulated. I think that the mandatory regulation of interest rates is not generally needed in order to prevent banks from acquiring unsound assets and that, as money rates and yields on securities fluctuate in response to changing market conditions, commercial banks should normally be free to adjust to those conditions the interest rates they pay.

In addition, the present statutes regulating interest rates apply only to commercial banks and not to other competing institutions. Therefore, those institutions have a competitive advantage over commercial banks.

Under the circumstances it would seem desirable that the regulation of interest rates paid by commercial banks on time and savings deposits be made permissive rather than mandatory. By making the authority permissive, it would still be possible for the supervisory authorities to intervene, if necessary, to help prevent the payment of excessive interest rates and unsound practices in extending credit. Such a stand-by authority should be extended, I believe, to include, under a coordinated approach by the appropriate regulatory authorities, savings and time deposits and similar accounts of savings banks, savings and loan associations, and perhaps credit unions.

FEDERAL BANK SUPERVISION. The Federal Reserve and the state supervisory authorities share the responsibility for examining and supervising state member banks. The performance of this responsibility has brought to us in the Federal Reserve an intimate knowledge of the day-to-day problems of the banks, and thereby has contributed importantly to the capacity of the Federal Reserve to carry out its basic responsibilities in the field of monetary policy. In addition, it has enabled us to observe at first hand the effects of monetary policy not only on individual banks but also on their borrowing customers.

The Federal Reserve is one of three Federal bank supervisory authorities. Effective Federal bank supervision requires a consistent approach to common supervisory problems. A basic problem has been the divergent interpretation and, therefore, varied administration of similar or even identical statutes. The result has been confusion and inequity. A consistent approach requires close cooperation among the Federal agencies. In the absence of such cooperation, some consolidation of those agencies or other arrangements may be called for. Over the years there have been many suggestions to this end.

At the very least, a greater degree of coordination is needed. Clearly, there should be an effective mechanism for the reconciliation of divergent views. I would hope that this could be accomplished without removing the Federal Reserve from a supervisory role because I feel that role contributes importantly to the formulation and execution of monetary policy.

BANK MERGERS, ETC. Most of the time-consuming burden of bank supervision at the policy level these days lies in the consideration of what might be called structural changes of the banking system, i.e., bank mergers, holding company acquisitions, new branches, and new bank charters. Federal jurisdiction over holding company applications is centralized by law in the Federal Reserve Board. In contrast, jurisdiction over bank merger applications is divided by law among the three Federal bank supervisory authorities. Although in both cases the Federal statutes provide for the submission of advisory opinions by other supervisory authorities to the deciding agency, there have been differences in approach and emphasis in the decisions rendered. In addition, the Department of Justice has certain responsibilities with respect to both holding company acquisitions and bank mergers. Better coordination is clearly needed.

With appropriate legislative changes, many of the decisions which are now made in Washington might be effectively delegated to regional groups composed of repre-

[4] S. 2076, 88th Cong., 2d Sess. (1964); and H.R. 8505, 88th Cong., 2d Sess. (1964).

sentatives of state banking authorities as well as of the Federal banking authorities, including the Federal Reserve Banks. Such delegation seems especially appropriate in the case of branch applications. Action at the regional level might, in many cases, become final without intervention by Washington.

If the only solution to the coordination problem is consolidation, it can be persuasively argued, I believe, that bank supervision is a logical adjunct to the formulation and execution of monetary policy and should be consolidated in the Federal Reserve System, with adequate authority on the part of the Federal Reserve Board to delegate much of the work to the Federal Reserve Banks.

BANKING STRUCTURE IN NEW JERSEY

In enumerating four areas for change in the Federal statutes, I would not imply that they are the only areas needing adaptation to current conditions. They are, however, important areas which seem to me to merit your special consideration. Nor would I want to convey the impression that it is only Federal banking law that needs review.

When I addressed your convention two years ago I asked a question: "Would it not be in the best interest of banking for you, the bankers of New Jersey, to recommend some minimum improvements in the Banking Law at this time in order to move forward toward the dual goals of greater efficiency and effective competition. . .?"

Since that time you have given a great deal of thought and study to the banking structure in the state. In the Federal Reserve we have followed these discussions with great interest. We have, I think, a justifiable concern with the ability of the banking system to supply the growing credit needs of the economy. These needs become not only larger but more complex as rural areas are developed into the vast industrial and residential complexes that are visibly spreading out from the major metropolitan areas of New York and Philadelphia. With these economic changes the pressures for banking change are intensified.

Those who advocate larger banking organizations in New Jersey have pointed out that the largest banks in the state are dwarfed by New York City and Philadelphia banks. It has been said that these giant competitors "siphon off" deposits and loans that should rightly go to New Jersey banks. Would it not be more reasonable to say that large institutions in neighboring states are supplying many of the credit needs that, because of legal restrictions or for other reasons, New Jersey institutions are unable to provide? The essential point is that the users of bank credit are probably getting the credit they need. Where the supply comes from is a matter of convenience, perhaps, but, more importantly, a matter of that entire complex of services, including the ability and the eagerness to provide them, that goes into a well-rounded banking relationship.

Not only are we in the Federal Reserve charged with the duty of preserving effective competition in banking, but we believe in it. We believe that it serves the public interest. We envisage changes in the banking structure of New Jersey as a means of increasing competition. Larger New Jersey banking organizations would be better able to compete for the "big business" of the state. It is futile to dream that they would get it all, but we would hope that their competitive vigor would, in large part, compensate for discrepancies in size alone which can probably never be eliminated.

Banking competition today is as much a matter of specialized services, techniques, ingenuity, and enthusiasm as it is of lending limits. As larger banks are able to assist more effectively in the development of industry in New Jersey, retail as well as wholesale banking business will also expand; all New Jersey banks, both small and large, are bound to benefit.

Even those who may agree with these broad objectives may not agree on the best way to accomplish them. It appears, however, that out of the discussion that has been going on in New Jersey there is growing support for legislation that would permit the operation of bank holding companies on a state-wide basis.

I would like to make two observations on the challenge to banking in New Jersey presented by the prospect of such legislation. The first concerns the holding company as a form of operation. Some people equate a holding company organization to branch banking, but they are not, in fact, equivalent. Some argue that branch banking is more efficient. On the other hand, a holding company offers the possibility of preserving the home-town characteristics of a local bank (which are cherished by so many bank customers) while at the same time providing the means for larger and more specialized financing efforts. Truly interested local directors who determine the policies of a local unit of a holding company organization can make a major contribution to the effective service the bank can render to its community. Large size is unquestionably a requisite for adequately providing large loans and the more complex banking services. Large size, however, is not essential to serve the varied needs of individuals, homeowners, and small businessmen in that profitable area that has come to be called consumer banking. In that area even the smallest bank can remain an effective competitor. The holding company organization constitutes a challenge to

the management of the local bank to serve its community better, while at the same time providing the additional benefits associated with size that the holding company is able to offer.

My second observation is a word of caution. The formation of a holding company and the acquisition of a bank by a holding company require the approval of the Federal Reserve Board. In reviewing a holding company application, the Board must consider whether the proposal would expand the size or extent of the bank holding company system involved beyond limits consistent with adequate and sound banking, the public interest, and the preservation of competition in the field of banking. Also pertinent in this field are the criteria used by the courts in deciding cases that arise under the Clayton Act dealing with acquisitions which may substantially lessen competition or tend to create a monopoly, or that arise under the Sherman Act dealing with acquisitions which may unreasonably restrain trade. The Supreme Court of the United States has equated excessive concentrations of banking resources in the relevant markets to undue lessening of competition, as well as to unreasonable restraint of trade. The Board will approve only those applications which, in the light of the competitive factors and the applicable banking factors, it finds to be in the public interest.

We would expect, therefore, that those banks which choose to band together to improve their potential of service to the public will seek to do so in ways that will enhance competition rather than reduce it.

CONCLUSION

In conclusion, I would revert to President Wilson's inaugural address. "We shall deal with our economic system as it is and as it may be modified, . . . and step by step we shall make it what it should be. . . ." These words, spoken fifty-one years ago, were truly prophetic of the years since then, and I trust of the years ahead. When these words were uttered, no one would have dreamed of the challenges our nation and our banking system would have to face. No doubt the challenges that lie ahead are beyond our imagination today. But whatever our respective challenges, we must be ready to meet them—and meet them well. Our success and your success in meeting them will be related to the extent that each of us realizes that the success of any governmental body and of any private organization rests on its service to society.

The Business Situation

The economy posted a good advance in April, and fragmentary data for May suggest that these gains have been at least maintained in recent weeks. Leading indicators such as new orders for durable goods, the backlog of business appropriations for capital spending, and consumer buying intentions add support to the widespread expectation of further gains in output and employment in the months immediately ahead. The limited data so far available, however, do not provide an adequate basis for assessing the ultimate impact of the tax cut on economic activity.

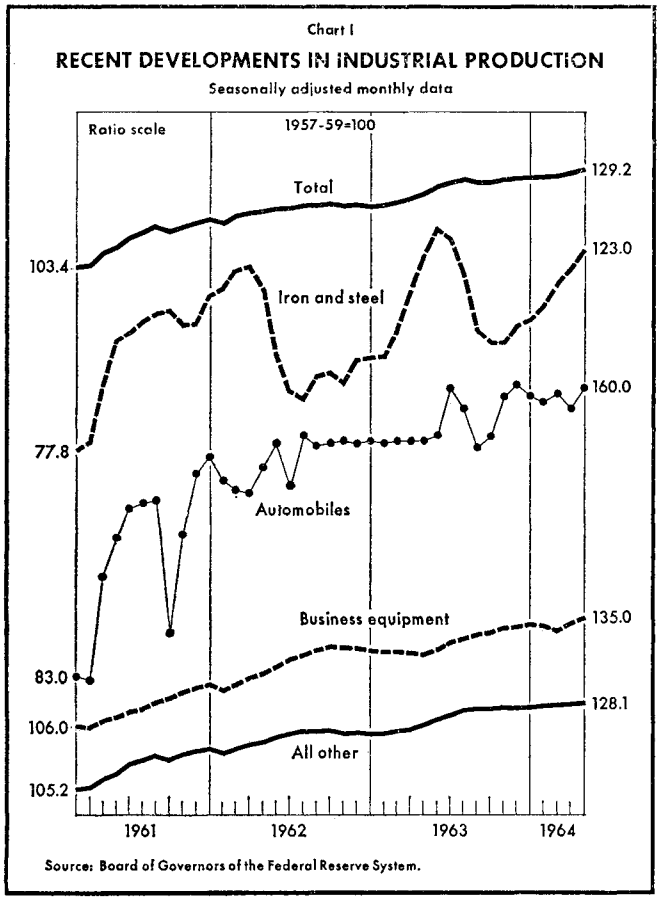
In April, industrial production, employment, and personal income showed the largest rises in several months. Retail sales, to be sure, edged down for the second month in a row, but such sales often show erratic movements, and appear to have risen somewhat in May after allowance for seasonal factors. Steel production in May appears to have been maintained at the already high April level, and weekly data suggest that auto output also remained about unchanged.

The prevailing atmosphere of confidence has not been accompanied, so far at least, by either a general speculative inventory build-up or by over-all inflationary price developments. Indeed, the broad indexes of prices have continued to exhibit substantial stability—a fact that may to some extent reflect continued excess capacity in several lines as well as unemployment still in excess of 5 per cent of the labor force. If further gains in economic activity cut

into these unused resources, price and wage stability may face a more severe test in the months ahead than has been experienced up to now.

PRODUCTION, ORDERS, AND EMPLOYMENT

After showing only relatively small month-to-month movements for almost a year, industrial production—as measured by the Federal Reserve Board's index—moved up a full percentage point in April to a record level of 129 per cent of the 1957-59 average (see Chart I). Increases in the production of two major components—iron and steel, and motor vehicles and parts—accounted for almost half the April gain, although all major sectors of the industrial economy shared in the advance. Output of business equipment climbed more than a point, suggesting rising outlays by business for capital goods, as overtime operations in the machinery industry reached their highest level in seven years. Production of consumer goods also rose in April, more than offsetting the small March decline.



The general gains throughout manufacturing production in April, moreover, were also reflected in higher output of electric and gas utilities and in the mining industry.

Partial May data suggest that, on a seasonally adjusted basis, steel ingot production as well as assemblies of new cars held at about the advanced April rate. Even with dealer inventories at record levels, automobile production schedules do not point to any decrease in the rate of assemblies in June. However, the assessment of possible additional gains in industrial production in the months ahead will be complicated by the relatively early completion—scheduled for July—of output of 1964 model cars. The steel industry has already experienced a slowdown in new orders from the auto industry, but over-all steel orders remain strong as a result of heavy broad-based demand, particularly by the construction industry and by manufacturers of heavy equipment.

Prospects for future gains in industrial activity received a strong boost from a rise to a record in new orders received by manufacturers of durable goods. The aerospace and primary metals industries contributed substantially to this advance, but gains were widespread throughout all major industries. In particular, new orders for machinery and equipment, a series closely related to business capital spending, posted a good rise. Moreover, with orders exceeding shipments, the backlog of total durable orders on the books of producers grew in April for the fourth month in a row.

The National Industrial Conference Board reported that new capital appropriations of major manufacturing companies edged a bit lower in the first quarter, but that such appropriations nevertheless remained at a very high level. Taking into account a sharp upward revision in the figure earlier reported for the fourth quarter of 1963, new appropriations have now been maintained for three quarters at levels not exceeded since the first quarter of 1956. The backlog of funds appropriated but not yet spent is continuing to mount, and since appropriations of manufacturing firms have tended to lead capital outlays by about six to nine months, prospects are excellent that the substantial gains in planned business spending for plant and equipment in 1964 reported by recent surveys will, in fact, be achieved.

Partly reflecting the April rise in industrial production, nonagricultural employment showed a further advance in that month: all major sectors of the economy, except construction and services, added to payrolls. The Census Bureau's household survey reflected the improved employment picture by recording a seasonally adjusted increase of 750,000 in the total number of persons employed, the largest monthly increase since April 1960. The gain, how-

ever, was primarily the result of increased part-time employment of women and reflected additions to the labor force. The number of unemployed also rose, although only slightly. Consequently, the April unemployment rate remained at the March level of 5.4 per cent. However, the long-term unemployment rate (fifteen weeks or more) declined to 1.2 per cent, the first clear movement below the 1.5 per cent level in two years.

CONSUMER SPENDING, RESIDENTIAL CONSTRUCTION, AND PRICES

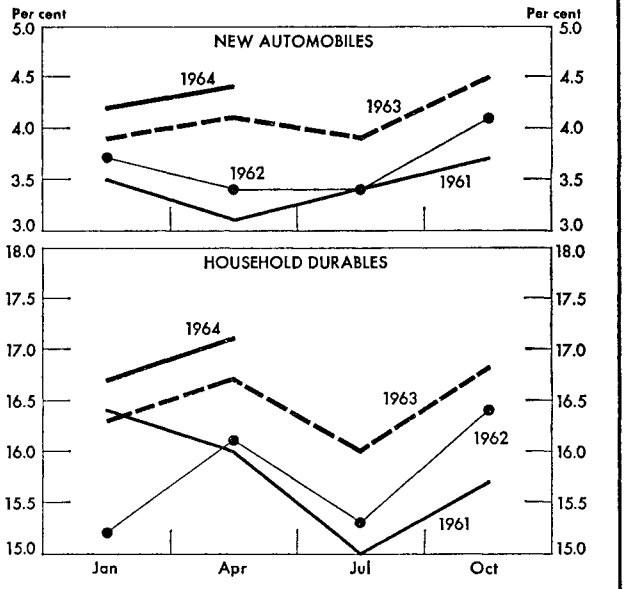
Retail sales, which had declined in March, receded slightly further in April but nevertheless remained close to the record February level. The April decline was concentrated entirely in nondurables, with sales of durable goods actually rising somewhat. Seasonally adjusted sales of domestically produced automobiles moved ahead in April, and preliminary data suggest no slackening in May. Rising disposable income in the hands of consumers—reflecting income gains as well as smaller Federal tax withholdings since the March tax cut—lend strong support to the prospect for further gains in consumer spending in the months ahead. This prospect is supported by the April Census Bureau Survey of Consumer Buying Intentions: plans to buy new cars and household durables were once again ahead of the previous year (see Chart II). Preliminary weekly data for May do, in fact, suggest some pickup in retail sales.

Residential construction activity remained as high in April as it had been in March and thus continues to be a factor of strength in general economic activity. The level of housing starts and new building permits likewise remains high, although both of these indicators fell in April. While month-to-month changes in these two series are highly volatile, the declines do underscore the need for caution in assessing the outlook for residential construction.

Broad measures of price behavior continue to exhibit near stability. Wholesale prices of commodities other than farm and food products were unchanged in April at below end-of-1963 levels and, on the basis of weekly data, appear to have remained unchanged in May. Wholesale prices of farm and food commodities declined in April and, on balance, may have edged down a bit further in May. A recent substantial decline in the Bureau of Labor Statistics index of spot raw industrial prices, moreover, ended more than six months of advance in that sensitive but somewhat erratic series. At the retail level, the consumer price index has continued to inch upward, climbing by 0.1 percentage point in both April and May. The over-all rise so far this year, however, has been only 0.2 per cent—well within the range of the moderate increases for similar periods experienced in recent years. Most recently, moreover, announcements of price reductions for specific goods (including color TV sets, some steel products, and aluminum sheets and plates) appear to have become more frequent than those of price advances. The business attitude on the pricing outlook is indicated by a recent survey of purchasing executives: many of these buyers do anticipate some upward price movement, but virtually all who see such a trend project only a slight to moderate updrift and expect price increases to be selective rather than general within various industries.

Chart II

CONSUMER INTENTIONS TO BUY NEW AUTOMOBILES AND HOUSEHOLD DURABLES WITHIN SIX MONTHS



Note: Buying plans are expressed as the ratio of the number of families who indicate they intend to buy to the total number of families in the survey.

Source: United States Department of Commerce, Bureau of the Census.

The Financing of Government Securities Dealers*

The United States Government securities market is one of the key financial markets in this country. In this market, the United States Treasury raises new money for Government operations and refinances outstanding securities. The Federal Reserve uses the market as the vehicle for its conduct of open market operations, one of the major instruments of monetary policy. And many groups of private investors use the Government securities market as a means of making adjustments in their liquidity positions and as an outlet for investment funds. In 1963, trading volume in United States Government securities totaled $429 billion (excluding direct acquisitions of new issues from the Treasury and redemptions of Treasury issues, which also run in the hundreds of billions of dollars).

The bulk of the transactions in this market is effected through a group of dealers (including both banks with dealer departments and nonbank dealer firms) who make markets by buying and selling securities for their own accounts. For such a market to function effectively, dealers must be willing and able to maintain large inventories of securities and thus to accommodate customers when there are no immediate offsetting transactions. With Government securities as collateral for loans, the dealers are able to rely very heavily on short-term borrowings to finance their inventories. Since the nonbank dealers' positions are carried largely on borrowed funds, the cost of financing is a major determinant of profits. The search for relatively cheap sources of financing is, therefore, a key aspect of the dealers' daily work. In fact, without access to a country-wide and financially attractive supply of borrowed funds, the dealers' ability to carry an inventory and make markets in Government securities would be seriously impaired and the Government securities market could not function as it does today.

A large portion of the dealers' borrowings are arranged on a day-to-day basis. The daily routine of arranging new loans and repaying outstanding loans has several important consequences. It influences (and is in turn influenced by) the terms on which banks and other lenders and borrowers adjust their liquidity positions. In addition, it redistributes bank reserves, provides a link between sectors of the money market, and helps transmit the effects of monetary policy throughout the country. Yet, the daily task of financing dealer inventories of Government securities is carried out so smoothly and unobtrusively that few persons are aware of the significance of these financing arrangements for the money market. To provide some perspective on the impact of dealer financing on the money market, this article describes dealer financing arrangements and the major sources of funds for dealers in the early 1960's.

The statistics used include all short-term financing of United States Government and Federal Agency securities arranged by bank and nonbank dealers who report to the Market Statistics Department of the Federal Reserve Bank of New York.[1] These statistics cover collateral loans (a type of financing under which the dealer retains title to the securities but transfers them to the lender or his agent as collateral for the term of the loan), repurchase agreements (an arrangement under which the dealer actually sells the securities but simultaneously commits himself to repurchase them at a price fixed at the time of the initial transaction), and "own bank funds" (money allocated to the dealer department of a dealer bank by the bank itself).

In response to changes in the relative cost and availability of funds, the nonbank Government securities dealers shift their financing among a wide variety of lenders, including New York City banks, other banks, nonfinancial corporations, agencies of foreign banks, state and local governments, insurance companies, and a number of other financial institutions. In addition, the Federal Reserve makes repurchase agreements with nonbank dealers when open market policy considerations make such contracts desirable. Bank dealers, on the other hand, tend to rely primarily on internal funds but may also utilize repurchase agreements

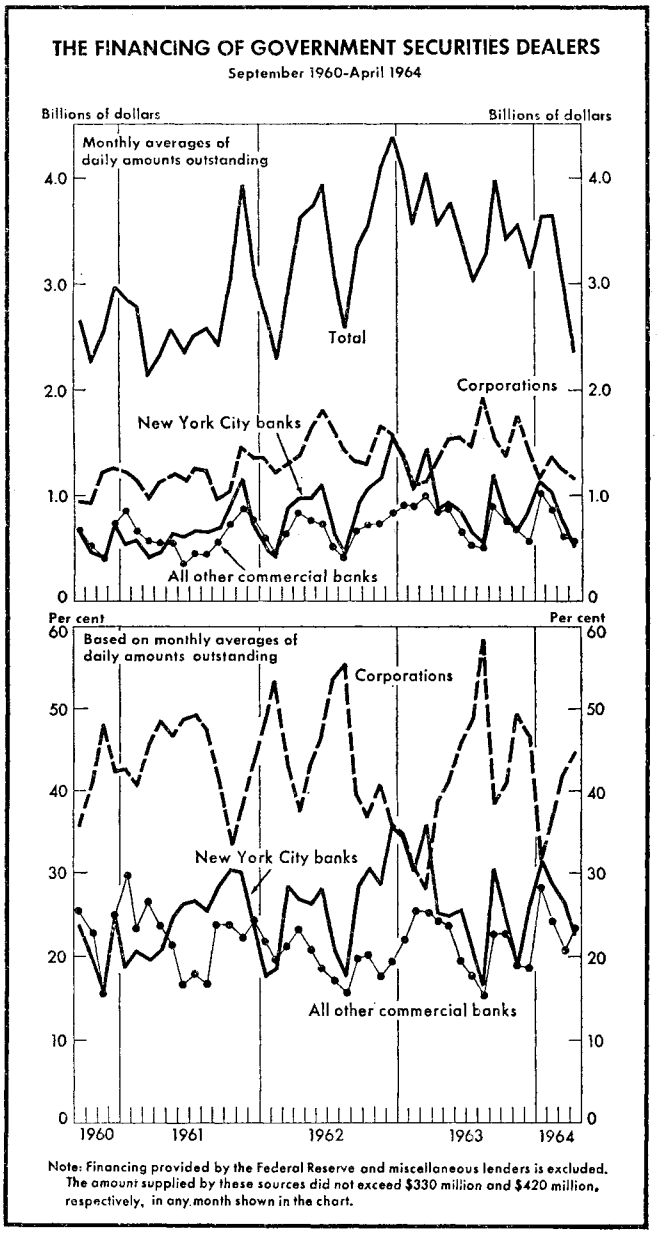
* Louise Freeman had primary responsibility for the preparation of this article.

[1] Since mid-1960 the Government securities dealers have been cooperating in a statistical program that has included the daily reporting of their positions, financing, and transactions. Some of the dealers had previously reported to the Securities Department of the New York Federal Reserve Bank. Most of the statistics in the article are released regularly by the Federal Reserve Bank of New York and published in the *Federal Reserve Bulletin.*

to attract low-cost funds from corporations and other lenders, as well as to accommodate their customers by providing them with an investment for temporarily idle funds.

The total volume of the dealers' daily financing requirements is large and highly volatile. Total dealer financing outstanding grew from a daily average of $2.7 billion in 1961 to $3.6 billion in 1963. In addition, the actual daily level of dealer financing ranged from a low of $1.7 billion to a high of $5.4 billion between September 1960 and December 1963. These sizable short-run variations in total financing are illustrated in the top panel of the accompanying chart, although the chart in fact smooths the fluctuations since monthly averages of daily data rather than actual daily figures are plotted. The variation in total financing that is shown in the chart reflects increases and decreases in dealers' positions, mainly in Treasury bills.

As a result of the sharp changes in total dealer financing and the constant search for lower costs by dealers and for better yields by lenders, the sources of dealer financing change from day to day. The greatest variations have occurred in financing supplied by New York City banks; the actual daily level of such financing has ranged from $2.3 billion to $179 million. On the same basis, financing from nonfinancial corporations also has fluctuated a good deal—from as much as $2.2 billion a day to as little as $620 million, while borrowing from banks outside New York City has fluctuated between $1.5 billion a day and $174



Note: Financing provided by the Federal Reserve and miscellaneous lenders is excluded. The amount supplied by these sources did not exceed $330 million and $420 million, respectively, in any month shown in the chart.

FINANCING OF GOVERNMENT SECURITIES DEALERS*

1961-63; annual averages of daily data

Distribution of financing	Amount outstanding (millions of dollars)			Share of total borrowing (per cent)		
	1961	1962	1963	1961	1962	1963
Total	2,712	3,364	3,558	100.0	100.0	100.0
By source of funds:						
New York City banks	671	890	941	24.7	26.5	26.4
Other banks	612	656	763	22.6	19.5	21.4
Nonfinancial corporations	1,171	1,462	1,467	43.2	43.5	41.2
Federal Reserve	49	59	114	1.8	1.8	3.2
Other†	208	297	274	7.7	8.8	7.7
By type of instrument:						
Repurchase agreements	1,716	2,132	2,242	63.3	63.4	63.0
Short‡	901	1,065	1,308	33.1	31.7	36.8
Long§	815	1,067	934	30.1	31.7	26.3
Collateral loans and own bank funds	996	1,232	1,316	36.7	36.6	37.0
By type of dealer:						
Bank‖	502	605	714	18.5	18.0	20.1
Nonbank	2,209	2,759	2,844	81.5	82.0	80.0

Note: Because of rounding, figures do not necessarily add to totals.

* Includes short-term financing for United States Government and Federal Agency securities.

† Includes mainly state and local governments, agencies of foreign banks, insurance companies, and other financial institutions.

‡ Repurchase agreements maturing in fifteen days or less.

§ Repurchase agreements maturing in sixteen days or more.

‖ Includes funds raised through repurchase agreements by dealer departments to finance their positions as well as "own bank funds".

million. This variation in the three largest sources of funds for dealers is also reflected in the monthly averages of daily data shown in the chart.

In the early 1960's, however, the short-run shifts among various sources of financing have tended to even out over a year. During the 1950's there had been a gradual shift in dealer financing away from New York City banks to other lenders and away from loans to repurchase agreements, as dealers gradually developed new sources of financing. This process was largely completed by the end of the decade. Thus, when annual averages of daily data are calculated, the distribution of dealer financing by source, by type of instrument, and by type of dealer is found to have been relatively stable during 1961-63 (see table). Among the major sources of funds, nonfinancial corporations provided over 40 per cent of the dealers' financing requirements in each of the three years; the New York City banks furnished roughly 25 per cent; other banks supplied around 20 per cent; and the Federal Reserve and other lenders contributed the rest. In each year, repurchase agreements accounted for about five eighths (or $1.7 billion to $2.2 billion per day) of all funds raised by dealers, while collateral loans and internal funds of bank dealers together averaged about three eighths (or $1.0 billion to $1.3 billion per day). About four fifths of the total represented financing of nonbank dealers and one fifth the financing of bank dealers.

THE CHARACTERISTICS OF DEALER FINANCING IN 1963

In deciding where and how to finance his position, a dealer has to consider several characteristics of the loan. What type of funds will be provided? When will the loan mature? Will he have the right of substitution of collateral? What will it cost him?

TYPE OF MONEY PROVIDED. There are two types of money that Government securities dealers can borrow: Federal funds and New York Clearing House funds. When a dealer obtains a Federal funds loan, he receives a draft on the reserve balances of the lender's bank at its Federal Reserve Bank. A transfer of reserve balances occurs on the same day as the loan, and the dealer therefore can use the money immediately. If the dealer obtains a loan in Clearing House funds, on the other hand, he receives a certified check on a New York City bank. This check must be presented at the New York Clearing House, and payment out of reserve balances of the drawee bank is not effected until the next day. Hence, the funds cannot be used until that day, except in transactions requiring settlement in Clearing House funds.

Before the mid-1950's, New York City banks made collateral loans to nonbank dealers only in Clearing House funds, but three of the five major New York City banks making dealer loans now regularly extend both Federal funds loans and Clearing House loans. In recent years, Federal funds loans outstanding have accounted for over half of the total collateral loans of New York City banks. Moreover, the daily change in Federal funds loans usually has been much larger than the change in Clearing House loans. Similarly, agencies of foreign banks in New York City make dealer loans in both Federal funds and Clearing House funds. On the other hand, virtually all loans or repurchase agreements with other lenders holding deposits in New York City are made in Federal funds. Almost invariably, borrowings from out-of-town lenders (both banks and corporations) are Federal funds loans, because the funds are transferred the same day over the Federal Reserve wire facilities. Repurchase agreements with the Federal Reserve always involve Federal funds.

The use of both Federal funds loans and Clearing House loans arises from the fact that both types of payment are used in United States Government securities transactions. The more recent practice of paying for short-term securities in Federal funds arose in part because it facilitates immediate adjustments in bank reserve or portfolio positions. Naturally, it is convenient for a dealer to do his financing by the same method by which the securities transaction is settled. Nevertheless, it is possible to use a Clearing House loan to finance purchases settled in Federal funds (and conversely). This usually involves the dealer in a purchase and sale of Federal funds as well as in the loan arrangement, but sometimes actual or expected rate differentials between rates on Clearing House and Federal funds loans or between present and future rates on Federal funds make this extra work worthwhile.[2]

MATURITY. Dealer loans also differ with respect to maturity. Most loans and some repurchase agreements (particularly repurchase agreements with banks outside New York City) are day-to-day or demand obligations that have no specified maturity and can be terminated at

[2] In order to finance a Federal funds purchase with a Clearing House loan, the dealer must buy Federal funds with the Clearing House check received in the loan. In other words, he exchanges the Clearing House check for another New York City bank's draft on its reserve balance at the Federal Reserve Bank of New York. Of course, in this case the dealer has to pay for the Federal funds at the market rate, as well as for the dealer loan. This extra cost, however, is usually offset when the loan is repaid, if the Federal funds rate has not changed. When the dealer sells the securities, he normally receives Federal funds, which he also sells; and he uses the Clearing House check received in the sale of Federal funds to repay the Clearing House loan.

any time by either borrower or lender. The New York City banks, however, rarely make use of this right on collateral loans, preferring instead to discourage loan renewals by raising their loan rates. Other lenders and the dealers do reduce demand loans at their discretion, although the other party to the transaction is usually given notice early in the day.

Collateral loans with specified maturities of several days are sometimes available, especially during Treasury financings; and many repurchase agreements (particularly those with corporations) have specific maturity dates ranging from one day to several months. The statistics on repurchase agreements, however, provide only two maturity categories, those with a current maturity of fifteen days or less and those maturing in sixteen days or more.[3] Long repurchase agreements—those with sixteen days or more to maturity—have constituted between one quarter and one third of total dealer financing during the three complete years for which such data are available (see table). The rest of dealer financing, consisting of short repurchase agreements, collateral loans, and own bank funds, has almost always had a maturity of fifteen days or less. Most of the long repurchase agreements have been with nonfinancial corporations; a few have been with banks and other lenders.

The Federal Reserve makes repurchase agreements with nonbank dealers for specified periods, ranging from one to fifteen calendar days. United States Government securities which mature in two years or less are acceptable collateral for such contracts, and the dealer cannot substitute collateral.[4] The Federal Reserve determines the original maturity of the repurchase agreement; either party may terminate the contract before maturity. In practice, the Federal Reserve seldom exercises its right to terminate repurchase agreements before maturity. In contrast, other lenders ordinarily do not allow the dealers to terminate repurchase agreements with specified maturity dates before maturity, but substitution of collateral may be permitted.

RATES. The basic rate in the cost structure of nonbank dealers is the rate (or rates) on collateral loans at New York City banks. Every morning each of the five New York City banks regularly making dealer loans posts at least two dealer loan rates: one for renewals and one for new loans.[5] On any given day the rates may vary from bank to bank, and occasionally a bank may change its rate during the day. These rates are available to nonbank Government securities dealers on loans secured by United States Government securities or by other collateral (such as Federal Agency securities, negotiable time certificates of deposit, and bankers' acceptances) as stipulated by each bank at any given time.

The rates charged by the New York City banks are usually higher than the rates available from other lenders. Rates charged by these banks also are frequently above the yield the dealers are earning on the collateral, so that dealers have a so-called "negative carry". This situation also occurs occasionally, but to a lesser degree, with regard to funds obtained from other sources.

The rate on funds obtained through repurchase agreements with private lenders is a matter of negotiation between dealer and lender. Rates are not posted, nor are they published anywhere. Both lenders and dealers, however, can get some idea of the market by "shopping around", and the dealers also get a feel for the market as lenders accept or reject the rates they offer. Moreover, the money market framework within which rates on repurchase agreements are set—the Federal funds rate, the dealer loan rates at New York City banks, and yields on Treasury bills—is known to all market participants.

A nonbank Government securities dealer can usually satisfy his credit needs from the New York City banks as a group at their posted rates, although the volume of loans he can obtain from any one bank will be limited. Accordingly, the maximum rate a nonbank dealer would pay to another lender on a demand, or one-day, repurchase agreement depends on the dealer loan rates at New York City banks minus the additional costs involved in obtaining the loan elsewhere (see section on "Other Costs"). For a bank dealer, the maximum rate would usually be the discount rate. The minimum rate a dealer would find is, of course, the yield the lender could obtain on alternative investments. For commercial banks this alternative is the sale of Federal funds. For business corporations there are few, if any, suitable alternative one-day investments; but for slightly longer periods they can buy short Treasury bills, finance company paper, or similar securities.

Within these limits, the rates paid by a dealer on repurchase agreements of the same maturity may differ on any given day because of the size of the loan, the lender's willingness to accept longer term collateral or to allow substitution of collateral, the time of day the loan is arranged, or the other business the lender has to distribute. From one day to the next, the relationship of the rate on day-to-day repurchase agreements to the basic

[3] The dividing line between short and long repurchase agreements is arbitrary; this division was selected in part because all repurchase agreements with the Federal Reserve mature in fifteen days or less.

[4] The Federal Reserve also makes repurchase agreements (with a maximum maturity of fifteen days) with nonbank dealers on bankers' acceptances maturing in six months or less.

[5] Sometimes a bank may post two rates for new loans, one for Clearing House loans and the other for Federal funds loans.

money market rates will vary with the dealers' financing requirements and the supply of funds available from lenders. In periods when the dealers expect the costs of day-to-day money to remain unchanged, the rate offered for a repurchase agreement of a few days' duration may be the same as that for a demand, or one-day, agreement.

Rates on longer repurchase agreements with specific maturity dates—agreements that are made primarily with corporations—are usually based on the yield on Treasury bills with a maturity close to that of the repurchase agreement. The rate on a long repurchase agreement would almost invariably be lower than the dealer's yield on the bills serving as collateral, since the dealer would prefer to finance securities involving a negative carry on a day-to-day basis so that they can be sold readily. The spread between the rate on the repurchase agreement and the return on bills of comparable maturity mainly depends on the yield accruing to the dealer on the collateral, his expectations regarding yields and borrowing costs, the supply of loanable funds, and the dealer's financing requirements. If the dealer is not allowed to substitute collateral, the rate paid the lender would probably be lower than otherwise.

The rate charged by the Federal Reserve on repurchase agreements with Government securities dealers is usually equal to the discount rate—it may not be lower than the discount rate of the New York Reserve Bank or the issuing rate on the latest issue of three-month bills, whichever is lower; there is no prescribed maximum.[6] A rate other than the discount rate of the Federal Reserve Bank of New York has, in fact, been charged on only fifty-three days between 1955 and 1963.

The rates dealers pay on collateral loans with domestic commercial banks outside New York and New York agencies of foreign banks are somewhat below rates charged by New York City banks, but are probably higher than rates on repurchase agreements. The procedure varies for charging dealer departments of commercial banks for own bank funds and for the proceeds from repurchase agreements. Such charges, if allocated, probably would not exceed the Federal Reserve discount rate.

OTHER COSTS. In addition to interest, the dealers have a number of other expenses in arranging financing, including costs of locating funds and clearing charges. Usually they also have to meet margin requirements.

Most of the nonbank dealers channel their securities transactions through a clearing bank. This bank accepts and makes payment for the securities purchased by the dealer and, in effect, makes a temporary (or day) loan to the dealer until he is able to arrange overnight financing. If the dealer arranges a Clearing House loan when he in fact needs Federal funds, the clearing bank may also provide him with the necessary Federal funds. Similar services are provided when the dealer sells or refinances securities. Generally, the fee for these services is a flat dollar amount per million dollars of securities delivered. This clearance fee—which is imposed each time securities are delivered—applies to outright sales, repurchase agreements, and some collateral loans with out-of-town banks, but not to collateral loans with New York City banks. For any one dealer the fee varies with the type of securities involved (lowest for bills and highest for bonds). The fee also varies among dealers, essentially because of differences in the cost of servicing the accounts; dealers with the largest dollar volume of trading pay the least per dollar of transactions. In the case of a one-day repurchase agreement or loan these fees add a substantial amount to the cost of financing, but they decline as a percentage of carrying costs, of course, as the maturity of the repurchase agreement increases.

In all financing arrangements, except for the occasional unsecured loan, the dealers transfer collateral or securities to the lenders. In fact, the dealers usually provide the lenders with collateral valued at more than the amount of the loan—i.e., they provide margin—and thus tie up some of their capital. Margin requirements on collateral loans vary among banks, but at all banks they increase with the maturity of the collateral. On loans at New York City banks, for example, the margin is zero or close to zero on the shortest securities, while even on the longest bonds the dealers rarely put up margin of more than 3 per cent.

The margin provided to private lenders on a repurchase agreement probably tends to be less than that on collateral loans with New York City banks. Indeed, some corporations value Treasury bills at par for repurchase agreements, which in effect gives them a negative margin since bills are discount securities and trade below par. Other corporations require no margin and value bills at market prices. When margin is provided, it tends to increase with the maturity of the security sold under repurchase agreement. The Federal Reserve always requires margin for repurchase agreements with dealers.

REPURCHASE AGREEMENTS WITH CORPORATIONS

Nonfinancial corporations, one of the most important sources of financing for Government securities dealers,

[6] For the latest published reference, see the "continuing authority" directive of the Federal Open Market Committee in the 1963 *Annual Report* of the Board of Governors, pp. 48-49.

supply funds almost entirely through repurchase agreements. In 1963, funds provided by corporations averaged $1.5 billion a day, or 41 per cent of all financing of bank and nonbank dealers, as shown in the table. To corporations, repurchase agreements with Government securities dealers are a liquid asset peculiarly adapted to certain of their needs. To the dealers, repurchase agreements with corporations are a relatively cheap source of financing, which also provides their corporate customers with a desirable asset.

REASONS WHY CORPORATIONS MAKE REPURCHASE AGREEMENTS. Corporations hold cash and interest-bearing liquid assets for a number of reasons. First, they need cash or liquid assets that can readily be converted into cash to meet income and other taxes, dividends, payrolls, and other scheduled business expenditures. Since the timing and the approximate amount of many of these payments are known well in advance, corporations can accumulate assets in anticipation of the payments as income is earned. Corporations may also accumulate liquid assets in periods when their net cash flow is large, thus building up a general liquidity reserve against unspecified needs.[7] Sometimes the proceeds of bond or stock issues may be temporarily invested in liquid assets until the funds are needed in the business. In addition, interest rates may influence decisions to hold liquid assets in a number of ways. For example, relatively high interest rates may induce corporations to hold more of their liquid assets in the form of earning assets; interest rate differentials may influence their choice among earning assets; and expectations of rising rates may cause them to shorten maturities or increase cash holdings.

Corporations may hold repurchase agreements for any of these reasons, but repurchase agreements have advantages over other assets which make them an especially suitable form in which to accumulate funds for specific payments.[8] First, the maturity of the repurchase agreement can be tailored to the corporation's payment schedule, thus eliminating the market risk implicit in holding liquid assets that would have to be sold. This factor is especially attractive when a corporation expects prices of money market assets to fall. Second, repurchase agreements can be arranged whenever the corporation has the funds. Finally, they may provide relatively attractive yields.

Direct purchases of Treasury securities are sometimes less desirable than repurchase agreements, because a corporation cannot always obtain a maturity date which fits its schedule of payments. To be sure, tax anticipation bills —which can be turned in for payment of Federal income taxes—are usually available for March and June tax dates and occasionally also for September and December tax dates; special bills maturing on the fifteenth of January, April, July, and October were available in the period under review; and a new series of bills with month-end maturities was introduced in August 1963. The regular weekly Treasury bills, however, mature only on Thursdays. Furthermore, a corporation in need of an investment outlet may not always be able to buy bills with desirable maturities at going rates in the secondary market.

Finance company paper, another alternative short-term investment, has some of the advantages of repurchase agreements. For example, the corporation can select the maturity date, within the range offered by the finance companies. Moreover, corporations can obtain finance company paper whenever wanted, since finance companies prefer to regulate the volume of paper by adjusting their rates rather than by refusing to sell paper. Also, the yields on finance company paper are higher than those on repurchase agreements except when finance companies are trying to discourage corporations from buying paper. There is, however, a modest increase in credit risk with finance company paper and, in contrast to repurchase agreements, short maturities (less than five days) are seldom available.

Negotiable time certificates of deposit (C/D's), issued by commercial banks, have been available since early 1961 either on original issue or in the secondary market. The corporation can obtain any maturity date it wishes if the C/D is purchased on original issue from a bank, but usually the rates have not been competitive with rates on close substitutes on maturities under three months or at times six months. Shorter C/D maturities can be purchased in the secondary market at better yields, but the amounts available are usually limited and the desired maturity date may be unobtainable.

That corporations do indeed use repurchase agreements as a means of accumulating funds to meet specific payments is shown by the sharp decline in repurchase agreements with corporations on the major tax and dividend dates and on other payment dates. Corporate repurchase agreements have also moved with sales of manufacturing corporations, probably reflecting the tendency for corporate outlays to vary with sales.

[7] In the 1950's, for example, corporations built up these liquidity reserves in business recoveries when retained earnings and depreciation tended to exceed expenditures on inventories and plant and equipment. In the later stages of expansion and during recessions, when capital expenditures tended to surpass retained earnings and depreciation allowances, liquid assets were reduced to meet expenditures.

[8] It should be recognized, however, that the corporation assumes the credit risk, remote though it may be, that the dealer will fail to live up to his contract to repurchase the securities.

THE DEALERS' ATTITUDE TOWARD REPURCHASE AGREEMENTS WITH CORPORATIONS. From the point of view of the nonbank dealers the major advantage of short repurchase agreements with corporations is, of course, their low cost, compared with loans from New York City banks. Bank dealers may also at times find repurchase agreements with corporations the cheapest or most acceptable source of funds.

In the case of long repurchase agreements, the cost is sometimes less than the cost of day-to-day repurchase agreements and of collateral loans. In addition, long repurchase agreements with the privilege of substitution of collateral may be an especially attractive method of financing when dealers expect day-to-day borrowing costs to rise. There are also, however, long repurchase agreements that are not regarded as a financing method at all but rather as a transaction in which the dealer acquires securities he would not otherwise hold in order to accommodate a customer who wishes to arrange a repurchase agreement. In such a case, of course, the dealer expects to make a profit on the spread between the yield on the securities and the rate he pays the customer.

In making long repurchase agreements the dealer assumes a price risk, particularly if the repurchase agreement runs for several weeks or more, if the maturity of the collateral appreciably exceeds that of the repurchase agreement, and if substitution of collateral is not permitted. In such a case the dealer is unable to sell the collateral should its price fall, so that a loss may be inevitable. Dealers, therefore, prefer to have the right of substitution of collateral in a long repurchase agreement, which gives them the chance to shorten the maturity of the underlying collateral if they see prices declining. Even without the right of substitution, however, the dealers can sell the securities for future delivery or sell short, thus hedging against possible losses although at additional cost.

FINANCING FROM NEW YORK CITY COMMERCIAL BANKS

The commercial banking system as a whole supplies the Government securities dealers with a larger volume of funds than corporations, but the banking system is not composed of a homogeneous group of lenders. The views and actions of New York City banks in regard to dealer loans differ sharply from those of most banks outside New York City, as do the characteristics of financing provided by these two groups of banks. In addition, the impact of dealer loans from banks on the money market is not the same in the two cases. For these reasons, New York City banks and other banks are considered as separate groups of lenders. It should also be noted that the aggregate data on financing obtained from all New York City banks reflect by and large the behavior of those five banks which regularly make loans to nonbank dealers, and that of the dealer banks. (The latter groups partially overlap.)

New York City banks alone provided dealers with a daily average of $0.9 billion in 1963, as the table shows. Although this was a larger dollar volume than in 1961 and 1962, it represented approximately the same proportion of total dealer financing requirements as in those years—roughly one quarter. The funds supplied by New York City banks included collateral loans to nonbank dealers, a very small amount of repurchase agreements, and funds allocated by the New York City dealer banks to their own dealer departments.

DEALER LOANS AND RESERVE ADJUSTMENT. For commercial banks, loans to nonbank Government securities dealers are an integral part of reserve management—the task of adjusting short-term bank assets and liabilities to keep cash reserves at the desired or required levels. Member banks of the Federal Reserve System must maintain a fixed percentage of their time deposits and net demand deposits[9] in the form of either vault cash or balances at their Federal Reserve Bank. These requirements have to be covered on an average basis over a week for reserve city banks and over two weeks for other banks. Since reserve balances are constantly fluctuating, each bank must make offsetting adjustments in short-term assets and liabilities to restore the required or desired level of reserves. The means most suitable for such adjustments are Federal funds (balances at the Federal Reserve Banks), Treasury bills, dealer loans, correspondent balances, and, if and when appropriate, borrowing from the Federal Reserve Banks.

The choice among these alternatives will depend on their relative costs, the length of time the surplus (or deficiency) is expected to last, the availability of the instruments, and the preference of the bank. The return on dealer loans is frequently equal to, or higher than that of, other reserve adjustment media (usually with the exception of longer maturities of Treasury bills). For banks as well as for corporations, dealer loans have the merit of being suitable for either one-day or longer term investment. In contrast, the transactions cost of buying and selling Treasury bills—reflected in the dealers' spread between bid and asked prices—discourages the use of Treasury bills for very short-run adjustments, while the

[9] Gross demand deposits minus cash items in process of collection and minus demand balances at other domestic banks.

costs of repeating paper work every day is a disadvantage of using Federal funds for reserve adjustments lasting several days. The possibility of making dealer loans, however, may be limited when dealer positions are low. Moreover, dealer loans are usually limited, in practice, to the larger banks because dealers naturally prefer arranging for a small number of large loans.

THE NEW YORK CITY BANKS' POLICIES TOWARD DEALER LOANS. When the New York City banks that are active in dealer financing seek to adjust their reserve positions through dealer loans, they do it primarily by changing their new and renewal dealer loan rates. After considering its expected reserve position, the structure of money market rates, and the dealers' probable needs for loans, each of the five major lending banks decides every morning whether to encourage or discourage dealer loans. The dealer loan rate is set accordingly: when it is well above the expected Federal funds rate, for example, dealer loans will be discouraged. (The Federal funds rate represents the cost to the bank, if it has to borrow to finance the dealers, and the alternative yield it gives up in undertaking such financing; and it also approximates the rate the dealers pay on short-term repurchase agreements with other lenders.)

Even if a bank has set rates that hopefully will discourage dealer loans, it stands ready to make loans at these rates. Some of the New York City banks may at times limit the volume of loans they are prepared to make at posted rates, but at least one bank is almost always willing to make an unlimited volume of Federal funds loans at its posted rates to the dealers as a group (while nevertheless limiting the volume of loans to any one individual dealer—as banks do with any borrower). The New York City banks, in other words, are willing to make dealer loans, even though such loans may cause reserve deficits that have to be offset by borrowing or by selling money market assets. A rise in dealer loans at the New York banks does, in fact, often result in an increase in their borrowings in the Federal funds market as reserve losses are offset. Similarly, a reduction in dealer loans frequently has the opposite effect. In such cases, the five New York City banks thus accommodate dealers "at the expense" of their own reserve positions, although at rates profitable to themselves.

NEW YORK CITY BANKS AS LENDERS OF LAST RESORT. As a result, the New York City banks as a group have come to serve as the lender of last resort for Government securities dealers. Collateral loans at New York City banks are a considerable convenience for the dealers, primarily because loans can be arranged even late in the day and because collateral is easily recovered from these banks. Indeed, to facilitate cash trading—payment and delivery on the day the contract is concluded—most dealers reserve part of their financing for New York City banks even if funds are readily available at lower costs elsewhere. In addition, as noted earlier, the transactions costs on collateral loans at New York City banks are relatively low. Nevertheless, short-term money is usually available to the dealers outside the New York City banks at rates low enough to compensate for the higher clearing costs and lesser convenience of such financing.

As a result, the normal procedure each morning is for the nonbank dealers to borrow as much as possible of the day's requirements (above a certain minimum) from lenders other than New York City banks as long as costs are below the rates charged by these banks. The residual is then financed at New York banks. Sometimes, of course, the renewal rate or new loan rate of some of the New York banks will be low enough to induce dealers to borrow from them early in the day without searching for other lenders. As a general rule, however, the New York City banks are residual lenders to whom the dealers turn when other lenders cannot provide enough money to finance a large increase in total borrowings or to offset periodic withdrawals of funds by corporations. The similarity between movements in total dealer borrowing and borrowing from New York City banks is illustrated in the top panel of the chart on page 108, while the bottom panel shows that the share of dealer financing obtained from New York City banks has been high when reliance on corporations has been low.

OTHER SOURCES OF FUNDS

OTHER COMMERCIAL BANKS. Banks outside New York City have also been a major source of funds for Government securities dealers, supplying a daily average of from $0.6 billion to $0.8 billion (20 to 23 per cent) of dealer financing in each of the last three years (1961-63). More than half of these funds were provided through repurchase agreements, while the remainder represented funds allocated by the Chicago dealer banks to their dealer departments and collateral loans to nonbank dealers.

The willingness of banks outside New York City to supply funds to Government securities dealers depends primarily on the reserve position of the banks and on the relative return on dealer loans. Those banks outside New York that make any dealer loans at all are usually adjusting their own positions (and hence may be termed "adjusting" banks) because they change the volume of dealer loans in order to restore reserves to the desired level. In contrast to New York City banks, these banks typically do not accommodate the dealers by increasing dealer loans if they expect such an increase to force them to borrow

more heavily. There are some out-of-town banks, however, which do borrow in the Federal funds market to maintain a minimum level of dealer loans. With any given amount of short-term surplus reserves, the volume of dealer loans made by these banks will vary with the relative yield and availability of such loans, compared with other reserve adjustment media (as noted previously).

As a result of the banks' attitudes toward dealer loans, combined with the dealers' readiness to borrow outside New York, dealer financing from banks outside New York has increased when the banks experienced temporary reserve gains—for example, at midmonth when float increases. In addition, funds supplied by banks outside New York have increased when the dealers' borrowing requirements rose (see the top panel of the chart). At such times the dealers intensified their efforts to locate banks outside New York City with surplus reserves, and they probably paid the banks higher rates relative to rates obtainable on other reserve adjustment media than at other times.

THE FEDERAL RESERVE. The Federal Reserve, at its own discretion, makes repurchase agreements available to the nonbank Government securities dealers when the System wants to prevent undue tightening of money market conditions in periods of seasonal pressures or to satisfy temporary reserve needs. In addition, the Federal Reserve has temporarily supplied somewhat longer term reserve needs through repurchase agreements on occasions when outright purchases of bills might have had a particularly strong downward impact on rates. When dealers' inventories are low or funds are available elsewhere at lower rates, however, the Federal Reserve may not be able to use repurchase agreements as it desires: dealers may not take the money offered or may terminate the agreements prior to maturity. On a daily average basis, the Federal Reserve supplies only a small part of dealers' needs. Such repurchase agreements were at a record level in 1963 yet averaged only $114 million a day (3 per cent) of total dealer borrowing.

OTHERS. All lenders other than those discussed so far supplied dealers with an average of $274 million a day in 1963, or slightly less than 8 per cent of their needs. About one quarter of this financing took the form of collateral loans, which probably came mostly from New York agencies and branches of foreign banks. These agencies lend to Government securities dealers when they have excess funds. Also in the category of other lenders are state and local governments, insurance companies, and other financial institutions. For these lenders, dealer loans may be an alternative to holding idle cash over a week end, a means of investing cash in anticipation of fixed payments, a temporary investment for the proceeds of a security issue, or a way of waiting out expected changes in interest rates. These considerations resemble those that influence corporations.

THE IMPACT OF DEALER FINANCING ON THE MONEY MARKET

The characteristics of the dealer financing mechanism make it a primary channel for the daily redistribution of short-term funds throughout the economy and a major link among the geographical and institutional sectors of the money market. Dealer financing results in heavy daily money market activity, since dealers change their positions —and hence their financing requirements—every day in response to Treasury financings, Federal Reserve activity, customers' needs, or their own appraisal of the market. In addition, because of the short average maturity of outstanding loans, either the dealers or the lenders can initiate a heavy turnover of outstanding loans on any given day. The fact that dealer financing activity is likely to redistribute funds among a wide variety of lenders clearly contributes to the important role of such financing in the money market. The dealers' sensitivity to costs, furthermore, insures that they will take advantage of the short-term nature of the loans and the diversity of the lenders to obtain low-cost funds, thus making the money market as a whole a more sensitive tool for both borrowers and lenders.

An illustration will help to show how dealer financing redistributes bank reserves on a daily basis. If bank reserves are flowing from the New York banks to those outside the City, the New York City banks can post relatively high rates on dealer loans, which encourage the dealers to arrange new loans or refinance existing loans with other lenders. If they succeed in arranging new financing outside New York and are therefore able to repay loans at New York City banks, a reflux of reserves into New York will be caused by dealer activity.

The process by which the dealer loan mechanism helps spread the effects of Federal Reserve open market operations throughout the banking system is very similar. For example, when the Federal Reserve sells Governments to the dealers to offset the usual midmonth expansion of bank reserves arising mainly from an increase in float, the dealers will have to finance these securities or resell them. Either action soaks up the excess funds that the Federal Reserve was seeking to absorb and transmits the impact of the Federal Reserve's sales to banks throughout the country. Furthermore, at this time the dealers may also refinance securities previously purchased with banks outside New York which hold temporary reserve surpluses.

Since dealer loans are a major outlet for excess funds, changes in the demand for dealer loans or in the supply of funds seeking temporary investment heavily influence closely related sectors of the money market, such as the markets for Federal funds and Treasury bills. A sharp increase in dealers' positions, for example, may cause an increase in the New York City banks' dealer loans even at higher lending rates, thus leading these banks to buy more Federal funds and place upward pressure on the Federal funds rate. And dealers who have unusual difficulty in finding financing may intensify their efforts to sell Treasury bills, thus perhaps producing interest rate increases in this area.

The Manager of the System Open Market Account gives close attention to developments in dealer financing in deciding what actions are necessary to implement the policy directives of the Federal Open Market Committee. Traders at the Federal Reserve Bank of New York talk to the nonbank dealers frequently throughout the day to follow their progress in meeting financing requirements. These reports on the availability and cost of money from banks and other lenders provide the Manager with one indication of the balance being struck in the money market between the demand for bank reserves and the supply of them. Altogether, the scale of Government securities dealers' financing needs and the flexibility of their financing arrangements make the dealer borrowing mechanism a factor of prime importance in influencing and reflecting the state of the money market.

The Money Market in May

A steadily firm tone was evident in the money market in May. Average member bank borrowing from the Federal Reserve Banks was somewhat higher than in April, although it remained within the range of other recent months. The reserve positions of the major money market banks—which had been relatively comfortable around the end of April following large Treasury redeposits of tax receipts in Class C bank Tax and Loan Accounts—came under increased pressure during much of the month, as Treasury balances at these banks were drawn down. Toward the close of the month, however, these pressures diminished. Almost all trading in Federal funds was at 3½ per cent, while rates posted by the major New York City banks on new and renewal call loans to Government securities dealers were predominantly in a 3¾ to 4 per cent range. Offering rates for new time certificates of deposit issued by the leading New York City banks generally changed little, although some banks at times raised their rates temporarily to add to, or retain, their deposits. The range of rates within which such certificates traded in the secondary market rose somewhat during the month. Rates on other leading short-term money market instruments were largely unchanged until the closing days of the month, when rates on various maturities of directly placed finance company paper and commercial paper were increased by ⅛ of a per cent. Treasury bill rates moved narrowly in May, with rates on shorter maturities tending to rise and those on longer maturities tending to decline.

In the market for Treasury notes and bonds, prices moved higher during the first half of May as the success of the Treasury's May refunding and statements of officials strengthened market confidence in the likelihood of near-term stability of interest rates. Around midmonth, prices of intermediate-term issues declined slightly while longer term obligations edged upward irregularly; in the latter part of the month, prices rose once again in most maturity areas. Prices of seasoned corporate and tax-exempt bonds held steady at the beginning of May, and then rose modestly before steadying again toward the end of the month.

BANK RESERVES

Market factors absorbed excess reserves on balance from the last statement period in April through the final

statement week in May. Member banks lost reserves, primarily as a result of a seasonal expansion in currency outside banks and through the effects of a routine Treasury interest payment to System Account.

System open market operations provided reserves over the period as a whole, partly offsetting reserves absorbed by market factors. System outright holdings of Government securities rose on average by $834 million from the last statement period in April through the final statement week in May, while System holdings of Government securities under repurchase agreements fell by $81 million. System net holdings of bankers' acceptances declined by $31 million. From Wednesday, April 29, through Wednesday, May 27, System holdings of Government securities maturing in less than one year contracted by $1,302 million, while holdings maturing in more than one year expanded by $2,185 million; this shift largely reflected the effects of the Treasury's May refunding operation and the passage of time.

CHANGES IN FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, MAY 1964

In millions of dollars; (+) denotes increase, (—) decrease in excess reserves

Factor	Daily averages—week ended				Net changes
	May 6	May 13	May 20	May 27	
Operating transactions					
Treasury operations*	+ 41	— 103	— 28	+ 88	— 2
Federal Reserve float	— 119	— 13	+ 424	— 325	— 33
Currency in circulation	— 95	— 212	— 4	+ 31	— 310
Gold and foreign account	— 15	— 4	+ 16	+ 12	+ 9
Other deposits, and other Federal Reserve accounts (net)†	+ 10	+ 24	— 255	— 51	— 272
Total	— 179	— 339	+ 154	— 245	— 609
Direct Federal Reserve credit transactions					
Open market operations					
Purchases or sales‡					
Government securities	+ 595	+ 324	— 139	+ 104	+ 834
Bankers' acceptances	—	— 2	— 1	— 1	— 4
Repurchase agreements					
Government securities	+ 82	— 100	— 49	— 14	— 81
Bankers' acceptances	+ 7	— 14	— 9	— 11	— 27
Member bank borrowings	+ 76	+ 103	— 16	— 90	+ 73
Other loans, discounts, and advances	—	— 2	—	+ 1	— 1
Total	+ 759	+ 310	— 265	— 10	+ 794
Member bank reserves					
With Federal Reserve Banks	+ 580	— 29	— 111	— 255	+ 185
Cash allowed as reserves§	— 269	+ 45	+ 121	+ 68	— 35
Total reserves§	+ 311	+ 16	+ 10	— 187	+ 150
Effect of change in required reserves§	— 290	+ 96	— 4	+ 114	— 84
Excess reserves§	+ 21	+ 112	+ 6	— 73	+ 66
Daily average level of member bank:					
Borrowings from Reserve Banks	211	314	298	208	258‖
Excess reserves§	289	401	407	334	358‖
Free reserves§	78	87	109	126	100‖

Note: Because of rounding, figures do not necessarily add to totals.
* Includes changes in Treasury currency and cash.
† Includes assets denominated in foreign currencies.
‡ May also include redemptions.
§ These figures are estimated.
‖ Average for four weeks ended May 27, 1964.

THE GOVERNMENT SECURITIES MARKET

The market for Treasury notes and bonds was bolstered in May by the favorable reception accorded the Treasury's refunding operation[1] and by optimism regarding the prospects for the short-run stability of interest rates. During the early part of the month, trading activity in the May refunding issues strongly favored the newly offered 4¼ per cent bonds of 1974, which attracted a good demand from investors. Offerings of "rights"—the maturing issues eligible for exchange—were modest and were readily absorbed by investor and professional demand. On May 15, the settlement date for the refunding, approximately $10.1 billion of the $10.6 billion of the maturing notes and certificates eligible for conversion was exchanged for the two issues which had been offered by the Treasury. Subscriptions for the new 4 per cent notes of November 1965 and for the new 4¼ per cent bonds of May 1974 totaled $8.6 billion and $1.5 billion, respectively. Approximately $0.5 billion of the three maturing issues (or about 12.6 per cent of the $4.2 billion held by the public) was redeemed for cash. Since the maturing securities were unusually widely dispersed among many types of holders, the rate of attrition was not considered high and actually fell somewhat short of earlier market expectations.

Prices of outstanding notes and bonds rose irregularly in fairly active trading during the first half of May. Growing confidence in current interest rate levels—following statements by officials that, in view of prevailing supply and demand factors, there seemed to be no immediate prospect for higher interest rates—prompted an increase in professional short-covering operations and stimulated investment demand as well. Buying favored the 2½ per cent wartime issues and the new 4¼ per cent bonds but moderate offerings of other outstanding issues, which arose partly on swaps into the new bonds, were also quickly absorbed. In the longer term sector, offerings were light, and prices continued to move irregularly higher in response to a continuing demand from investors and a limited market supply. Around midmonth, some hesitancy developed and prices of intermediate issues receded a bit, as demand tapered off and higher price levels prompted professional offerings. This reaction was short-lived, however, and during the latter part of May the market tone once again strengthened, in part because of increased public fund interest in intermediate maturities. At the close of the month, prices of short- and intermediate-term Treasury notes and bonds

[1] The terms of this refunding, announced late in April, were discussed in last month's *Review*, p. 86.

were generally 4/32 to 13/32 above end-of-April levels, while longer term obligations were 10/32 to 26/32 higher.

In the market for Treasury bills, rates fluctuated narrowly over much of the month in a range slightly above the lower rate levels prevailing toward the end of April. At the beginning of May, reinvestment demand for bills from sellers of rights to the Treasury's refunding fell short of market expectations, and bill rates edged higher since demand from other sources was also relatively limited. As confidence in the current structure of interest rates became more widespread, however, both investor and professional demand increased considerably. Scarcities began to develop in some maturity areas, and bill rates generally receded from May 6 through midmonth. In the latter part of the month, activity contracted somewhat and only small mixed changes in rates on outstanding bills occurred. The Treasury's decision to add $100 million to the six-month bills sold in each of the last two regular weekly auctions of the month had little impact on the market. Rates on most outstanding bills were 1 basis point higher to 9 basis points lower on balance during the month, while the yield spread between three- and six-month bills declined to 12 basis points.

At the last regular weekly auction of the month held on May 25, average issuing rates were 3.475 per cent for the new three-month issue and 3.595 per cent for the new six-month bill—3 basis points higher and 2 basis points lower, respectively, than the rates of the final auction in April. The May 27 auction of $1 billion of new one-year bills resulted in an average issuing rate of 3.719 per cent, compared with an average issuing rate of 3.705 per cent on the comparable issue sold in April. The newest outstanding three-month bill closed the month at 3.47 per cent (bid), as against 3.45 per cent at the end of April, while the newest outstanding six-month bill was quoted at 3.59 per cent (bid) on May 28 (the final business day of the period), unchanged from April 30.

OTHER SECURITIES MARKETS

A confident tone emerged in the markets for corporate and tax-exempt bonds in early May, largely in reaction to the same factors that strengthened the Government securities market during this period. Prices of seasoned corporate and tax-exempt bonds held generally steady, although heavy previously accumulated dealer inventories of new bonds prompted several syndicate terminations. The price concessions that resulted on several recent issues rekindled investor interest, thus facilitating the placement of unsold balances. At the same time, the tax-exempt sector was encouraged by the contracting calendar of scheduled state and local flotations. In the latter part of May, a number of new corporate bond offerings moved slowly, as investors resisted the lower reoffering yields resulting from aggressive underwriter bidding. The tax-exempt market closed with prices firm, partly because of the moderate near-term calendar. Over the month as a whole, the average yield on Moody's seasoned Aaa-rated corporate bonds was unchanged at 4.41 per cent, while the average yield on similarly rated tax-exempt bonds declined by 4 basis points to 3.08 per cent. (These indexes are based on only a limited number of issues.)

The volume of new corporate bonds floated in May amounted to approximately $470 million, compared with $375 million in the preceding month and $535 million in May 1963. The largest new corporate bond issue marketed during the month consisted of $100 million A-rated (Standard and Poor's) 4⅝ per cent finance company debentures maturing in 1989 and not redeemable for eight years. Offered to yield 4.675 per cent, the debentures were accorded a good investor reception. New tax-exempt flotations in May totaled approximately $625 million, as against $1,125 million in April 1964 and $830 million in May 1963. The Blue List of tax-exempt securities advertised for sale declined slightly by $3 million during the month to $594 million on May 28, the final business day of the period. The largest new tax-exempt bond issue during the period was a $100 million state flotation, consisting of $50 million of school building bonds reoffered to yield from 2.25 per cent in 1966 to 3.40 per cent in 1988 and $50 million of water development bonds reoffered to yield from 2.95 per cent in 1974 to 3.625 per cent in 2013. Both offerings were Aa-rated (Moody's) and were well received by investors. Other new corporate and tax-exempt issues marketed in May were accorded mixed receptions by investors.

Fiftieth Anniversary of the Federal Reserve System—Early Response of the Commercial Banks*

During 1914, as the Federal Reserve System was about to be launched, one of the major questions was how well the System would be accepted by prospective member banks. There existed considerable evidence that not all important commercial banking interests were in accord with the principles of the Federal Reserve Act. While the measure was being discussed in Congress in 1913, an apparent consensus among bankers had favored the earlier Aldrich proposal, which had pointed toward a more centralized institution with greater representation for banking interests. Even Benjamin Strong, then president of Bankers Trust Company, New York, and shortly to become the first Governor of the Federal Reserve Bank of New York, had expressed serious misgivings about the Federal Reserve System as it had emerged from Congressional debate.

In addition to disagreements on principles, there were also practical questions of potential disadvantages of membership, such as the absence of interest payments on reserves deposited with a Federal Reserve Bank and the expected adoption of a par check collection mechanism among member banks by the Federal Reserve System. Under the earlier National Banking Act and existing state banking laws, a considerable portion of required reserves could be—and usually were—deposited in earning accounts. Furthermore, the smaller banks in particular looked with disfavor at the possibility of par check collection, since many obtained a sizable portion of their earnings from exchange fees deducted from the face value of the checks sent to them by other banks for payment. These banks were also apprehensive over the additional supervision of the Federal Reserve authorities, while both large and small state-chartered banks felt further uncertainty as to whether or not they could legally withdraw from the System once they had accepted membership.

There were, of course, powerful factors working toward broad bank membership. These included the service facilities that the new System was about to develop, and the knowledge that membership contributed to an over-all strengthening of the commercial banking structure. Of even greater importance was potential access to the Federal Reserve "discount window". The previous absence of a "lender of last resort" had often led to embarrassment for individual banks and had contributed to damaging money panics affecting the entire financial system.

The first evidence of the response of the banking community proved highly encouraging. By April 2, 1914, no less than 7,471 national banks had applied for stock in the Federal Reserve Banks, leaving only 15 who chose to relinquish their charters rather than join the System. Since national banks held about half of the banking system's deposits, acceptance of membership by this overwhelming majority was of critical importance.

The pace of entry proved considerably slower among the estimated 9,000 state banks and trust companies who met the Reserve Act's capital requirements for membership. By the end of 1916, 37 state-chartered institutions had joined the System and 119 more had become members by converting or reorganizing as national banks. Meanwhile, however, evidence was accumulating that membership did provide tangible benefits to offset some of the apparent disadvantages. Moreover, the passage of an amendment to the Reserve Act on June 21, 1917—when the number of state-chartered members had risen to 53—assured state members that they could withdraw if they desired. Between that date and the year end 197 banks entered the System, and in 1918 an additional 686 became members.

By the fall of 1919, five years after the inauguration of the Federal Reserve System, it was clear that commercial banks generally supported the System. Its membership included almost one third of all commercial banks, and these members held over 70 per cent of all deposits in such banks. Today, a half century later, 45 per cent of all commercial banks, accounting for over 83 per cent of commercial bank deposits, are Federal Reserve members.

* The sixth in a series of historical vignettes appearing during the System's anniversary year.