

1914 FIFTIETH ANNIVERSARY 1964

FEDERAL RESERVE BANK OF NEW YORK



MONTHLY REVIEW

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The Business Situation

Strikes in the automobile industry had a significant impact on most business indicators in October and November, but these are now settled and the underlying strength of the domestic economy appears sufficient, on balance, to support further expansion. Work stoppages arising out of labor-management disputes are always difficult to evaluate in terms of their impact on business trends, current and future. While strikes are in progress, output, sales, and payrolls in the industry involved are of course lower than would otherwise be the case, and when settlements are finally reached there may be attempts to make up for lost production; only after some passage of time are these distortions gradually removed. In addition, both the strikes and developments after their settlement may influence production and employment in other industries not directly involved, and these influences may have secondary effects on prices, inventory behavior, and expectations.

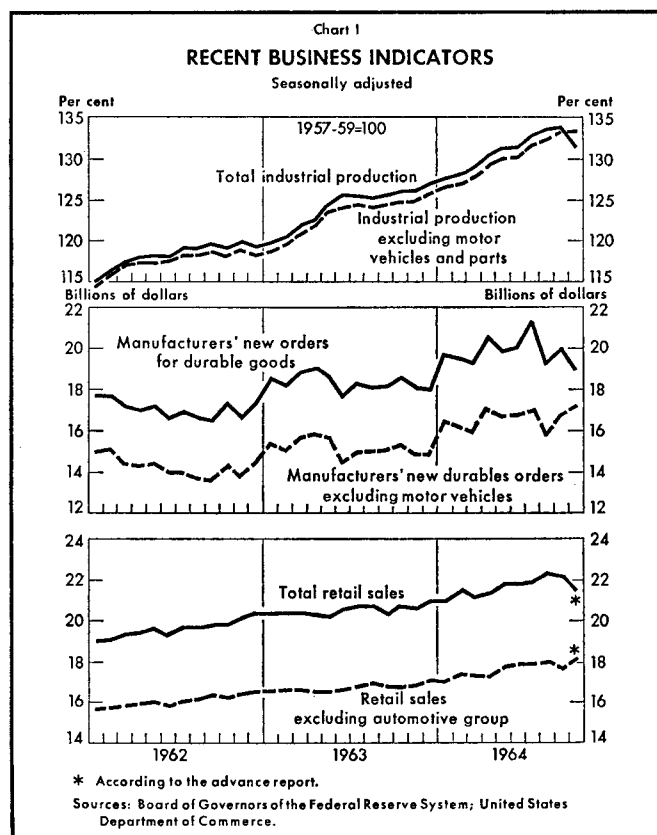
Whatever the net effect of all these forces may be, it remains true that with the settlement of the strikes at both General Motors and Ford the entire automotive industry is now producing cars and allied products at peak rates and should provide a substantial push to economic activity in the months to come. At the same time, the economy is moving into the Christmas season amid expectations of record sales even after allowing for seasonal influences. The Census Bureau's October survey of near-term consumer buying plans, moreover, would generally seem to support the outlook for further improvements in sales performance at retail outlets over the coming weeks. Aside from strike effects, personal income and employment have continued to advance. Leading indicators of activity in the residential construction industry in September and October, moreover, appeared somewhat stronger than had been the case in earlier months. The latest Department of Commerce-Securities and Exchange Commission survey of businessmen's capital spending plans, conducted in November, also points to further near-term strength. In particular, the survey indicated that total business spending for plant and equipment for the first half of 1965

would reach \$48.7 billion at an annual rate, up \$2.0 billion from the rate now expected for the final quarter of 1964.

While the settlements in the automobile industry have removed some significant uncertainties from the economic picture, other problems—including important labor negotiations—still lie ahead. The most immediate question concerns the possibility of an East and Gulf Coast dock strike on December 20. In the somewhat more distant future, there is, of course, the possibility of a strike in the steel industry after April 30. The results of these various negotiations are certain to have an important bearing on the outlook for a continued orderly economic advance and for price stability. With regard to recent price movements, the consumer price index in October edged up by 0.1 percentage point to reach 108.5 per cent of the 1957-59 average. For the year through October, the consumer price index advanced by 1 per cent from the average for the final quarter of the year before, compared with a rise of 1.2 per cent in the corresponding 1963 period. Specific price announcements related to industrial commodities continue mostly on the up side, and weekly data for November suggest that the industrial component of the wholesale price index moved up further in that month, following a modest advance the month before.

PRODUCTION, NEW ORDERS, AND EMPLOYMENT*

Reflecting the lost production at General Motors, the Federal Reserve Board's seasonally adjusted index of industrial production dropped by 2.3 percentage points in October to 131.7 per cent of the 1957-59 average (see Chart 1). Excluding the substantial drag exerted by the motor vehicles and parts component, however, the overall index would have shown a slight rise. Iron and steel production rose by 1.3 per cent, reflecting broadly based demands. Despite the decline in truck production, total output of business equipment advanced by 1 per cent to a new high. Weekly data for November suggest that auto-



mobile assemblies made a strong recovery toward the end of the month and that steel ingot production continued to expand at a modest rate.

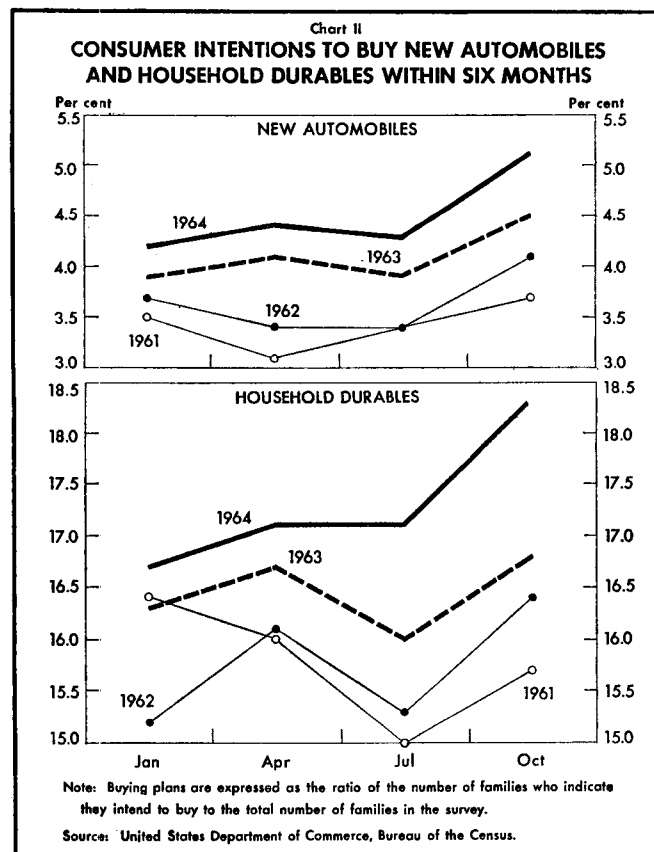
New orders booked by durables manufacturers registered a 2.1 per cent decline in October, following a modest 2.9 per cent gain the month before (see Chart I). The October fall in these orders reflected a sharp drop in orders for motor vehicles and parts, also attributable to the labor disputes at General Motors. Excluding the motor vehicles component, new orders edged up slightly, largely however on strength from the aircraft and parts component which tends to show somewhat erratic month-to-month movements. With new orders above shipments in October, the backlog of unfilled durables orders advanced by 1.9 per cent (seasonally adjusted) to mark the tenth month in a row in which an increase has been posted.

Nonfarm payroll employment in October moved down by 66,000 persons, seasonally adjusted, to 59.0 million. The October decline represented the first time since November 1963 that this series had turned down. The substantial 252,000 drop in manufacturing employment, which accounted for the fall in the total, was for the most part centered in the transportation equipment producing in-

dustry, again reflecting the wider impact of the strike at General Motors. Meanwhile, employment with state and local governments continued its long-sustained advance, and the service and trade groups also showed further moderate gains. In November, according to the household survey, both total employment and the civilian labor force rose, with the gain in the number of people finding jobs considerably larger than the expansion in the civilian labor force. As a result, the aggregate unemployment rate fell to 5.0 per cent, which has been bettered only once since February 1960. The unemployment rate for married men also showed marked improvement in November, dropping to 2.5 per cent. Teen-agers, however, remain a serious problem; their unemployment rate stood at 14.9 per cent in November, compared with 14.4 per cent the month before.

RESIDENTIAL CONSTRUCTION AND RETAIL SALES

Outlays for residential construction in November declined by 0.4 per cent (seasonally adjusted), thus continuing the weakening first noted in the second quarter. The latest



forward-looking indicators of housing activity, however, suggest the possibility that the downtrend of the past several months may now be leveling out. In September, nonfarm housing starts posted a modest 2.3 per cent gain after having moved down for two months in a row. In October, moreover, nonfarm housing starts rose by 8.9 per cent and building permits issued posted a slight increase following a considerable September decline.

Retail sales in October fell by 2.9 per cent, following a much smaller movement on the down side the month before (see Chart I). The October decline was fully accounted for by a 25 per cent drop in the automotive component, which in turn reflected the limited availability of new cars. As is also apparent from the chart, retail sales excluding the

automotive group posted a good gain (2.7 per cent). Unit sales of new automobiles did appear to recover somewhat in November, but it will take a few more weeks to assess fully the post-strike strength of automobile demand. Consumer buying plans, at any rate, suggest strength. The Census Bureau's mid-October survey of such plans shows that the proportion of consumers planning to buy new cars within the next six months was markedly above the proportion for the second quarter as well as considerably above the corresponding 1963 period (see Chart II). The chart also shows that the proportion of consumers planning to purchase household durables within the next six months was even more substantially above earlier readings than in the case of cars.

The Money and Bond Markets in November

The high points of interest in the money and bond markets in November were important monetary policy changes on both sides of the Atlantic, and a massive cooperative international effort in defense of the pound sterling—all of which occurred in the week beginning November 23. The pound sterling had been under pressure in the international markets for some time, and this pressure became particularly intense on Friday, November 20. Against this background, the Bank of England on Monday morning, November 23, raised the bank rate from 5 per cent to 7 per cent in order to stem further speculative pressures. Yields in United States markets promptly rose on Monday as market participants, taken by surprise by the British action, generally anticipated that the Federal Reserve would follow sooner or later with an increase in the discount rate.

After the close of business that afternoon, the Board of Governors of the Federal Reserve System announced approval of actions by the Boards of Directors of the Federal Reserve Banks of New York, Boston, Philadelphia, Chicago, and St. Louis in raising these Banks' discount rates from 3½ per cent to 4 per cent, effective November 24. On subsequent days, the other seven Federal Reserve Banks followed suit: the Federal Reserve Bank of Atlanta on November 25; the Federal Reserve Banks of Dallas, San Francisco, Richmond, and Cleveland on November 27; and the Federal Reserve Banks of Minneapolis and Kansas

City on November 30. The discount rate change was the first since July 1963, when Federal Reserve discount rates were raised from 3 per cent to 3½ per cent. The Board of Governors also announced that effective November 24 it was increasing the maximum rates that member banks are permitted to pay on savings deposits and time deposits, while the Federal Deposit Insurance Corporation stated that these new ceilings would also apply to insured non-member banks.

The Board noted that these actions were taken "to maintain the international strength of the dollar". The moves were "aimed at countering possible capital outflows that might be prompted by any widening spread between interest rates in this country and the higher rates abroad and also at ensuring that the flow of savings through commercial banks remains ample for the financing of domestic investment". (See box below for the full statement.)

On Tuesday, November 24, yields on Treasury bills, notes, and bonds rose further early in the day but then steadied at the higher rate levels. The increase in the Bank of Canada's rate to 4¼ per cent from 4 per cent had no perceptible effect on the United States Government securities market. Sizable speculative pressure against the pound sterling reappeared on the same day, however, and early on Wednesday yields again increased in the United States Government securities market as investors sold on a mod-

erate scale. Subsequently, trading dried up as market participants waited to see what further official actions might be forthcoming. Around 2 p.m. Wednesday, the Federal Reserve System and the United States Treasury issued a statement noting that arrangements had been made to provide

a \$3 billion fund to defend sterling. (See box below for the full statement.) Following this announcement, the atmosphere in the market for Treasury securities improved, although remaining cautious, and prices and yields moved narrowly over the remainder of the month.

**STATEMENT ON FEDERAL RESERVE BANK DISCOUNT RATE AND REGULATION Q CHANGES
ISSUED BY THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM ON NOVEMBER 23**

The Federal Reserve System took action today on two fronts to maintain the international strength of the dollar.

The Board of Governors in Washington approved actions by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Chicago, and St. Louis increasing the discount rates of those Banks from 3½ per cent to 4 per cent, effective tomorrow (Tuesday, November 24, 1964). The change was the first since July 1963, when Federal Reserve discount rates were increased from 3 to 3½ per cent.

The Board of Governors also increased the maximum rates that member banks are permitted to pay on savings deposits and time deposits—including certificates of deposit—to the following levels:

1. On savings deposits, 4 per cent, regardless of the time the funds have been on deposit. The maximum rates previously permissible were 3½ per cent on savings deposits in the bank for less than one year and 4 per cent on those on deposit for one year or more.

2. On time deposits and certificates of deposit, 4 per cent for maturities of less than 90 days and 4½ per cent for all longer maturities. The maximum rates previously permissible were 1 per cent for maturities of less than 90 days, and 4 per cent for longer maturities.

The actions were taken following a rise in official and market rates in London, where an increase in the bank rate from 5 to 7 per cent was announced by the Bank of England today. They also follow recent advances in rates on the European continent.

The Federal Reserve actions were aimed at countering possible capital outflows that might be prompted by any widening spread between interest rates in this country and the higher rates abroad and also at ensuring that the flow of savings through commercial banks remains ample for the financing of domestic investment.

* * *

**STATEMENT ON THE DEFENSE OF STERLING, ISSUED BY THE FEDERAL RESERVE SYSTEM AND
THE UNITED STATES TREASURY ON NOVEMBER 25**

Eleven countries and the United Kingdom today made arrangements providing \$3 billion to back up Britain's determination to defend the pound sterling.

Today's funds are in addition to the \$1 billion drawing the United Kingdom will obtain from the International Monetary Fund at the end of this month under an existing stand-by.

Austria, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, and the United States, joined by the Bank for International Settlements, moved quickly to mobilize a massive counterattack on speculative selling of the pound.

The International Monetary Fund drawing, which can have a maturity up to three years, will enable the British to pay off all outstanding short-term credits from central banks, including the Federal Reserve. The currency swap arrangement with the Federal Reserve System has been raised by \$250 million to \$750 million, and a \$250 million credit has been made available by the United States Export-Import Bank. (These amounts are included in the total package of \$3 billion.)

Earlier in the month—during the period which preceded the official actions noted above—the money market had been generally firm, and most Treasury bill rates had moved narrowly. Prices of Government notes and bonds continued to rise in the beginning of November, following indications in October that a change in the British bank rate was unlikely at that time. Later, they backed off on professional profit-taking and subsequently moved within a narrow range, reflecting widespread market confidence that domestic economic forces were not likely to disturb the existing structure of rates over the near term.

Movements in the prices of corporate and tax-exempt bonds roughly paralleled those of Government securities during November. Prices moved irregularly higher prior to the change in the British bank rate, dropped on the news of official action abroad and at home, and steadied at the lower price levels as the month drew to a close.

THE MONEY MARKET AND BANK RESERVES

The tone of the money market was consistently firm during the first three weeks of November, with very little trading in Federal funds at rates below the $3\frac{1}{2}$ per cent discount rate. Around midmonth, Federal funds traded predominantly at $3\frac{3}{4}$ per cent on several days as major New York City banks became strong bidders for funds, in part to meet the heavy financing needs of Government securities dealers, while "country" banks built up sizable reserve excesses. Dealer loan rates posted by the major New York City banks over the three-week period were generally in a $3\frac{3}{4}$ to 4 per cent range, though the top of the range rose to $4\frac{1}{8}$ per cent after midmonth. Offering rates for new time certificates of deposit as well as the secondary market rates on such deposits showed little change over the three-week period, and rates on bankers' acceptances remained at about the October level.

After the change in the discount rate and in Regulation Q, money market rates adjusted upward. The effective rate on Federal funds rose to 4 per cent, although not before it had dipped below $3\frac{1}{2}$ per cent late in the statement week ended November 25 as country banks drew down the excess reserves piled up in the preceding week. After this period of temporary ease, dealer loan rates posted by the major New York City banks moved up to a range of $4\frac{1}{8}$ to $4\frac{3}{8}$ per cent. Several New York City banks announced increases in the rates they would pay on negotiable time certificates of deposit, as well as on savings deposits. By the month end, dealers in bankers' acceptances had raised their rates by $\frac{1}{4}$ of a per cent, making the rate on 1- to 90-day unendorsed acceptances $4\frac{1}{8}$ per cent (bid). On November 25, commercial paper dealers increased their

rates on prime 4- to 6-month paper by $\frac{1}{8}$ of a per cent to $4\frac{1}{8}$ per cent (offered). Late in the month, the major sales finance companies raised their rates on 30- to 89-day directly placed paper by $\frac{1}{8}$ of a per cent to $3\frac{3}{8}$ per cent (offered).

Reflecting the ebb and flow of money market pressures, weekly average member bank borrowings from the Federal Reserve Banks fluctuated during November between a high of \$590 million and a low of \$159 million. In the early part of the month nation-wide reserve availability contracted, mainly as a result of an unexpected strength in member bank required reserves. After the November 11 (Veterans Day) holiday net reserve availability improved somewhat, but country banks built up unusually high levels of excess reserves in the week ended November 18. Confronted with a decline in the available supply of Federal funds at a time when dealer financing was exerting pressure on the money market banks, the reserve city

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

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

Factor	Daily averages—week ended				Net changes
	Nov. 4	Nov. 11	Nov. 18	Nov. 25	
"Market" factors					
Member bank required reserves*	- 305	+ 124	- 40	- 131	- 352
Operating transactions (subtotal)	- 633	- 407	+ 204	+ 91	- 745
Federal Reserve float	- 380	+ 77	+ 251	+ 174	+ 142
Treasury operations†	+ 115	+ 87	- 47	+ 20	+ 185
Gold and foreign account	+ 15	- 16	+ 8	- 50	- 43
Currency outside banks*	- 206	- 516	- 1	+ 11	- 712
Other Federal Reserve accounts (net)‡	- 196	- 50	- 7	- 63	- 316
Total "market" factors	- 938	- 283	+ 164	- 40	- 1,097
Direct Federal Reserve credit transactions					
Open market instruments					
Outright holdings:					
Government securities	+ 731	+ 29	+ 27	+ 189	+ 986
Bankers' acceptances	+ 2	+ 1	+ 1	+ 2	+ 6
Repurchase agreements:					
Government securities	+ 69	+ 246	- 106	- 90	+ 125
Bankers' acceptances	+ 20	- 12	- 13	+ 33	+ 28
Member bank borrowings	+ 246	- 49	+ 163	- 431	- 71
Other loans, discounts, and advances...	-	- 1	+ 1	-	-
Total	+ 1,068	+ 214	+ 80	- 318	+ 1,044
Excess reserves*	+ 130	- 69	+ 244	- 358	- 53
Daily average levels of member bank:					
Total reserves, including vault cash*...	21,211	21,018	21,302	21,075	21,152‡
Required reserves*	20,770	20,646	20,688	20,817	20,730‡
Excess reserves*	441	372	616	258	422‡
Borrowings	476	427	590	159	413‡
Free reserves*	- 35	- 55	26	99	9‡
Nonborrowed reserves*	20,735	20,591	20,712	20,916	20,739‡

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

* These figures are estimated.

† Includes changes in Treasury currency and cash.

‡ Includes assets denominated in foreign currencies.

§ Average for four weeks ended November 25, 1964.

banks turned to the Federal Reserve "discount window" to fill their residual needs. Subsequently, as over-all reserve availability improved and the supply of Federal funds from country banks expanded in the second week of their reserve settlement period, member bank borrowings from the Reserve Banks fell appreciably in the final statement week of the month. Over the four-week period as a whole the weekly average of System outright holdings of Government securities rose by \$956 million, while average holdings of Government securities under repurchase agreements increased by \$125 million. Average System holdings of bankers' acceptances, both outright and under repurchase agreement, expanded by \$34 million during the period. From Wednesday, October 28, through Wednesday, November 25, System holdings of Government securities maturing in less than one year rose by \$1,034 million, while holdings of issues maturing in more than one year increased by \$28 million.

THE GOVERNMENT SECURITIES MARKET

The upsurge in prices of Government notes and bonds, which had developed in mid-October, reached its high watermark just after Veterans Day, and prices receded somewhat thereafter. Contributing to the price firmness in the early part of the month was the continuing belief that, over the near term, there was not likely to be any increase in interest rates abroad requiring higher domestic rates. In addition, the temporary slowdown in economic activity, caused by the interruption of automobile production and forecasts by some economists of less business buoyancy in 1965, led a number of market participants to feel that economic forces might work in favor of lower interest rates over the months ahead. In this environment, broad investment demand—both outright and on tax swaps—was supplemented by professional purchases, and prices moved higher in active trading. By November 12, prices of most issues maturing in five years or more were $\frac{1}{2}$ to $\frac{1}{4}$ higher than they had been on October 30, and many issues stood at their peak prices of the year. At the higher price levels, investment demand slackened and profit-taking developed as professionals appeared to conclude that the advance had about run its course. Prices of coupon issues declined gradually around midmonth, and then fluctuated narrowly through Friday, November 20.

On Monday morning, November 23, following the announcement of the increase in the British bank rate, prices of most intermediate- and long-term Treasury issues initially dropped $\frac{1}{2}$ to $\frac{1}{4}$, as the market sought a new trading level. Activity was light and largely professional in character, however, as customer selling failed to develop and

some demand subsequently appeared at the lower price levels. The increase in the discount rates of five Federal Reserve Banks, announced after the close of business Monday afternoon, contributed to further price reductions of $\frac{1}{2}$ to $\frac{1}{4}$ Tuesday morning, but prices steadied and closed the day above their lows. On Wednesday, November 25, selling by banks and other investors exerted pressure on prices, especially in maturities of under five years. As time went on that same day, the severity of the pressure being experienced by the pound sterling in the exchange markets became more evident. Trading in Treasury issues ebbed as participants withdrew until they could better assess developments. The announcement of the \$3 billion credit being made available to the United Kingdom brought a quick improvement in bond market atmosphere; trading expanded, and prices rose. Thereafter, prices moved narrowly and, at the end of the month, prices of Government notes and bonds were generally $\frac{1}{2}$ to $\frac{1}{4}$ below end-of-October levels.

The Treasury bill market had an optimistic tone at the beginning of the month, which then gave way to a somewhat more hesitant atmosphere around midmonth. In the early part of the month, there was good demand for scarce shorter maturity bills—particularly issues coming due in November and December. By November 12, rates in this maturity area had declined moderately from their end-of-October levels while rates on longer bills had fluctuated narrowly. Investor demand contracted somewhat in the period after November 12, and dealers were willing sellers as high financing costs associated with the firm conditions that had developed in the money market made their inventories more burdensome. As a result, bill rates generally rose, particularly in the shorter maturity area where rate declines had been most pronounced earlier in the month.

On November 10 the Treasury announced that it would auction on November 17 \$1.5 billion of 210-day tax anticipation bills to be dated November 24, 1964 and to mature on June 22, 1965. Since an offering of this magnitude had been generally expected by the market, the announcement produced hardly a ripple in rates on outstanding bills. Under the terms of the offering, commercial banks were permitted to make 50 per cent of their payments for the new bills through credit to Treasury Tax and Loan Accounts. The bills were sold at an average issuing rate of 3.639 per cent and traded thereafter around a 3.79 per cent rate, as banks sold bills in the expectation that the losses incurred would be more than offset by the value of the deposits acquired.

Following the November 23 interest rate action by the United Kingdom, Treasury bill rates initially rose 10 to 24 basis points as the market adjusted to this new factor affecting the interest rate outlook. Bidding in the regular weekly

auction that same day, November 23, was quite cautious, resulting in an average issuing rate of 3.758 per cent on the new three-month bill, up nearly 16 basis points from the rate set in the preceding week's auction. Following the announcement of $\frac{1}{2}$ of a per cent rise in the discount rates at five Federal Reserve Banks after the close of business Monday, bill rates rose further on Tuesday before steadying. The Treasury's sale that day of \$1 billion of new one-year bills resulted in an average issuing rate of 4.068 per cent, up 28 basis points from the rate set in the preceding monthly auction. On Wednesday, November 25, the bill market was affected by the nervousness generated by the pressure on sterling, but recovered after the special \$3 billion credit package was announced. Thereafter, the higher cost of financing exerted a continued upward pull on bill rates, and at the last regular weekly auction of the month, held on November 30, average issuing rates were 3.868 per cent for the new three-month issue and 4.030 per cent for the new six-month bill; these rates were 30 and 31 basis points higher, respectively, than the average rates in the final weekly auction in October. The newest outstanding three-month bill closed the month at 3.84 per cent (bid), compared with 3.55 per cent (bid) at the end of October, while the newest outstanding six-month bill was quoted at 4.00 per cent (bid) at the end of November, compared with 3.71 per cent (bid) on October 30. The closing rates on the outstanding three- and six-month bills were the highest since March 1960.

OTHER SECURITIES MARKETS

Prior to the bank rate increases by the Bank of England and the Federal Reserve, the markets for corporate and tax-exempt bonds continued to display the basically confident tone that had developed the month before. In the corporate sector, where the volume of new and recent public bond flotations remained extremely light, a steady investor demand confronted scarcities in supply and prices edged higher. Prices also moved upward in the tax-exempt sector on fairly good demand. Following the announcement on November 23 of the increase in the British bank rate, and in response to growing uncertainty over the international financial situation, prices of corporate and tax-exempt bonds declined. The tax-exempt sector was encouraged, however, by the upward revision of maximum rates which most commercial banks are permitted to pay on savings and time deposits, apparently in anticipation of increased bank buying of tax-exempt issues. In the closing days of the month, a steadier tone developed in both the tax-exempt and corporate markets. Over the month as a

whole, the average yield on Moody's seasoned Aaa-rated corporate bonds rose by 1 basis point to 4.44 per cent, while the average yield on similarly rated tax-exempt bonds fell by 2 basis points to 3.09 per cent. (These indexes are based on only a limited number of issues.)

The volume of new corporate bonds publicly floated in November amounted to only about \$25 million, compared with \$180 million in the preceding month and \$200 million in November 1963. The few small corporate bond issues which reached the market during the month were generally well received. New tax-exempt flotations in November totaled approximately \$485 million, as against \$735 million in October 1964 and \$665 million in November 1963. The Blue List of tax-exempt securities advertised for sale closed the month at \$576 million, compared with \$570 million on October 30. Most new tax-exempt bond issues floated in November were accorded good investor receptions.

ESSAYS IN MONEY AND CREDIT

The Federal Reserve Bank of New York has just published a 76-page booklet, entitled *Essays in Money and Credit*. It is designed to furnish the student of money and banking with information, not readily available elsewhere, on the national money and credit markets. The eleven essays in the booklet had been published initially in the *Monthly Review*, but have now been revised to bring them up to date.

In the foreword, Alfred Hayes, President of the Bank, notes that: "*Essays in Money and Credit* deals with a variety of financial subjects that are given relatively little attention in general texts on money and banking. Several articles help the reader gain an insight into some of the technical problems involved in the administration of monetary policy and into Treasury debt and cash operations and their interrelations with the Federal Reserve's daily work. Others describe and analyze money and securities market instruments or deal with banking problems and policies."

Copies of the booklet are available from the Publications Section, Federal Reserve Bank of New York, New York, N. Y., 10045, at 40 cents per copy. Educational institutions may obtain quantities for classroom use at 20 cents per copy.

Federal Reserve Accounts, Money Supply, and Bank Credit

Over the past 3½ years of economic advance, the nation's commercial banks have added some \$64 billion to their loans and investments, and bank deposits have also risen substantially. These increases, which were facilitated and aided by Federal Reserve actions, helped to provide for the credit and liquidity needs of the growing economy. The accompanying set of charts is designed to highlight some of the key quantitative elements and relationships involved in the monetary side of the economic advance.

Any analysis of financial developments in an economy such as ours tends to be complex because of the many interrelationships which exist among the relevant quantities that are to be explained. In order to keep the exposition simple enough to be illustrated by charts, the discussion that follows omits many of these complexities. Some technical points are covered in footnotes to the body of the text, but these can be overlooked without necessarily impairing the reader's understanding of the central theme of the analysis. In the course of the analysis, attention will be drawn to the effect on bank reserves of Federal Reserve open market operations and changes in reserve requirements, to changes in the composition of the money supply and bank assets, and to the role played by nonmember banks.

There are two problems that deserve special mention. One is that it is necessary to select a starting point at which to break into the circular chain of cause and effect. The charts presented here begin with the release of bank reserves by the Federal Reserve and then show how these reserves supported increases in both the money supply and bank credit. An alternative approach would have been to begin with the expansion in bank credit in response to the demands of the economy, then focus on the creation of bank deposits attendant to the credit expansion, and finally to derive the increase in bank reserves needed to support the additional deposits. Still other approaches might well also have been feasible and appropriate.

The second problem relates to the need to distinguish between underlying forces of supply and demand that result in changes in bank deposits and credit, and the actual changes themselves, after these underlying forces have

worked through the economy. For example, when the Federal Reserve provides reserves to the banking system, there is no way of knowing precisely what additional volume of the public's deposits these reserves will eventually support. The creation of additional bank credit and thus of deposits on the basis of these reserves is not automatic but depends on actions by the public and the banks, and such actions are influenced by a wide range of economic and financial conditions. Furthermore, the quantitative outcome will depend upon the public's preferences for currency versus deposits, and for demand versus time deposits, and on whether the deposits created end up at reserve city, "country", or nonmember banks.¹ By necessity, the data presented in this article reflect only the final outcome of all these decisions and actions and the preferences actually prevailing during the 3½-year period under study. Since the underlying forces of demand and supply change, the "after-the-fact" relations of any given period cannot necessarily be considered indicative of the effects of future Federal Reserve creation of reserves on commercial bank credit and deposits.

When banks expand credit—and create deposits—in response to demands of the economy, they do so within the limits of available reserves. The availability of bank reserves and the terms on which they are available, in turn, are influenced by Federal Reserve policy actions—open market operations, changes in reserve requirements, and changes in discount policy—as well as by changes in "operating factors" over which the Federal Reserve has only a minor and indirect influence.

¹ The relation between the provision of additional reserves and the deposit-credit expansion under our fractional reserve system can, of course, be quantified in terms of the so-called deposit-expansion multiplier. The standard textbook multiplier, which reflects a weighted average of actual reserve requirement ratios (and perhaps some ratio to allow for other "leakages" such as a marginal demand for currency), generally represents the theoretical maximum expansion of deposits and credit possible with a given increase in reserve availability. The multipliers that could be computed on the basis of the relationships apparent in the charts presented with this article, on the other hand, would reflect the actual outcome of the expansion process that took place over the period with any possible shifts in underlying preferences submerged in the statistical record.

Chart I
CHANGE IN FEDERAL RESERVE ACCOUNTS.

February 1961 to September 1964
Millions of dollars

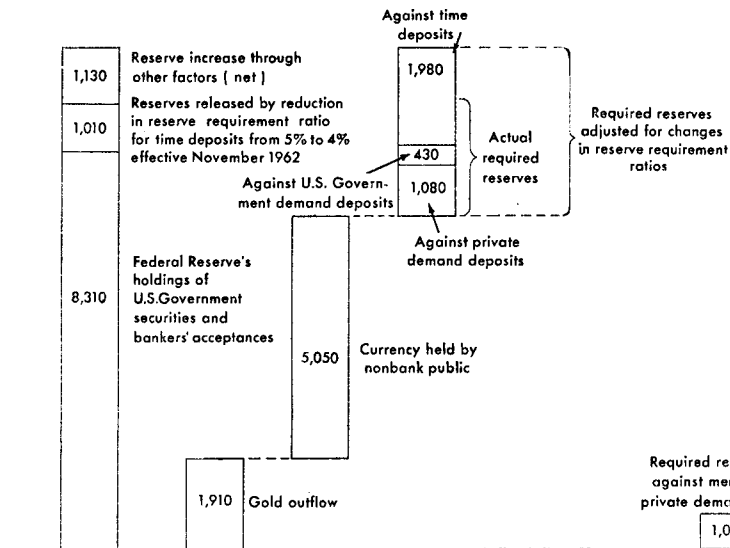


Chart II
CHANGE IN MONEY SUPPLY

February 1961 to September 1964
Millions of dollars

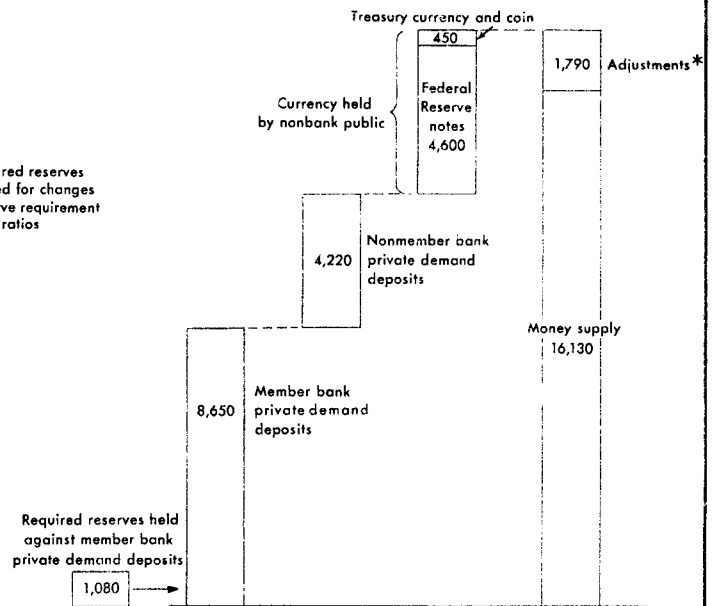


Chart III
CHANGE IN BANK CREDIT AND OTHER ASSETS AND THEIR COUNTERPARTS

February 1961 to September 1964
Millions of dollars

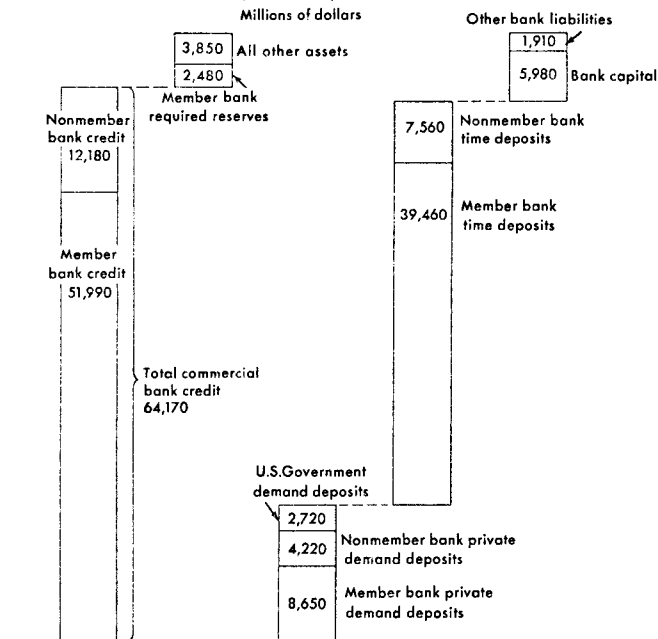
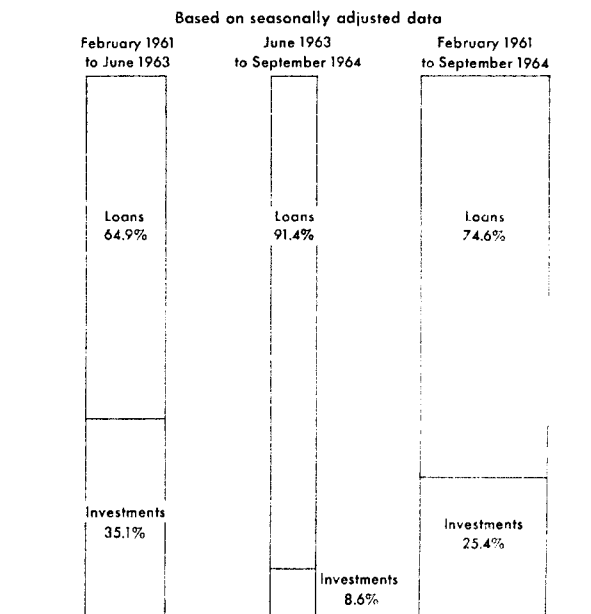


Chart IV
COMPOSITION OF THE CHANGE IN ALL COMMERCIAL BANK CREDIT BY COMPONENTS

February 1961 to September 1964
Per cent



Note: Dollar amounts rounded to nearest \$10 million.

* This and each of the other items are explained in the text.

From the beginning of the current economic upswing in February 1961 through the end of September 1964, Federal Reserve open market operations supplied bank reserves through the net purchase of \$8.3 billion of United States Government securities and bankers' acceptances (see Chart I),² adding 31 per cent to the System portfolio over the period. A second major factor—which in effect provided additional reserves for the banking system over the period—was the Federal Reserve's reduction of member bank reserve requirements against time deposits from 5 per cent to 4 per cent in November 1962. As a result of this reduction, member bank required reserves at the end of September 1964 were about \$1 billion less than they would otherwise have been.³ Finally, there was a net release over the period of another \$1.1 billion in reserves stemming from changes in other Federal Reserve accounts. (Several of these other factors exhibit wide intramonthly fluctuations so that, for a slightly different period, their net impact might have resulted in a net absorption of reserves. The largest components of the net release were a \$1 billion increase in Federal Reserve float and a \$260 million rise in member bank discounts and advances. Some offsetting absorption resulted from a \$470 million increase in Treasury deposits at the Federal Reserve.) Thus, in the aggregate, a little more than \$10.4 billion of funds was provided.

Not all these additional reserves were available to support an expansion in member bank deposits. Indeed, over the interval covered, nearly one fifth of the increase in Federal Reserve credit merely offset the reserve loss resulting from the \$1.9 billion outflow of gold in partial settlement of the nation's balance-of-payments deficits during the period. There was also a sharp increase in the public's demand for currency; the increase in the amount of coin and currency in the hands of the nonbank public absorbed an additional \$5.1 billion in reserves.

Thus, as can be computed from the data in Chart I, only

about one third of the \$10.4 billion in fact provided the banking system with additional reserves that could be used as the basis for a multiple expansion of bank credit and deposits. In terms of actual developments over the period, about \$1.1 billion of these residual reserves may be regarded as having been used to support the expansion in member bank private demand deposits that took place, while another \$430 million was required as backing for an increase in United States Government demand balances held with member banks. The underlying forces of public preferences and bank policies also resulted in a very rapid—indeed unprecedented—growth in time deposits over the period. Thus, the remainder of the increase in required reserves, nearly \$2 billion (in terms of a total that is adjusted for the change in reserve requirements) was used to “back” the increase in time deposits. (It must be remembered that \$1 billion in reserves was released by the reduction in reserve requirements.) The actual increase in required reserves against time deposits amounted to about \$970 million over the period. The increase in required reserves against time deposits thus was actually smaller than the rise in required reserves against private demand deposits, despite the far more rapid growth in time deposits than in demand deposits. Any given increase in reserves will support a far larger rise in time deposits than in demand deposits simply because lower reserve requirements apply to time deposits.

The links between the changes in Federal Reserve accounts and the rise in the money supply⁴ over the period are examined in more detail in Chart II. The \$1.1 billion increase in required reserves held against private demand deposits identified in Chart I was sufficient to support an expansion of over \$8.6 billion in member bank private demand deposits.⁵ Adding the \$4.2 billion increase in private

² The amounts indicated in the charts are derived from several different sources. Wherever possible, the estimates are based on weekly averages of daily figures for two statement weeks around the end of February 1961 and September 1964. Where daily average figures are not available, the underlying data are Wednesday figures for the most nearly corresponding period. Given the fairly sizable week-to-week and month-to-month fluctuations in all banking data, the relations shown in the charts might have to be modified somewhat if a slightly different time period were used.

³ This represents the difference between the actual required reserves against time deposits under the present 4 per cent ratio and the amount of reserves that would have been required against the same volume of deposits at a 5 per cent ratio. At the time the reserve requirements were reduced, the over-all volume of deposits was lower than at present, and the amount of reserves “released” by the action totaled about \$0.8 billion.

⁴ The money supply as conventionally defined consists of (a) demand deposits at all commercial banks, other than those due to domestic commercial banks and the United States Government, less cash items in the process of collection and Federal Reserve float, (b) foreign demand balances at Federal Reserve Banks, and (c) currency outside the Treasury, the Federal Reserve System, and the vaults of all commercial banks.

⁵ Actually private demand balances at member banks measured on a gross basis rose by \$12,430 million over the period. Part of this rise is fictitious, however, in that some holders of the deposits had written checks against their accounts which at the time the data were gathered had been deposited with banks but had not yet cleared through the banking system, which results in a double counting of some balances. The figure cited in the text and in Charts II and III is net of the sizable increase that occurred over the period in these so-called cash items in the process of collection—an adjustment consistent with the definition of the money supply noted in the preceding footnote. A similar adjustment is made in the private deposit figure shown for nonmember banks.

demand deposits at nonmember banks gives a growth in total private checkbook money of nearly \$13 billion over the 3½-year period.⁶ It is interesting to note that even though nonmember bank private demand deposits are at present only about 17½ per cent of total private demand deposits at all commercial banks, their contribution to marginal changes in these deposits is frequently considerably larger. Between February 1961 and September 1964, nonmember banks accounted for nearly 33 per cent of the gain in total private demand deposits.

The next step in building up the components of the change in the money supply is to add to the rise in checkbook money the \$5.1 billion increase in Federal Reserve and Treasury notes and coin held by the nonbank public (a total already shown in Chart I). Finally, certain other adjustments must be made (primarily to eliminate from the total the increase in domestic interbank demand balances and the rise in Federal Reserve float). As a result of all these factors, the money supply increased by \$16.1 billion over the 3½-year period, or at an annual rate of 3.1 per cent. The relatively more rapid rise in the currency component reflected the public's increased preference for holding currency rather than checkbook money.⁷ While currency represented only about one fifth of the money supply at the beginning of the present general business upswing, this component accounted for nearly one third of the total enlargement in the money supply over the period.

The emphasis on demand deposits in the preceding paragraph reflects the fact that only this category of deposits is included in the money supply. Time deposits are not included in the conventionally defined money supply, because they cannot serve directly as a means of payment. Yet, an increase in commercial bank credit can be reflected in a rise in either demand deposits or time deposits (including savings deposits), depending upon public preferences. As it has turned out over the past several years, the public has been quite willing—indeed has preferred—to accept the somewhat lesser degree of liquidity of time deposits in return for the interest income, with the result that

the rate of growth in time deposits has substantially exceeded the rate of increase in demand deposits. The change in bank credit—the major item on the asset side of bank balance sheets—and its liability counterparts in deposits and other accounts is examined in more detail in Chart III.

As is shown on the left-hand side of that chart, total bank credit at all commercial banks increased by nearly \$64.2 billion over the 3½-year period under study, or at an annual rate of 8.2 per cent. Member banks accounted for 81 per cent of the increase, while nonmember banks contributed the remaining 19 per cent, somewhat more than their relative share of the amount of bank credit outstanding at the beginning of the period. This part of the chart also shows other increases in bank assets, including the rise of about \$2.5 billion in member bank required reserves (also shown in Chart I) and other items such as a rise in balances due from other banks and increased investment in banks' premises (on a net basis).

The counterpart of this asset expansion is shown in the three right-hand columns of Chart III. Adding an increase of \$2.7 billion in United States Government demand deposits at all commercial banks to the \$12.9 billion rise in private demand deposits at member and nonmember banks (already shown in Chart II) brings to \$15.6 billion the over-all increase in demand deposits during the last 3½ years. Time deposits, on the other hand, expanded by \$47 billion during the period. The bulk of the increase in these deposits occurred at member banks, many of which began issuing negotiable time certificates of deposit during the period. It might be emphasized once again how significant a role in this increase in member bank time deposits and in the corresponding bank credit expansion was played by the reduction in reserve requirements against time deposits. In terms of the end results, it could be said that \$25.3 billion of the increase in member bank time deposits was made possible by the reduction in reserve requirements, while \$14.2 billion received support from additional required reserves actually required and held against time deposits.⁸

The remaining \$7.9 billion of advance in bank assets found its counterpart primarily in a \$6 billion rise in bank capital accounts, as shown in Chart III. Net changes in bank liabilities other than deposits, including an increase

⁶ Since nonmember banks do not maintain their reserves at Federal Reserve Banks, the figures for required reserves shown in the charts do not include these reserves. These banks do, however, have to comply with state-imposed reserve requirements; and part of the reserves supplied by the Federal Reserve System in effect served to support expansion of nonmember bank deposits and credit.

⁷ The factors influencing the public's demand for currency are discussed by Irving Auerbach, "Forecasting Currency in Circulation", this *Review*, February 1964, pp. 36-41.

⁸ This calculation involves the arbitrary assumption that the effects of the time deposit reserve requirement reduction showed up exclusively in increases in time deposits. This attribution amounts to an *ex post* accounting device. In fact, the reduction in reserve requirements freed reserves which banks were able to use in support of the expansion of either time or demand deposits, the actual outcome depending on public preferences.

in bank borrowings both from the Federal Reserve and from others, accounted for \$1.9 billion.

The last column in Chart IV indicates that, over the 3½-year period as a whole, for each dollar put into investments in securities of all types three dollars went into loans. There was, however, a significant difference between the experience in the early and later portions of the period. Prior to the move by the Federal Reserve in July 1963 toward a somewhat less easy monetary policy, the growth

in bank credit was large enough for commercial banks both to meet loan demands and still to increase their investments substantially. Since that time the increase in total bank credit has been accounted for much more heavily by loans. Indeed, until the increases in commercial bank holdings of United States Government securities in August and September 1964 (due partly to the effects of Treasury debt management operations), loan expansion at the banks was in part supported by a net liquidation of investments.

Fiftieth Anniversary of the Federal Reserve System – Bank Supervision*

The fundamental objective of bank supervision is to foster and maintain a sound banking system. One of the basic purposes of the Federal Reserve System, as stated in the preamble of the Federal Reserve Act, was "to establish a more effective supervision of banking" in the United States. "More effective" were the key words, because banking had long been under the supervision of state and Federal governments when the Federal Reserve Act was passed in 1913.

Some banks had been operating under varying degrees of state supervision since the early and mid-1800's, when a number of states passed laws relating to bank chartering and operations. Indeed, the unique nature of banking tended to stimulate governmental supervision although many states were slow to react.

The National Bank Act was a major step toward improved supervision. Nevertheless, national bank examination methods had left something to be desired. In pre-Federal Reserve days, national bank examiners worked under a system of fixed fees for each examination, a faulty system in the opinion of John Skelton Williams who, as Comptroller of the Currency, was responsible for the administration of the National Bank Act. He observed in his

annual report for 1915 that, under this arrangement, "the examiner necessarily made either a very superficial and hasty examination of the bank or remained for closer consideration, at his own expense, to perform a gratuitous service for the Government". The Federal Reserve Act authorized the Board of Governors of the Federal Reserve System, upon recommendation of the Comptroller of the Currency, to fix salaries for national bank examiners. Later the act was amended to direct the Comptroller to set these salaries. The act also gave the new Reserve Board the power to "examine at its discretion the accounts, books, and affairs of . . . each member bank and to require such statements and reports as it may deem necessary".

The process of bank examination is primarily concerned with an evaluation of assets, procedures, policies, and the effectiveness of management. Examinations also provide the bank supervisory authorities with the basic information necessary to perform other functions such as issuance, interpretation, and enforcement of regulations; merger and branching decisions; and decisions concerning capital and corporate structure requirements. The intimate information on bank operations derived from bank examinations also is useful in the formulation of monetary policy.

Actually the System was slow to move into the field of supervision. Regular examinations of nationally chartered member banks were being made by national bank examiners. In 1917 the Federal Reserve Banks were specifically

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

authorized to accept examinations by state authorities of state member banks in place of examinations made by Board-appointed examiners. The same year, the directors of the Federal Reserve Bank of New York authorized the acceptance of examinations and reports made by state authorities in the Second Reserve District.

For the next decade and a half, the Reserve Banks confined themselves largely to special credit investigations of member banks, generally undertaken in cooperation with state authorities but sometimes independently. These credit checks consisted mainly of a review of the quality of member bank loan portfolios. In addition to serving as a method of supervision, they provided the Reserve Banks with supplemental information that could be used when the member banks applied for discounts or advances.

In 1933, when it became apparent that a strengthening in supervision was necessary—especially with respect to trust operations—the Board asked the Reserve Banks to expand their examining facilities. The following year, the Board directed that at least one regular examination of each state member be made yearly by Federal Reserve examiners, independently or in conjunction with state authorities. Joint state-Federal Reserve examination of state member banks continues today, while national bank members are still examined by the Comptroller's national examiners.

The System's supervisory responsibilities as delineated by the Federal Reserve Act in 1913 have been expanded by various acts of Congress. The additional supervisory functions, to name a few, include the processing of merger applications of state member banks, the chartering and supervision of companies organized by banks to do a foreign banking and financing business, the registration of bank holding companies, and regulation of bank loans for purchasing or carrying listed securities.

The absence of restrictive definitions of the supervisory duties and responsibilities of the Federal Reserve System and the gradual broadening of the Congressional mandate have been helpful in permitting the System to adapt its

supervisory functions to the far-reaching changes in banking that have taken place since the passage of the Federal Reserve Act.

PER JACOBSSON FOUNDATION LECTURES

On November 9, 1964, in Basle, Switzerland, the Per Jacobsson Foundation presented the inaugural lectures of a series to be continued in future years and other cities. The Foundation thus honored the late Managing Director of the International Monetary Fund and began to carry out its principal purpose, which is to sponsor and publish regularly lectures on international monetary affairs by recognized authorities.

The first two lectures, both on the subject of "Economic Growth and Monetary Stability", were given by Maurice Frère, former Governor of the National Bank of Belgium and President of the Bank for International Settlements (viewing the subject from the standpoint of a developed country), and by Rodrigo Gómez, Director General of the Bank of Mexico (the view from a developing country).

The Foundation has now published the texts of these lectures. Because of the interest of many readers of this *Review* in international monetary affairs and in view of this Bank's sympathy for the Foundation's aims, we have arranged to have a limited supply of these texts available for distribution upon request.

Requests should be addressed to the Publications Section, Federal Reserve Bank of New York, New York, N. Y., 10045. Requests for French and Spanish versions of the lectures can also be filled.