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MONEY MARKET IN FEBRUARY

The money market was under relatively steady pressure in February, even in the February 20 statement week when reserve positions eased temporarily. On the other hand, the securities markets, despite extensive Treasury financing operations and the heavy flow of new corporate and municipal offerings, continued to move toward higher prices and lower rates through the first half of the month before reacting moderately in the second half. Member bank reserve positions, which had been eased in January by unusually strong seasonal influences, were tightened over the month by a continuing reduction in the quantity of Government securities held by the Federal Reserve System and, to a lesser degree, by the shifting impact of regular market influences. System sales of short-term Treasury issues, including notes and certificates, amounted to 574 million dollars over the four weeks ended February 27. In the first half of the month, these sales were partly offset by repurchase agreements designed to aid Government securities dealers in their underwriting function during the period of Treasury financing. The effective rate on Federal funds held to the 3 per cent "ceiling" on each day, but money market pressures were at no time unduly severe.

In the Government securities market, attention early in the month was focused on Treasury borrowing operations involving the refunding of 10.7 billion dollars of notes and certificates, maturing variously in February, March, and April, and the refinancing of the special 1.75 billion dollar issue of February 15 bills floated in November. Although the attrition on the exchange of notes and certificates was relatively large—870 million dollars, or 17 per cent of holdings outside the Federal Reserve System and Government agencies—the financing was absorbed without significantly interrupting the steady climb in prices of bonds and notes that had begun on January 8. Later in the month, there were sharp markdowns on several days (although generally followed by moderate recovery) apparently reflecting some market opinion that prices had moved to higher levels than were warranted by the outlook for business conditions and credit policy.

Vigorous nonbank demand for Treasury bills brought downward pressure on yields in the first half of February, despite the 100 million dollar increase in the amount of new bills offered in the first two weekly auctions of the month. Rates subsequently drifted back up, however, reflecting in part the further expansion of weekly offerings to 1.8 billion dollars, an increase of 200 million dollars over the maturing issues. Rates on the longest outstanding regular bills fell from 3.12 per cent on January 31 to a low point of 2.98 per cent on February 13, but by the end of the month had risen again to 3.28 per cent.

At the end of January, one bankers' acceptance dealer had reduced rates by ⅛ per cent, following a generally sharp rundown in dealer portfolios from the unusually high peak reached at the year end. Rates quoted by other dealers remained unchanged, however, and on February 6, with a supply of new acceptances continuing to appear at those rates, the one dealer who had cut his rate came back in line with the rest of the market. At the end of the month the bid on 90-day acceptances thus stood at 3½ per cent for all dealers. On February 19, rates on time loans made to security dealers against stock exchange collateral were reduced by ⅛ per cent. The rate on 90-day time loans, which had been 4½ per cent (bid) since December 21, was thus lowered to 4⅜ per cent.

Member Bank Reserve Positions

Member bank borrowings at Federal Reserve Banks rose substantially in February to an average level of 643 million dollars, compared with an average of 413 million in the preceding four weeks. In contrast to the preceding month, when member banks held net free reserves through most of the period, average borrowings in February exceeded average excess reserves in each of the four weeks.

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Pressure on reserves was relatively even during the first half of the month, before easing in the third week and tightening again toward the end of the month.

In each of the first two statement weeks in February, average borrowings rose by about 100 million dollars, reflecting primarily the need for funds to replace reserves lost as a result of System sales of Government securities. Reserves were also absorbed, on balance, by a decline in float and a rise of currency in circulation. These operating drains were largely offset, however, by a reduction in Treasury balances at Federal Reserve Banks, an increase in gold stock, and some further reduction in required reserves. The effect of outright sales of Government securities by the Federal Reserve System was tempered by an expansion in repurchase agreements outstanding, but on balance the reduction of System holdings was substantial.

Toward the middle of the month there was a marked relaxation of pressure on bank reserve positions, allowing member banks to reduce somewhat their indebtedness to Reserve Banks. Much of the easing was attributable to the midmonth peak in float, which was somewhat heightened by delays in the processing of checks resulting from the observance of Lincoln's Birthday at a number of Federal Reserve offices. Treasury balances continued to fall, releasing reserves to the market, and there were other gains from gold and foreign account operations and from a return flow of currency. About half of the added reserves were absorbed by System open market sales and the runoff of repurchase agreements written earlier in the month.

Table I

Changes in Factors Tending to Increase or Decrease Member Bank Reserves, February 1957

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

Factor	Daily averages—week ended				Net changes
	Feb. 6	Feb. 13	Feb. 20	Feb. 27	
Operating transactions					
Treasury operations*	−121	+155	+210	−122	+122
Federal Reserve float	− 38	− 78	+226	+ 29	+139
Currency in circulation	+ 12	− 46	+ 36	+ 61	+ 63
Gold and foreign account	+167	− 32	+110	− 27	+218
Other deposits, etc	−117	− 38	− 36	−174	−365
Total	− 95	− 41	+546	−232	+178
Direct Federal Reserve credit transactions					
Government securities:					
Direct market purchases or sales	− 39	−221	−232	−104	−596
Held under repurchase agreements	+ 24	+ 50	− 63	− 11	—
Loans, discounts, and advances:					
Member bank borrowings	+113	+101	−164	+136	+186
Other	—	—	—	—	—
Bankers' acceptances:					
Bought outright	—	—	− 1	− 1	− 2
Under repurchase agreements	—	—	—	—	—
Total	+ 97	− 71	−459	+ 20	−413
Total reserves	+ 2	−112	+ 87	−212	−235
Effect of change in required reserves†	+ 67	+205	− 53	+ 76	+295
Excess reserves†	+ 69	+ 93	+ 34	−136	+ 60
Daily average level of member bank:					
Borrowings from Reserve Banks	615	716	552	688	643‡
Excess reserves†	378	471	505	369	431‡

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

* Includes changes in Treasury currency and cash.

† These figures are estimated.

‡ Average for the four weeks ended February 27.

Member banks came under renewed pressure toward the end of the month, mainly as the result of a reduction in float and an increase in Treasury balances.

The heavy drain on Treasury deposits persisted through most of February, at times adding substantially to bank reserves. Even the rise in Treasury deposits at Reserve Banks in the first statement week of February, which ordinarily would have withdrawn reserves, resulted from bookkeeping transfers that obscured an actual outflow of funds to the market. In this case, the increase in Treasury balances reflected the new deposits created by the Reserve Banks upon receipt of credits to their gold certificate accounts by the Treasury. These gold certificate credits were based upon the purchase by the Treasury of 300 million dollars of gold from the International Monetary Fund near the end of January in exchange for noninterest-bearing notes to increase the dollar assets of the IMF. Had the new deposits not been created, Treasury balances at Reserve Banks would have declined. These additional Treasury deposits were soon expended, but toward the end of the month Treasury balances were partly replenished from more normal sources of funds, including the sale of additional Treasury bills. For the month as a whole, however, Treasury operations resulted in additions to bank reserves.

Government Securities Market

The continued buoyancy of the Government securities market early in February greatly facilitated the Treasury financing operations undertaken in the opening week of the month. Subscription books were open on February 4 and 5 for refunding 10.7 billion dollars of maturing notes and certificates, and tenders were received on February 7 for 1.75 billion dollars in new tax anticipation bills designed to replace the special 91-day bills issued in November and maturing February 15. In the first of these financing operations, holders of 7.2 billion dollars of 2⅝ per cent certificates maturing February 15 and of 3.0 billion dollars of 2⅞ per cent notes maturing March 15 were given the option of exchanging their securities for either of two new issues—3⅜ per cent certificates of indebtedness due February 14, 1958, or 3½ per cent notes maturing May 15, 1960. Holders of 531 million dollars of 1½ per cent notes due April 1, 1957 (primarily the Federal Reserve Banks) were allowed to exchange only into the new one-year certificates. Both new issues were dated February 15, 1957. The new tax anticipation bills, also dated February 15, were offered in exchange for either cash or for the special bills maturing on February 15. The new tax issue will mature June 24, 1957, and may be offered at face value in payment of income and profits taxes due June 15, 1957.

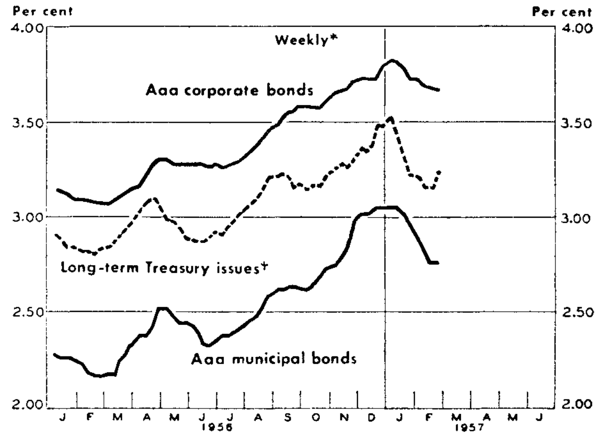
Both financing operations proceeded smoothly. Prices of the maturing 2⅞ per cent notes and 2⅝ per cent certificates, the principal "rights" to the financing, moved to slight premiums after the initial Treasury announcement of terms and held there during the refunding. The new issues also were quoted above par in "when-issued" trading. Results of the exchange, released by the Treasury later in the month, showed that holders of 282 million dollars of the February notes, 579 million dollars of the March notes, and 9 million dollars of the April notes had elected to present their holdings for cash redemption. The remaining 9.9 billion dollars of maturing securities were exchanged for 8.4 billion dollars of the new one-year certificates and 1.5 billion dollars of the notes of 1960.

The continuing advance of prices of outstanding Treasury bonds and notes during the first part of the month apparently was sustained primarily, as in January, by a general feeling in the market that the vigor of the economic boom had abated for the time being. In addition, the continuing success of underwriters in distributing rapidly the large volume of new corporate issues was taken by some observers to mean that interest rates had reached their peaks. Yields on longer term Government issues, as shown in the accompanying chart, were thus carried down to the lowest levels since last October.

By the middle of the month, however, market opinion had apparently become increasingly concerned over the sustainability of the higher price structure, since little evidence had developed of any fundamental shift in Federal Reserve policy or in business conditions. A limited supply of 3¼'s of 1978-83 and 3's of 1995 helped to touch off a downward movement, and the Treasury announcement on February 14 that Congress would be asked for authority to raise to 3¼ per cent the interest rate payable on Series E and H bonds added some further pressure. These influences, along with optimistic statements by Government officials on the economic outlook, generated some irregular declines in the latter half of February. At the end of the month, prices of most bonds callable after 1961 were more than 2 full points below their earlier February peaks and as much as 1⅜ points lower than at the end of January. The declines were much less pronounced for the 3¼'s and 3's, which fell $\frac{4}{32}$ and $\frac{6}{32}$, respectively, over the month as a whole. Throughout February, trading in the intermediate and long-term area was very light, so that the relatively sharp price movements did not reflect major changes in supply and demand.

Yields on Treasury bills moved down steadily in the first two weeks of February despite the added supply resulting from successive increases of 100 million dollars in the regular bill issues during the period. The market also had little difficulty in absorbing the 1.75 billion dollars of new tax bills auctioned on February 7; the average issuing rate was 3.231 per cent and bid quotations held close to this level through much of the remainder of the month. However, when the regular weekly offering was increased by another 100 million to 1.8 billion dollars in the auction of February 18, a somewhat sluggish tone appeared in the market. The nonbank buying in the first half of February included a substantial corporate demand, based partly on

MARKET YIELDS OF SELECTED SECURITIES



* Weekly averages, except Wednesday close for municipal bonds. Latest date plotted is February 21.
† Old series.
Sources: Board of Governors of the Federal Reserve System and Moody's Investors Service.

the reinvestment of proceeds from sales of "rights" by some investors anticipating cash needs within a short period. Average issuing rates in the first two weekly auctions moved down steadily, from 3.283 per cent on January 28 to 3.132 per cent on February 4 and to 3.057 per cent on February 11. Over the rest of the month, average issuing rates rose somewhat, moving up to 3.182 per cent in the auction of February 18 and 3.288 per cent on February 25, as some signs of a seasonal slackening of demand developed in the market with the approach of the March 15 tax date.

Other Securities Markets

The firm tone that had appeared in the corporate and municipal bond markets in January was extended into February despite the continuing large flow of new security offerings. In the latter part of the month, a slightly heavier atmosphere developed, especially in the municipal market, but yields generally remained steady at the levels to which they had declined in the previous several weeks. Average yields on outstanding high-grade corporate bonds, as reflected in Moody's Aaa-rated index, moved down 6 basis-points over the month to 3.66 per cent, while for municipal issues with a similar rating average rates at the end of February were 4 basis-points below the 2.87 per cent level established at the close of the preceding month. The widest price fluctuations were experienced by corporate convertible issues, reflecting the sharp break in the stock market on February 11 and partial recovery thereafter.

The volume of public offerings of corporate bonds for new capital is estimated to have been 465 million dollars in February, compared with 620 million dollars in January. It was considerably in excess, however, of the 120 million dollars of new offerings a year earlier, and since February had a relatively small number of business days.

the absorption of the new issues required extensive market activity. Nevertheless, most of the new issues were well received and quoted at premium prices in the secondary market. As a result, dealer inventories of new corporate bonds apparently remained relatively low, despite the large volume that passed through their hands during the month.

In the municipal market, demand was less brisk. Total public offerings for new capital were again large—474 million dollars—although somewhat smaller than in the previous month or in February 1956. Investor interest in many of these offerings was relatively limited, however, particularly in the latter part of the month, and the slow distribution of some issues into the hands of ultimate investors resulted in some increase in dealer portfolios.

Member Bank Credit

The decline in total loans at weekly reporting member banks leveled off in the four weeks ended February 20, following unusually heavy net repayments in the opening weeks of 1957. Borrowing at these banks was reduced by 106 million dollars over the four-week period, compared with declines of 1,922 million dollars during the preceding four weeks and 65 million dollars in the comparable period a year earlier. Business loans fell by 174 million dollars in the two weeks ended February 6, but increased by 191 million in the two following weeks. Real estate loans, "all other" loans (largely to consumers), and loans to security brokers and dealers were somewhat lower on balance.

Trade concerns, commodity dealers, construction firms, and processors of food, liquor, and tobacco continued to make net repayments on balance, while the public utility and transportation group reduced borrowings after having increased them earlier in the year. These declines were offset by smaller-than-usual repayments by sales finance companies and by substantial increases in borrowing by manufacturers of metals and metal products, textile producers, and firms in the petroleum, coal, chemicals, and rubber group. Largely because of the heavy repayments in January, total business loans at the weekly reporting banks have declined 931 million dollars since the beginning of the year, compared with a contraction of 439 million dollars in the same period a year earlier.

Total investments of weekly reporting member banks declined by 407 million dollars during the four weeks ended February 20, a much smaller drop than in 1956. Bank holdings of Government securities fell by 521 million dollars, but this decline was only half as large as a year earlier, reflecting the extensive Treasury refinancing during February 1957. Portfolios of other securities rose by 114 million, compared with an increase of 8 million the year before. Total loans and investments thus declined by only 513 million, in contrast to a drop of 1,137 million in the corresponding four weeks a year earlier.

Table II
Weekly Changes in Principal Assets and Liabilities of the Weekly Reporting Member Banks
(In millions of dollars)

Item	Statement weeks ended				Change from Dec. 26, 1956 to Feb. 20, 1957p
	Jan. 30	Feb. 6	Feb. 13	Feb. 20p	
Assets					
Loans and investments:					
Loans:					
Commercial and industrial loans	− 84	− 90	+ 91	+100	− 931
Agricultural loans	− 5	− 8	+ 4	− 4	− 29
Security loans	+ 29	+ 45	− 71	− 14	− 585
Real estate loans	− 17	− 20	+ 12	− 15	− 85
All other loans (largely consumer)	+ 2	− 35	+ 10	− 30	− 254
Total loans adjusted*	− 79	− 112	+ 48	+ 37	−2,028
Investments:					
U.S. Government securities:					
Treasury bills	−226	− 238	−186	+169	− 510
Other	− 3	+ 58	− 63	− 32	− 335
Total	−229	− 180	−249	+137	− 845
Other securities	+ 22	+ 64	− 40	+ 68	+ 18
Total investments	−207	− 116	−289	+205	− 827
Total loans and investments adjusted*	−286	− 228	−241	+242	−2,855
Loans to banks	−144	− 143	+377	−275	− 144
Loans adjusted* and "other" securities	− 57	− 48	+ 8	+105	−2,010
Liabilities					
Demand deposits adjusted	−220	−1,202	−451	−132	−1,923
Time deposits except Government	+ 39	+ 69	+ 30	+ 62	+ 476
U. S. Government deposits	+167	+ 80	− 29	+675	− 863
Interbank demand deposits:					
Domestic	−683	+ 484	+162	−350	−1,176
Foreign	− 57	− 12	− 35	+ 61	− 147

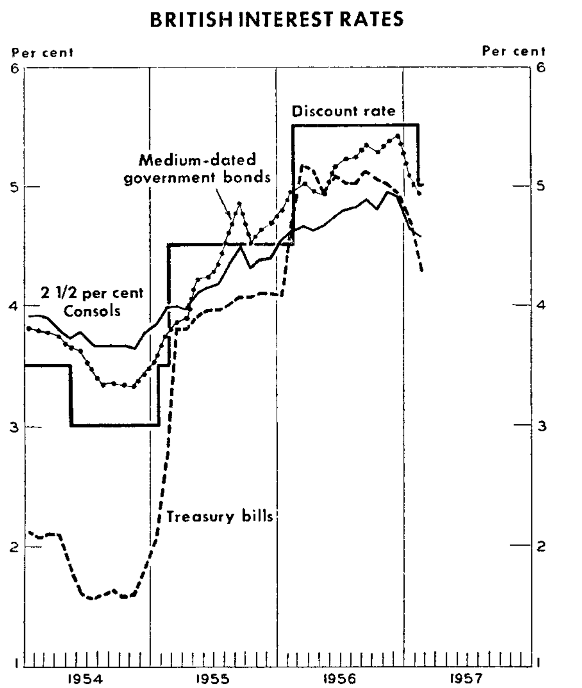
p Preliminary.

* Exclusive of loans to banks and after deduction of valuation reserves; figures for the individual loan classifications are shown gross and may not, therefore, add to the totals shown.

INTERNATIONAL MONETARY DEVELOPMENTS

Monetary Trends and Policies

The Bank of England reduced its discount rate to 5 per cent as of February 7, from the 5½ per cent rate in force since February 16, 1956 (see chart). According to the Bank's Governor, the move carried "no implication of a change of policy", and the British Chancellor of the Exchequer stated that the reduction was designed simply "to enable the Bank of England to maintain the full effectiveness of monetary policy". The reduction came against a background of receding inflationary pressures and a decline in the liquidity of the banking system and in interest rates. The industrial investment boom, the main factor behind the inflationary pressures of 1955-56, has been leveling off, while residential building has actually been declining. Mainly as a result of a drop in automobile output, the industrial production index toward the end of 1956



Consols: monthly averages. Medium-dated bonds: 3 per cent Savings bonds, 1965-75, monthly averages. Treasury bills: weighted monthly averages of weekly allotment rates. February data partly estimated.
Source: Bank of England.

was slightly lower than a year earlier. Furthermore, for the first time since early 1954, vacancies in industry were fewer than the unemployed, although the latter still remained a very small fraction of the labor force. These reduced demand pressures in the United Kingdom also contributed to a notable improvement in the country's balance of payments on current account; the latter showed a surplus of 144 million pounds in January-June 1956, and despite the current difficulties connected with the Middle East crisis, "a small but by no means unsubstantial surplus" for the year ending June 1957 is anticipated, according to an official statement.

The improved economic balance in the United Kingdom set the stage for a decline in short-term market interest rates and a recovery in the bond market. From December 7 to February 1 the average Treasury bill tender rate declined from 5.04 per cent to 4.54 and, after the discount rate was cut, fell further to 4.15 on February 22. Consol prices have risen markedly during the last three months, and on February 28 yielded 4.55 per cent, as against 4.98 at the end of November. In the course of these developments in the money and bond markets, the authorities on February 14 floated a 300 million pound 3½ per cent Funding Stock, 1999-2004, priced to give a gross redemption yield of 4.50 per cent. This debt operation was designed to further the government's debt funding program and to facilitate a reduction in the banks' liquidity ratios (cash, call loans, and Treasury and commercial bills to total deposits); the increase in these ratios in the last two years had weakened the Bank of England's monetary control, and necessitated the reliance on directives by the authorities to the commercial banks. In line with the fall in market interest rates, the rate on new loans with a maturity of more than five years, made by the Public Works Loans Fund to the local authorities, has been reduced ¼ per cent to 5½.

The Reserve Bank of India raised to 4 per cent from 3½, as of February 1, its interest rate on advances to commercial banks against government and other eligible securities. While the Bank's rate on advances granted under the Bill Market Scheme was left unchanged at 3½ per cent, the stamp duty on bills of exchange was increased to ½ per cent, as a result of which the cost of such borrowing was also brought to 4 per cent. These changes took place in the wake of a 16 per cent rise in wholesale prices during 1956 and a loss in external reserves of about one third during the last nine months of the year. In order to help alleviate these strains, the authorities have also taken disinflationary fiscal measures. On November 30, the government introduced a supplementary budget that provided *inter alia* for the reimposition of a capital gains tax, an increase in the "supertax" rates, additional excise duties on certain domestic products, and a rise in the customs duties on many imports. Despite the anticipated increase in tax revenues, however, the government still plans a substantial amount of deficit financing. In addition, on January 1, the Indian Government terminated the liberal import licensing scheme that had been in effect since 1955. Heavy cuts were made in import quotas for such consumer and producer goods as the authorities believed could be replaced by increased domestic production. New restraints were also placed on the spending of foreign exchange for traveling abroad.

In Canada, the Treasury bill rate continued to rise during most of February; at the third tender in the month the average Treasury bill tender reached 3.81 per cent, an all-time high, but fell to 3.76 at the fourth tender. Long-term government bond yields, on the other hand, declined during February to the levels that had prevailed at the turn of the year, while short and medium-term yields fell even further. During February, the commercial banks' business loans remained at around the year-end level, while their holdings of government bonds increased considerably; the banks' ratio of liquid assets (cash, day-to-day loans, and Treasury bills) to deposits rose to 17 per cent, as against the agreed minimum of 15 per cent.

Exchange Rates

Sterling rates moved somewhat lower during February, as uncertainty over the Middle Eastern situation continued to be a depressing factor in a relatively quiet market. American-account sterling was quoted as high as \$2.80$\frac{1}{32}$ as it met with fair commercial demand early in the month. After the announcement that Britain's gold and dollar reserves had decreased 49 million dollars during January, however, and with substantial bidding for dollars in London —principally by oil interests—the rate declined; by February 6 it had slipped to $2.79\frac{13}{16}$, about the level prevailing during the remainder of the month. Oil interests were important both as buyers and suppliers of sterling in the New York market while, in the latter part of the month, diamond dealers were noteworthy purchasers. On February 28 American-account sterling was quoted at $2.79¾.

Although the decline in the British bank rate from 5½ per cent to 5 per cent announced on February 7 had virtually no effect in the spot market, the change was noticeable in the forward market where discounts on three and six months' sterling dropped to $\frac{11}{16}$ and 1⅝ cents—the narrowest since February and May 1955, respectively. After widening to $1\frac{1}{16}$ and $2\frac{1}{32}$ cents on good offerings of forward sterling, discounts were again narrower at ⅞ and $1\frac{23}{32}$ cents at the month's end.

Transferable sterling met with reduced demand, particularly on the part of sugar interests, and declined to $2.7620 at midmonth. By February 28 the rate had recovered only slightly to $2.7635. Securities sterling fluctuated between $2.64¼ and $2.61½, with rates tending toward the lower part of the range.

The Canadian dollar weakened slightly from $1.04\frac{15}{32}$ to $1.04¼ in a rather quiet market during the first half of February. Subsequently good demand for the Canadian dollar developed largely as a result of various security issues announced by Canadian companies, most notably the Trans-Canada Pipe Lines, Ltd., and direct investment needs; on February 28 the rate again stood at $1.04\frac{15}{32}$.

OPEN MARKET OPERATIONS ABROAD

Open market operations of some form are conducted by the central banks of most countries which have, or are developing, active money markets. The kind and extent of such operations, and their relative importance among the tools of monetary control, vary widely. In this country open market operations—i.e., purchases and sales of Government securities (and bankers' acceptances) as directed by the Open Market Committee of the Federal Reserve System—have become the chief instrument of credit control, providing a flexible means of influencing the volume of bank reserves and thereby helping to maintain appropriate credit conditions.[1] Outside the United States, however, open market operations are a full-fledged credit policy instrument in only a few countries, notably the United Kingdom and Canada. Elsewhere, such operations are limited in scope; they are not always undertaken at the central bank's initiative; they are in some instances effected directly with banks or other investors; and they may be conducted in securities other than government obligations or bankers' acceptances. Despite the institutional difficulties encountered in many foreign countries, open market operations abroad are nevertheless rapidly gaining in importance.

The Legal and Institutional Setting

Before the thirties, only a few foreign central banks had legal authority to conduct open market operations, but today practically all are empowered to deal in government and government-guaranteed securities. Many foreign central banks also have authority to purchase and sell bankers' acceptances and commercial bills. In certain countries, moreover, they can operate in nongovernment bonds (Australia, Denmark, Japan, Mexico), while in a few others they can deal in any bonds that they themselves declare suitable (Austria, Guatemala); sometimes, too, they can undertake operations in special mortgage bonds (Bolivia, El Salvador, Norway). Finally, a number of central banks, particularly in the financially less-developed countries, have power to issue their own securities for monetary policy purposes.[2]

In many countries, however, the purchase of government securities by the central bank is circumscribed by legislation as to the total amount, the ways in which the purchases may be conducted, and the maturity of the securities that may be purchased. Limits on central bank holdings of government securities, whether acquired in the market or directly from the government, sometimes are stipulated in absolute amounts (Belgium) or are related to the bank's capital and/or demand liabilities (Pakistan, Venezuela). Such provisions are generally designed to limit the recourse of governments to central bank credit. For the same reason, the legislation of a number of countries, notably France, prohibits direct purchases of securities from the government, while in Cuba the central bank is normally permitted to buy only government securities that have been outstanding for more than one year. Similarly, some central bank laws provide in effect that open market operations may not be carried out to help in the financing of government deficits, and specify that such operations may take place only in order to "regulate the money market" (Austria, France) or for "monetary policy purposes" (Chile, Korea, the Philippines). In addition, some central bank laws enjoin the central bank from purchasing securities during inflationary periods (Ceylon, Chile, Cuba, Korea, the Philippines).

In some cases there are legal restrictions on the maximum maturity of government securities that can be in-

[1] For a description of techniques in the United States, see Robert V. Roosa, *Federal Reserve Operations in the Money and Government Securities Markets,* Federal Reserve Bank of New York, July 1956.

[2] E.g., Ceylon, Chile, Cuba, the Dominican Republic, Ecuador, El Salvador, Honduras, Korea, Mexico, Paraguay, and the Philippines.

cluded in central bank portfolios. Such restrictions either provide that the securities must be short term without defining the maturity (France, Venezuela) or actually specify maximum maturities, ranging from two years (Switzerland) to five years (Mexico) or even ten (Guatemala). In other countries, such as Ceylon, the statute requires the central bank to maintain adequate holdings of short-term securities to enable it more readily to contract its credit if such a contraction becomes necessary.

Legal limitations on the government securities holdings of central banks, however, are less frequent today than some years ago. Thus, they were relaxed in South Africa in 1941 and in Switzerland in 1953; they were removed completely in New Zealand in 1936, the Netherlands in 1945, India in 1948, and Canada in 1954. In some countries, such as Denmark, Norway, Sweden, and the United Kingdom, such legal restrictions have never existed.

Legal authority alone is, of course, not sufficient to enable a central bank to conduct meaningful open market operations. An appropriate institutional framework is required, and in many foreign countries the lack of such a framework is a serious barrier to the development of open market operations as an effective instrument of monetary policy. The most important and most frequent obstacle is the lack of a broad and active market for the kinds of securities usually considered appropriate for central bank ownership. In the absence of a flexible money market, moreover, the commercial banks tend to operate with ample excess reserves and their cash ratios tend to fluctuate widely (since the banks have no other ready way of adjusting their positions); under such circumstances, central bank sales or purchases of securities lack a fulcrum in the form of a stable cash ratio on which to get leverage, so that changes in bank reserves following upon such transactions may not materially affect the availability of credit from the commercial banks.

A somewhat less-common and less-serious difficulty is the risk that changes in commercial bank reserve positions brought about by open market operations may in some instances be so readily offset by changes in borrowing from the central bank through discounts and advances, as to leave the availability of credit from the banks largely unaffected. This risk is minimized, of course, insofar as commercial banks are reluctant to incur indebtedness or remain long in debt; in many countries, moreover, central bank discount rates are maintained as "penalty rates" in order to reduce the incentive to borrow from the central bank, or else such borrowing is limited directly by formal or informal discount ceilings.[3] Finally, in some foreign countries the central banks do not possess a sufficient volume of securities suitable for open market operations, or the non-central bank portfolios of securities eligible for central bank purchase are very small.

[3] See "Discount Policies and Techniques Abroad", *Monthly Review*, June 1956.

It is thus not surprising that open market operations are rarely used abroad in the same continuous and broad manner as in this country; only in the United Kingdom and Canada, as already noted, are such operations employed as a full-fledged credit policy instrument. In other countries, such operations are relied upon for more limited purposes: the evening-out of daily money market fluctuations (France) or the offsetting of seasonal and other "temporary" changes in bank liquidity (Germany, Japan, the Netherlands). Central bank open market operations have also served in many foreign countries merely as a means to support government bond prices; such operations, however, have in recent years been abandoned or employed more flexibly in most European and British Commonwealth countries in order to reinforce other monetary measures such as discount rate increases. In countries with less-developed financial systems, central bank open market operations have been used primarily as part of the over-all effort to broaden the countries' capital markets.

The United Kingdom

In the United Kingdom, the institutional conditions for effective open market operations have long been present. The London money and capital markets are among the most developed in the world, and the commercial banks operate with stable cash ratios. Direct borrowing at the central bank through the "discount window" is not available to the commercial banks, and the borrowing done by discount houses tends to be limited by the penalty effect of the discount rate, which remains consistently above most money market rates.[4] Finally, the Bank of England has usually had an ample securities portfolio for its operations, and its purchases and sales are known to be supplemented by the operations of the large government funds.

The Bank of England's open market operations, which originated in the last century, were developed more fully in the twenties and thirties. During the war and the early postwar years, however, the Bank kept the Treasury bill rate rigidly pegged, and thus supplied funds to the market at the latter's initiative. It was only in November 1951 that the Treasury bill rate was finally "freed" and the Bank's control over the cost and availability of credit thereby strengthened.

In general, the Bank appears to confine its open market operations to short-term securities. Upon occasion, however, the Bank intervenes also in the medium and long-term market. Partly because data on changes in the detailed composition of the Bank's holdings are not published, it is difficult to determine whether the short-term transactions are largely for the "Banking Department", and the

[4] Since this borrowing is done entirely by the discount houses, the commercial banks adjust their positions by calling in their loans to the discount houses. Changes in the volume of borrowing from the central bank, however, do not have the same direct and immediate influence on the availability of bank credit as in some countries where the banks borrow directly from the central bank and where such borrowing affects their own willingness to extend credit.

longer term more largely for the "Issue Department". In any event, during recent years it seems to be agreed by observers that the Bank has conducted operations in longer term securities only in order to smooth out undue deviations from what the authorities have taken to be the underlying current trend of prices. There has been little, if any, suggestion by market observers that the Bank was attempting to lead or to determine the actual level of prices and rates for government securities of any maturity category. It should also be pointed out that the "government broker"—one of the principal brokers in the government bond market—operates in medium and long-term government securities on behalf not only of the Bank of England but also of the government departments, as well as of his own regular private customers. The Bank's transactions in the short-term securities market are executed by another firm, its "bill broker"—one of the London discount houses. This broker normally effects transactions with all of the other discount houses as well as with the banks. In view of the need to even out or offset the frequent and large swings in Treasury cash transactions, as well as other disturbances in the money market, the Bank's operations are continuous and thus enable it to maintain close technical surveillance over the market.

The Bank of England's operations definitely have a direct bearing on money market conditions. For instance, when the Bank desires to bring about a tightening of pressures on the availability of funds, it may (by shrinking its purchases or making sales or redeeming maturities) "leave the market short of cash", thus forcing it "into the bank"—that is, forcing the discount houses to borrow at the discount rate which, as noted, is a penalty rate. Such borrowing at the Bank of England in turn tends to induce the discount houses to buy fewer and sell more short-term securities, thereby raising the rates of interest on these securities and exerting a restraining influence on the money market as a whole. The frequency with which the market is forced "into the bank" and, of course, the amount of such borrowing become important influences upon the spread between the market rates and the discount rate. During the first years following the unpegging of the Treasury bill rate of 1951, this spread was relatively wide, but in the two years ended December 1956 it was substantially narrowed. Nevertheless, the Bank of England's operations have during the inflationary periods of recent years met with certain difficulties, as the Treasury faced large cash deficits and resorted to substantial issues of Treasury bills placed in great part with the banking system. As the Governor of the Bank pointed out last October:

> Unfortunately, at some periods during more recent years, it has not proved possible to match the total requirements of Government and public bodies by the sale of long-term securities. Floating debt has again at times become excessive, bank deposits too high and technical pressures more difficult to maintain.

Canada

Although the Bank of Canada was established only in 1935, its open market operations have already become its main instrument of monetary policy. The basic conditions for effective open market operations seem to have been largely fulfilled. The Canadian bond market, which was already quite active at the time of the Bank's establishment, has since widened considerably, and in 1954 a genuine money market began to develop, centering around a broadening market for Canadian Treasury bills. The Canadian commercial banks have for some time been operating with stable cash ratios, particularly since the broadening of the money market. Borrowing at the Bank of Canada through discounts and advances by the banks and through special repurchase agreements by government securities dealers is intermittent and on a small scale, because the banks remain reluctant to borrow, and because the discount rate remains above short-term market rates[5] and thus tends to discourage such borrowing.

The Bank of Canada began its operations in the market soon after it was established. During the war and immediate postwar years, however, it undertook support operations in the government securities market to minimize the interest costs of the war effort. The first departure from this policy occurred in January 1948 when it abandoned its earlier practice of submitting daily lists of bids and offers to the market. However, up to the time of the Korean outbreak in mid-1950 the Bank, according to official statements, was still primarily concerned with ensuring a reasonable stability of bond prices, even though it was also aiming at keeping commercial bank reserves from rising. Subsequently, the Bank "freed" short-term interest rates. One of the difficulties in the earlier postwar years had been that, because of the absence of a short-term money market, the commercial banks used sales of Treasury bills to the central bank for adjusting their reserve positions, and the central bank, while not committed to buying such bills, actually never refused to do so at favorable prices in order to ensure, in the circumstances then prevailing, the commercial banks' liquidity. This practice was, however, gradually modified and finally abandoned with the introduction of new arrangements for day-to-day loans by banks to government securities dealers in 1954 and with the further development of trading activity in money market instruments.[6]

The Bank of Canada's open market operations take place over the whole maturity range of the government securities market and have three major objectives. There is, first of all, the daily activity designed to minimize mar-

[5] Since November 1956, the Bank of Canada has set the discount rate each week at ¼ per cent above the Treasury bill rate; see "International Monetary Developments", *Monthly Review*, December 1956. Prior to this arrangement, the bill rate rose above the discount rate only on rare occasions.

[6] For a discussion of the Canadian money market, see "Monetary and Banking Developments in Canada", *Monthly Review*, August 1956.

ket disturbances, as well as operations to offset seasonal and other temporary changes in market liquidity. Secondly, the Bank has the task of keeping bank reserves at the level deemed appropriate for monetary policy purposes. Finally, the Bank's operations are directed at broadening the government securities market. The Bank's operations are best summed up in a 1954 statement of the then Governor of the Bank of Canada, Mr. Towers, to the banking committee of the Canadian House of Commons:

> As part of our programme to improve and broaden the money market for the benefit of lenders and borrowers and of our financial structure as a whole, the Bank of Canada has been a constant trader in Government of Canada securities since we opened our doors in 1935. While the total amount of our holdings of Government securities is necessarily determined by considerations of monetary policy, we have endeavored to help make a market for all Government issues and have been very substantial buyers and sellers. In a sense, we perform a jobbing function, holding the inventories which are indispensable to a good market. Investment dealers and banks also operate in this way, although naturally on a smaller scale. We would be glad to see both dealers and banks extend their operations of this character, and have the Bank of Canada play a smaller part, although we would always expect to be a substantial participant in the market.

Continental Europe

On the European Continent, central bank open market operations have so far remained limited, compared with those in the United Kingdom and Canada, both because of narrower markets and for other reasons. In West Germany, the operations of the Bank deutscher Länder in their present form began only in 1955 when the Bank was confronted with a growing need to reduce the liquidity of the banking system because of the large inflow of gold and foreign exchange, and yet had only a negligible securities portfolio. In order to obtain suitable securities for the Bank, the Bank and the government agreed to transform certain nonmarketable securities held by the Bank (the so-called "equalization claims" created during the 1948 currency reform) into short-term marketable securities with maturities of up to two years. The operations of the Bank deutscher Länder in the short-term market are primarily designed to offset fluctuations in the liquidity of the banking system. However, in the absence of a broad short-term market, the Bank's operations are rather passive since it restricts itself to announcing, and from time to time changing, the selling and buying rates for the securities it deals in. The actual transactions then depend on the decisions of the banks with which the central bank deals. Nevertheless, the Bank's open market sales have been very large during recent months when it has endeavored to offset the effects of the heavy inflow of foreign exchange. At the beginning of this year, after net sales of such securities had almost reached the authorized limit of 2 billion Deutsche marks, the Bank negotiated an agreement with the government to transform a further billion of nonmarketable into marketable securities. The central bank has also, on occasion, operated in the long-term bond market.

The Netherlands Bank faces somewhat similar problems in its open market operations. Up to 1952, it is true, there had been an additional obstacle to open market sales in that the Treasury was continuously selling short-term securities on tap at fixed rates without regard to its own immediate financing needs; however, in mid-1952 the Treasury suspended such sales. Since then, the Netherlands Bank has entered the market from time to time, both as a seller and as a buyer; on occasion it has replenished its securities portfolio by transforming the Treasury's book debt, inherited from the Occupation, into marketable securities with maturities of up to five years. By now, however, the book debt has been greatly reduced, and since the Bank's current securities portfolio is also relatively small, the Bank's potential ammunition for open market sales is limited. The narrowness of the market—despite the operations of government securities dealers—has likewise tended to restrict the scope of open market operations. Up to the end of 1955 the Bank had confined itself to announcing from time to time its willingness to sell or buy, at specific rates, securities of varying maturity, and would then wait upon the reaction of the market. Since then, however, it has made its open market sales more flexible by declaring its willingness to sell securities of specified maturity at rates to be determined through bids from the market, provided the rates are acceptable to it; the initiative as regards the amounts which the Bank may be able to buy still remains largely with the market. In addition, toward the end of 1956 the Bank resorted to short-term repurchase agreements with banks and apparently also with government securities dealers at rates set by itself.

In France, where banks and discount houses participate in a fairly well established money market, the central bank's operations are limited to smoothing-out the periodic disturbances in the flow of funds in the market. The bulk of the Bank's transactions, outright as well as under repurchase agreements, is in Treasury bills issued with maturities of up to two years, and takes place through a special broker. The limited scope of the Bank of France's operations, as its Governor stated in a recent annual report, is the result of two factors: first, the government, confronted with a large deficit, is currently issuing Treasury bills on tap at net yields higher than the discount rate, with the result that commercial banks are encouraged to borrow at the Bank of France; secondly, the Bank of France is under legal obligation to buy at its discount rate all Treasury bills offered to it in the market when they are three months or less from maturity.

In the Scandinavian countries, open market operations have been conducted largely in longer term government securities. In Denmark, where the central bank had already been operating in the bond market in the interwar period, the Bank is known to be fairly active and to exert an important influence on bond prices. During most of the postwar years, however, it has not supported long-term yields rigidly, but instead has conducted its transactions mainly on the basis of general monetary policy considerations. In Norway, the central bank did not engage in open market operations until quite recently, and its transactions have mainly been on the buying side. In 1955 it replaced its former rigid supports by more flexible securities purchases, and last year it actually reduced, on balance, its portfolio. Since the Bank's securities portfolio is limited, it recently proposed to the Finance Ministry to convert a part of the government's book debt, inherited from the wartime Occupation, into short-term bonds that would thus be available to the Bank for sale in its market operations. The operations of the Swedish central bank have been a major factor in the bond market during the postwar years. Up to October 1954, they had been geared to the government's cheap money policy; at that time, however, the Bank announced, as part of its monetary restraint policy, that it not only would abstain from supporting government bonds but also would, if necessary, sell securities in the market in order to increase the effect of its credit restraint measures. Since then the Riksbank has been in the market both as a seller and a buyer, and apparently has not supplied the banks with the full amount of reserves that would have been needed to meet all credit demands.

In other European countries, central bank open market operations are negligible. Thus, in Belgium, official operations in the long-term market are conducted by the Fonds des Rentes, a government fund established in 1945 to support government bond prices; the central bank itself does not operate in the market. In view of the large financing needs of the government, the unutilized margin of the government's legal credit ceiling at the central bank—which applies both to direct borrowing and to indirect borrowing through the Bank's securities purchases—has been so small as to give little leeway for open market purchases; and open market sales have been thwarted by the large borrowing of the government and its agencies in the market. These factors, according to the 1955 annual report of the central bank, have deprived it of an important field of action. Consideration is now being given to establishing a more flexible money market within which the Bank could operate more effectively.

In Switzerland, where the economy has been very liquid during the postwar years, it is the smallness of the central bank's securities portfolio that has prevented the Bank from engaging in major open market sales. For this reason, the Bank at times has made limited sales of gold coins to the public to absorb excess liquidity of the banking system; however, reliance has been primarily placed on gentlemen's agreements for special reserve requirements and for other measures, between the authorities and the banks and other financial institutions. In addition, the accumulation of large cash balances by the Treasury and the issuance by the Treasury of special securities have helped absorb excess liquidity.

Other Countries

In other countries of the British Commonwealth, central bank open market operations, while not very extensive, have generally helped to broaden the capital markets and at the same time have exerted some influence on the banking systems. In the Union of South Africa, the stated aim of the central bank's open market policy has principally been to maintain orderly conditions in the government bond market and to establish appropriate relationships between the rates for different maturities. The Bank quotes buying and selling prices for government securities, based on a pattern of rates that it decides on from time to time according to circumstances and monetary policy aims. Thus, the Bank in September 1955, besides increasing the discount rate, announced that it would operate in the bond market in order to bring the yields on short and long-term governments up to certain levels. In Australia, the central bank's operations to support government bond prices have until recently been relatively rigid, and have at times involved very large additions to bank reserves. However, in the spring of 1956, as part of the government's restraint measures, the Bank reduced its support of the bond market "to a more normal level", and long-term yields rose by ½ per cent. It should also be noted that the Bank has attempted to improve the marketability of government bonds by being a ready buyer of such bonds in small amounts, and also by facilitating transactions in the market when large buying or selling orders were involved.

In India, heavy bond-support operations by the central bank were abandoned as far back as November 1951 when the Bank announced that, instead of maintaining the long-term rate by buying any government securities that were offered to it, it would refrain, except in special circumstances, from buying securities to meet seasonal needs of the banks, which would thenceforth have to be met mainly through the "discount window". This change in the central bank's open market policy was intended to make effective the newly increased discount rate, and to assure that a seasonal contraction would take place when the peak of the seasonal needs for funds was over. The central bank's securities transactions, which take place either directly with the banks or through brokers, have also been intended to help the banks secure a better distribution of their securities portfolios, as well as at times to prepare the market for new government loan issues. In Ceylon, the central bank's operations, while relatively small, have been mainly concerned with helping to regulate the banking system's liquidity rather than with a rigid and often inflationary support of government bond prices, as in many other financially less-developed countries. On occasion, however, the Bank aided in stabilizing the market during the issue of government loans. In February 1956, when the Bank's portfolio was almost exhausted but the economy unusually liquid, the Bank issued its own one and two-year securities—the first instance of an issue of central bank bonds in many a year. In Pakistan, the central bank informs its broker that it is prepared to buy or sell securities, and leaves it to the market to make use of the facilities thus offered. In this way, the Bank has been able to relieve periods of stringency while guarding against wholesale unloading of securities, and at the same time has provided a more or less consistent demand for securities.

In Japan, after a lapse of many years, the central bank reinstituted open market operations in November 1955 in a setting of greatly increased bank liquidity. So far, however, the Bank's sales have been small, and the Bank has agreed to suspend them several days prior to the maturity dates of the particular securities. Moreover, the Bank stands ready, for a short period after the sales, to repurchase at the same price the securities that it has sold. It similarly stands ready to repurchase as well the securities sold by the Treasury under the recent arrangement of placing new securities directly with the commercial banks rather than with the central bank.

In other countries of Asia as well as in Latin America, the scope of central bank open market operations has remained even more limited because of the extreme narrowness or virtual absence of capital markets. In these countries, moreover, such operations generally consist of purchases only, and on the rare occasions when sales are made, care is usually taken not to depress securities prices. Moreover, the purchases have often been intended to supply needed funds directly or indirectly to the government or the various government agencies. The operations of the securities stabilization funds established under central bank laws, as in the Philippines, the Dominican Republic, Ecuador, and Honduras, have likewise remained very small. In the face of narrow capital markets, the authorities in these financially less-developed countries not only have resorted to central bank repurchase guarantees for newly issued government securities, as in Cuba and Mexico, but often have also employed measures of a more or less coercive nature in order to reduce banking liquidity, help broaden the markets, and aid in the financing of government deficits. Thus, in Mexico the commercial banks' reserve requirements, which have long included government securities, were recently tightened so as to require the banks to purchase additional government securities from the central bank. In Honduras, a recent increase in the banks' reserve requirements provided that it might be fulfilled by purchasing government securities from the central bank's securities stabilization fund. In the Philippines, the commercial banks can in part meet their reserve requirements by holding government securities, and in Cuba the commercial banks have recently been required to invest in government securities a certain percentage of their deposits in order to be eligible to accept official deposits. In Paraguay, Guatemala, and Ecuador, the authorities have introduced special laws requiring insurance companies and other financial institutions to invest in government and other officially favored securities.

In spite of the severe limitations on open market operations, much has been achieved in the broadening of the capital markets in a number of these countries, notably Cuba, Costa Rica, Mexico, and the Philippines. But even where central bank operations have helped to widen the ownership of government securities, official commitments to support government bonds have often tended to impede efforts to prevent too rapid an expansion in the money supply.

Lessons and Prospects

The endeavor of many foreign countries to develop facilities for central bank purchase and sale of securities in the market reflects the need being felt there to improve the flexibility and strengthen the impact of monetary and credit controls. It is also clear that there are many institutional obstacles to be overcome in most countries. Despite the advance achieved in a number of countries, the open market instrument is still only rarely the major credit-control tool. Where it is used, with the notable exceptions of the United Kingdom, Canada, and the United States, it generally serves to supplement other instruments such as discount rate and reserve requirement changes. Nevertheless, in the last few years sale of government securities by various central banks in order to mop up excess liquidity has become an important instrument of monetary management. Furthermore, insofar as central banks abroad are still supporting government bond prices, such operations are now being effected more flexibly, and at interest rates that reflect more realistically the basic supply and demand conditions prevailing on the money and capital markets.

The growing experience of foreign central banks is demonstrating that many of the obstacles to practicable use of open market operations can be overcome. The lack of a suitable central bank securities portfolio is, as a rule, the easiest to remedy; when a central bank has no book claims on the government that can be transformed into marketable securities, it may obtain the power to issue its own securities in order to secure the needed ammunition. A much more serious obstacle is to be found in the lack of appropriate fiscal and debt management policies; still, there is growing realization in many countries of the need for a better balanced budget and for the covering of deficits through noninflationary means, and a number of countries are already adjusting their policies accordingly. The absence of sufficiently broad money and capital markets is another fundamental problem; certain central banks, however, have already contributed significantly to the development of such markets, both by helping to create a proper institutional framework and by nourishing the further growth of these markets.

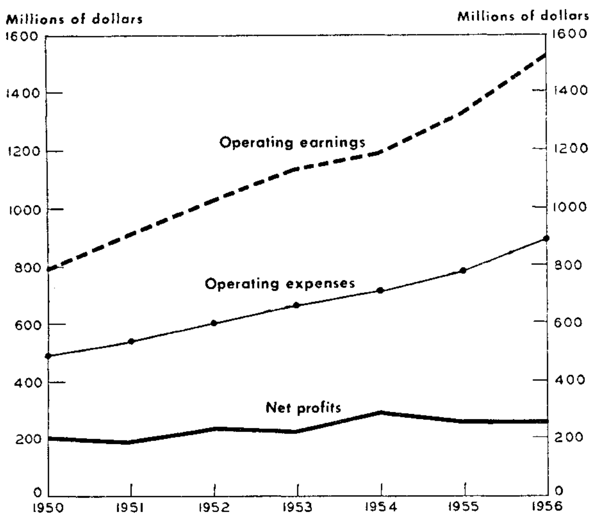
But much remains to be done. In general, it is essential that central bank operations to broaden money and capital markets do not become merely a means for facilitating government-deficit financing; government-bond-support operations may have inflationary repercussions even as markets broaden. In countries with less-developed financial systems, the broadening of financial markets, however, is dependent not only on suitable monetary, fiscal, and debt-management policies, but also on continued economic growth and diversification. In countries with more developed systems, further progress hinges mainly on the overhauling of government debt policies and techniques, and on improvements in the functioning of the money market; such reform measures are already being considered in a number of Western European countries.

EARNINGS AND EXPENSES OF SECOND DISTRICT MEMBER BANKS IN 1956

Net current operating earnings of member banks in the Second Federal Reserve District increased 100 million dollars, or 18.8 per cent, in 1956 to an all-time high of 635 million dollars. Expanded loan volume and higher rates of interest on loans were primarily responsible for the improvement in earnings. Operating expenses also rose but not so rapidly as income. After deduction of income taxes, losses and charge-offs, and charges against operating earnings to augment reserves for losses on loans, however, net profits before dividends of 253 million dollars were less than 1 per cent higher than in 1955. The failure of net profits to reflect the substantial rise in net current operating earnings was the result both of losses on the sale of securities and of a growing volume of charge-offs on loans. The loan charge-offs were particularly important at the central reserve New York City banks.

Total current earnings and expenses of Second District member banks have risen constantly since 1950, as shown in Chart I, and since income has increased more than outgo, net current earnings have risen each year to new peaks. For several reasons, however, net profits after taxes have not kept pace with the rise in net earnings. Net additions to valuation reserves for loan losses have risen substantially in each year of this period except 1952 and 1953. Nearly 98 million dollars were added to reserves for loan losses in 1956. Losses or charge-offs on loans also have increased, especially during the last two years. In addition, in four of the six years since 1950 the banks sustained losses on sales of securities; in 1956, these losses on securities totaled over 71 million dollars. Finally, taxes on net income have increased more rapidly than net profits before income taxes, owing in large part to a decrease in holdings of tax-exempt investments. While these factors tended to restrain any substantial rise in net profits, the banks have simultaneously augmented the size of the reserve "cushion" that they are maintaining against potential losses.

Chart I
EARNINGS, EXPENSES, AND NET PROFITS OF SECOND DISTRICT MEMBER BANKS, 1950-56

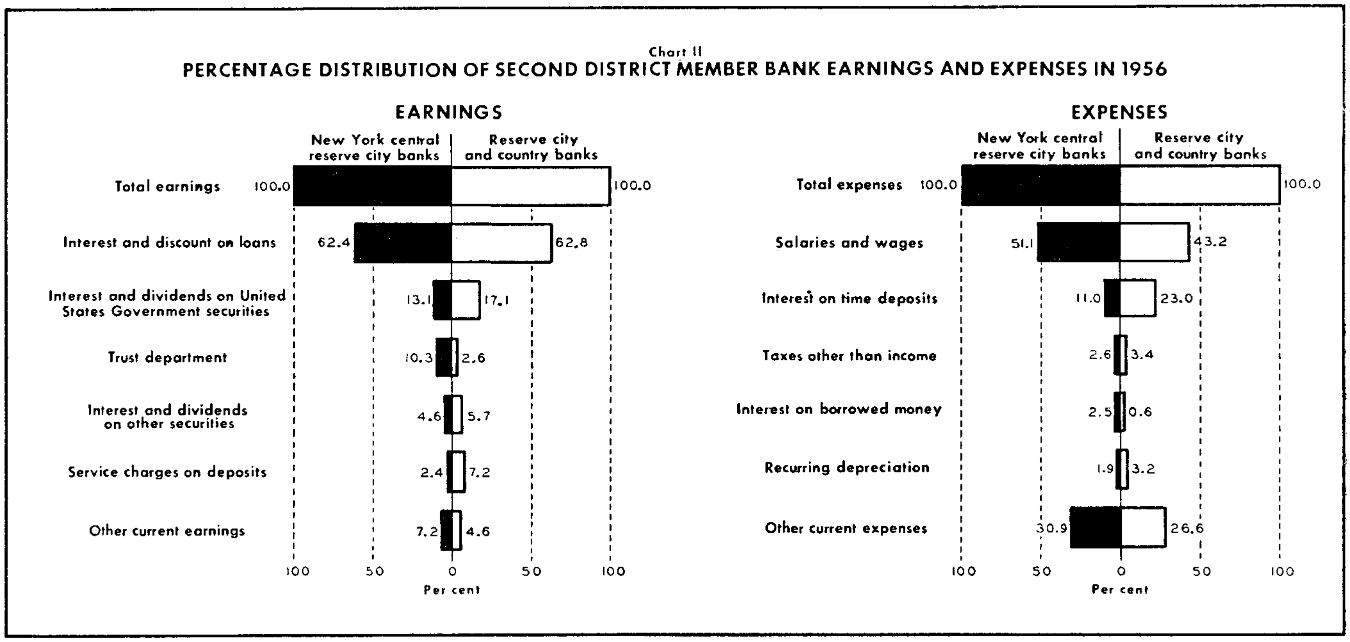


Sources: Board of Governors, Federal Reserve System, 1950-55. Figures for 1956 are preliminary and are compiled by the Federal Reserve Bank of New York.

Proportionately, the increases during 1956 in both earnings and expenses were greater for member banks in the Second District than for member banks elsewhere in the country. Net current operating earnings of Second District member banks rose 18.8 per cent in 1956, compared with 15.2 per cent for all member banks. The differential reflects the fact that banks here expanded their loans more than the banks in other parts of the country. After losses on security sales and other nonrecurring charges, net profits before taxes for the Second District banks rose 5.6 per cent, compared with 4.2 per cent for all member banks.

Almost 63 per cent of the operating earnings of Second District banks in 1956 was derived from interest and discounts on loans, as shown in Chart II. Both the central reserve city banks and the reserve city and country bank groups derived about the same proportion of their earnings from loans. However, the reserve city and country banks received about 23 per cent of their earnings from investments compared with 18 per cent from the New York City banks, and 7 per cent from service charges on deposit accounts against about 2½ per cent for the City banks. The central reserve city banks, on the other hand, derived more than 10 per cent of their income from their trust departments, compared with about 2½ per cent for banks elsewhere in the District.

By far the largest item of expense in operating a bank is salaries and wages. The City banks' expenses for salaries and wages in 1956 amounted to 51 per cent of total expenses, but at the other District banks this item represented only 43 per cent of the total, reflecting in large part the lower average wages prevailing in nonmetropolitan areas. The second major item of expense, interest on time deposits, is more than twice as large an expense for small banks as it is for the large City banks, since the

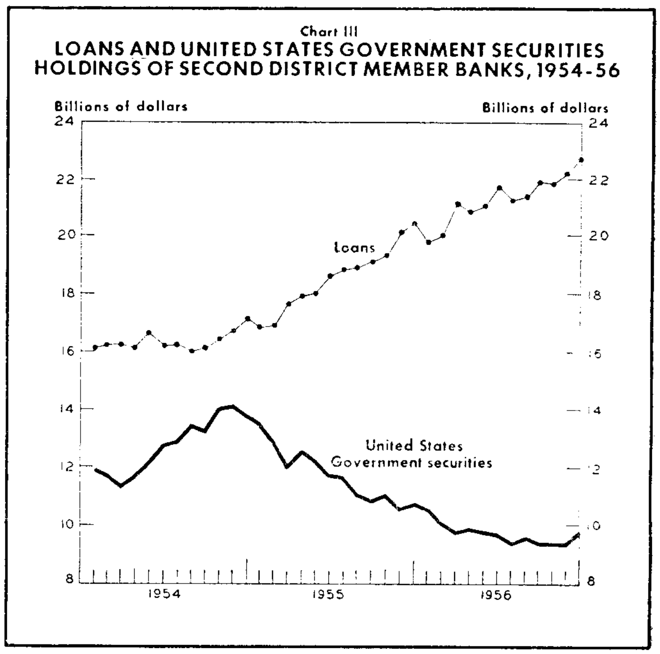


volume of time deposits at reserve city and country banks represents a much larger proportion of total deposits, 38 per cent, compared with only about 12 per cent at City banks.

Operating Income

In 1956, bank earnings reflected higher average interest charges on loans, higher yields on Government securities, and, as shown in Chart III, the continuing shift from relatively lower yielding investments to higher yielding loans. As a result, total current operating earnings of member banks in the Second District attained a peak of 1,523 million dollars, 206 million dollars or 15.7 per cent above 1955. The continuation of credit restraint through 1956, however, had a greater impact on the central reserve New York City banks than it had on other banks in the Second District. Although both the City banks and the reserve city and country banks expanded their loan portfolios, the City banks had to contract their investments by nearly the same amount as their loan expansion. On the other hand, the reserve city and country banks in the aggregate generally held some excess reserves during the course of the year, and the increase in their loans required less security liquidation. The average amount of loans on the books of the City banks and of the reserve city and country banks during the year rose 1.9 billion dollars (14.3 per cent) and 0.7 billion dollars (13.7 per cent), respectively, whereas investments declined 1.8 billion dollars (18.9 per cent) in the City banks and only 0.3 billion dollars (5.4 per cent) in the banks outside the City. Consequently, total loans and investments increased only 0.4 per cent in the City banks but 4.1 per cent outside the City.

Most of the loan expansion at the City banks occurred in commercial and industrial loans which averaged 2,162 million dollars, or 26.1 per cent more than in 1955. The rise in consumer loans also was relatively large (11.3 per cent), but in dollar terms it added only 158 million to the increase in total loans. The only significant loan category to decline at the City banks was "loans to brokers and dealers in securities" which contracted 505 million dollars, or 20.3 per cent, probably reflecting in part smaller average inventories held by brokers and dealers during 1956 and in part a shift of security financing to out-of-town banks and nonbank lenders. In the aggregate, the ratio of loans to total loans and investments at the City banks rose from 58.3 per cent in 1955 to 66.3 per cent in 1956. At reserve city and country banks, commercial loans also rose, but an expansion in real estate and consumer loans contributed significantly to the total increase. Outside New York City, the ratio of loans to total earning assets rose from 49.7 per cent in 1955 to 54.3 per cent in 1956.



New York City banks increased their rate on "prime" loans to business borrowers from 3½ per cent, effective at the beginning of the year, to 3¾ per cent in April, and to 4 per cent in August. These changes paralleled the rise in the discount rate at the Federal Reserve Bank of New York from 2½ per cent to 2¾ per cent on April 13 and to 3 per cent on August 24. Average rates on short-term business loans at the New York City banks, as reported in the quarterly interest rate surveys conducted by the Reserve System, rose somewhat less, from 3.75 per cent at the beginning of 1956 to 4.22 per cent at the end of the year. The ratio of total income from loans to the average volume of loans outstanding during the year at the City banks in 1956 equaled 4.08 per cent, compared with 3.56 per cent in 1955. In District banks outside the City, where rates are generally somewhat higher and less responsive to money market developments, the effective rate on total loans was 5.35 per cent in 1956 and 5.14 per cent in 1955.

Although Second District banks decreased their securities holdings, interest and dividends earned on securities did not decline proportionately because the banks sold relatively more of their short-term, lower yielding securities and also replaced maturing obligations at higher rates. Average total investments contracted 2,127 million dollars (14.1 per cent) from the previous year to 12,911 million dollars, while interest and dividends earned on securities fell only 25 million dollars, or 7.8 per cent. The New York City banks' securities portfolios declined 18.9 per cent and earnings fell 13.2 per cent. Although other banks in the District reduced their securities portfolios 5.4 per cent, their earnings on securities rose 2.0 per cent because the increase in interest earned more than offset the decline in the volume of securities held.

Earnings from trust department operations of City banks increased 19.2 per cent to 105 million dollars, and at other banks trust earnings rose 4.8 per cent to 13 million dollars. Higher trust department earnings reflected a continued growth of trust business and higher security yields and dividends. Income from service charges on deposit accounts rose sharply at both large and small banks, by 20.6 per cent at City banks and 15.7 per cent at other banks.

Operating Expenses

Expenses of both classes of banks in the District continued to climb steadily in 1956. Since the beginning of 1950 Second District banks' total expenses have risen 82.2 per cent, or an average of 10.5 per cent per year. In 1956, expenses increased 13.5 per cent above the 1955 levels, and there was little difference between the increased costs of operating central reserve or reserve city and country banks. Expenses were up 13.7 per cent at New York City banks in 1956 and 13.3 per cent elsewhere.

Wages and salaries, which constitute nearly half of total expenses for Second District member banks, did not increase so fast in 1956 as other items of expense. In the New York City banks salary and wage payments rose 8.6 per cent, whereas in the reserve city and country banks they were up 10.2 per cent; in both groups the increases reflected the combination of higher wage rates and an increase in the number of people employed. During the entire postwar period, 1945 to date, salary and wage payments at the City banks have risen 135 per cent and at those outside the City 228 per cent.

Reflecting an increase in rates paid together with an expansion in the average volume of time deposits in 1956, interest payments on time deposits—the second largest single item of expenses at District banks—rose 31 million dollars, or 28.7 per cent. The average effective rate paid on time deposits in the City banks rose from 1.23 per cent in 1955 to 1.74 per cent in 1956 and in the reserve city and country banks from 1.46 per cent to 1.72 per cent. As a result of the higher rates on advances from the Federal Reserve Bank and on "Federal funds" prevailing during 1956, interest paid on borrowed money doubled in the City banks and showed only a slightly smaller rise in the District outside the City. This item, nevertheless, continued to represent one of the smaller expenses incurred during the year, amounting to 2.5 per cent of total expenses in the City banks and $\frac{6}{10}$ of 1 per cent in the banks outside the City.

Recurring depreciation on banking premises, furniture and fixtures also rose sharply in 1956, especially at the New York City banks where the increase amounted to 37.0 per cent. The marked rise in depreciation charges in 1956 was due in part to further modernization of quarters and in part to a change in accounting procedures at some banks. Contrary to the practice common among other businesses, banks have often followed the conservative accounting procedure of charging to "other current operating expenses" the full cost of modernization of premises and the cost of new equipment purchased even though, for tax purposes, they set up a depreciation schedule and charged off the expense over a number of years. Under this procedure these costs were reflected in "other current operating expenses" rather than "recurring depreciation" in the "Report of Earnings and Dividends". However, because the costs of modernization and new equipment (for example, electronic equipment) have become substantial, in 1956 some banks adopted the procedure of making recurring depreciation charges rather than writing off the full cost immediately.

Nonrecurring Items

Second District member banks had net losses on securities amounting to 71 million dollars in 1956, of which 53 million dollars represented the loss sustained by the central reserve New York City banks. Losses on securities rose 32.6 per cent at City banks and 26.0 per cent at other District banks. Because of the continuing pressure on reserves, part of the losses resulted from the sale of securities to obtain funds to expand loans, but some also resulted from "switching operations" undertaken to establish losses for tax purposes. Since banks are permitted to deduct losses from security sales from net profits before income taxes, it is often advantageous, when security prices have fallen, for a bank to sell some of its investments and establish a loss which will be deducted from net profits and thus reduce the income tax liability. The bank can simultaneously buy other securities to maintain its investment portfolio.

The net amount of loans charged off by Second District banks increased sharply in 1956 to 34.7 million dollars, an amount more than two and one half times the charge-offs incurred in 1955. In New York City, larger losses on loans were sustained by many of the banks, and their total loan charge-offs of 30.0 million dollars compare with only 10.5 million a year ago.

In a precautionary move, stimulated in part by the rise in loan charge-offs and in part by the tax deductible features of additions to bad debt reserves for loan losses, the City banks added 65 million dollars to their valuation reserves for loan losses, nearly twice the amount added during the previous year. Reserve city and country banks, although their loan charge-offs were comparatively small, added 33 million dollars to their valuation reserves, compared with 20 million dollars in 1955. In contrast to the additions to reserves for loan losses, only minor changes were made in reserves for security losses. City banks added a net of 2.2 million dollars to their reserves for security losses, but the other District banks decreased their reserves a net of 1 million dollars.

Taxes, Dividends, and Retained Earnings

Profits before income taxes of Second District member banks rose to 447 million dollars, an amount 5.6 per cent or 24 million above 1955. In the City banks profits before taxes increased 8.4 per cent, but in the remaining District banks they declined 3.1 per cent. Correspondingly, income taxes, paid or accrued, increased sharply in the City banks and declined moderately elsewhere in the District. The magnitude of these changes in taxes was accentuated by a reduction in holdings of tax-exempt municipal obligations on the part of the New York City banks and an increase in the holdings of these securities by other District banks.

Cash dividend payments by both groups of banks rose during 1956 despite the comparative stability of net profits after taxes. In fact, dividend payments increased 11.0 per cent at the reserve city and country banks and 7.5 per cent in New York City. Relative to total capital funds at

Earnings and Expenses of Second District Member Banks, Selected Years
(In millions of dollars)

Item	New York central reserve city banks				Reserve city and country banks			
	1945	1950	1955	1956	1945	1950	1955	1956
Number of banks	37	23	18	18	777	728	608	569
Earnings:								
On United States Government securities	222.1	144.6	156.2	132.9	81.5	72.9	87.5	87.1
On other securities	24.2	31.3	50.9	46.9	10.3	16.0	26.2	28.9
On loans (including service charges and fees on loans)	105.6	215.1	483.9	633.3	45.2	142.2	270.0	319.7
Service charges on deposit accounts	7.5	16.3	20.4	24.6	9.0	19.6	31.9	36.9
Trust department earnings	40.7	57.5	88.0	104.9	5.3	8.5	12.4	13.0
Other current earnings	32.1	47.4	67.2	71.5	12.9	16.3	22.2	23.5
Total current operating earnings	432.2	512.2	866.6	1,014.1	164.2	275.5	450.2	509.1
Expenses:								
Salaries and wages—officers and employees	116.8	169.7	252.7	274.5	46.4	87.4	137.9	152.0
Interest on time deposits (including savings deposits)	5.6	9.7	42.5	59.1	23.8	31.7	66.4	81.1
Interest and discount on borrowed money	1.0	1.9	6.6	13.2	0.2	0.3	1.2	2.2
Taxes other than on net income	10.2	11.8	14.0	14.2	6.0	8.3	11.1	12.0
Recurring depreciation on banking house, furniture, and fixtures	4.2	3.5	7.3	10.0	3.7	5.6	9.6	11.3
Other current operating expenses	78.6	101.3	148.5	165.4	32.3	56.3	84.6	93.4
Total current expenses	216.4	297.9	471.6	536.4	112.4	189.6	310.8	352.0
Net current operating earnings before income taxes	215.8	214.3	395.0	477.7	51.8	85.9	139.4	157.1
Net recoveries (+) or charge-offs (−) on loans	+ 1.3*	− 2.7	− 10.5	− 30.0	+ 1.2*	− 1.2	− 2.8	− 4.7
Security profits and recoveries (+) or charge-offs (−)	+100.2†	+ 13.5	− 39.9	− 52.9	+ 26.1†	+ 6.8	− 14.6	− 18.4
All other recoveries (+) or charge-offs (−), net	− 12.4	− 3.8	− 0.3	+ 18.4	− 2.7	− 0.6	− 3.1	− 1.5
Net additions to (−) or deductions from (+) valuation reserves for:								
Loan losses	—	− 14.2	− 36.4	− 65.2	—	− 12.1	− 19.8	− 32.6
Security losses	—	+ 6.9	+ 11.1	− 2.2	—	+ 0.2	+ 5.0	+ 1.0
Net profits before income taxes	304.9	214.0	319.0	345.8	76.4	79.0	104.1	100.9
Taxes on net income	90.7	68.6	132.5	156.8	16.0	23.2	38.8	37.4
Net profits after income taxes	214.2	145.4	186.5	189.0	60.4	55.8	65.3	63.5
Cash dividends paid or declared	73.0	89.4	123.9	133.2	13.9	20.2	31.0	34.4
Retained earnings	141.2	56.0	62.6	55.8	46.5	35.6	34.3	29.1

* Includes transfers to or from valuation reserves for loan losses.
† Includes transfers to or from valuation reserves for losses on securities.
Sources: Board of Governors of the Federal Reserve System, 1945-55; figures for 1956 are preliminary and are compiled by the Federal Reserve Bank of New York.

hand at the beginning of 1956, cash dividend payments during the year represented an average return of 4.9 per cent for the City banks and only 3.7 per cent for the reserve city and country banks. Since larger cash payments were made in 1956 while net profits increased only moderately or showed a decline, retained earnings were smaller at both groups of banks. In New York City retained earnings declined 6.8 million dollars, or 10.9 per cent, to 55.8 million dollars, while in the other District banks they fell 5.2 million dollars, or 15.2 per cent, to 29.1 million dollars.

SELECTED ECONOMIC INDICATORS
United States and Second Federal Reserve District

Item	Unit	1957	1956			Percentage change	
		January	December	November	January	Latest month from previous month	Latest month from year earlier
UNITED STATES							
Production and trade							
Industrial production*	1947-49 = 100	146p	147	146	143	− 1	+ 2
Electric power output*	1947-49 = 100	226p	220	218	211	+ 3	+ 7
Ton-miles of railway freight*	1947-49 = 100	—	111p	104	112	+ 7	+ 5
Manufacturers' sales*	billions of $	—	26.7p	28.7	27.0	− 7	− 2
Manufacturers' inventories*	billions of $	—	51.4p	51.4	46.3	#	+12
Manufacturers' new orders, total*	billions of $	—	28.8p	29.4	28.1	− 2	− 2
Manufacturers' new orders, durable goods*	billions of $	—	14.4p	15.1	14.7	− 5	− 8
Retail sales*	billions of $	—	16.5p	16.4	15.7	+ 1	+ 4
Residential construction contracts*	1947-49 = 100	—	n.a.	197	290	−14	−22
Nonresidential construction contracts*	1947-49 = 100	—	311	272	306	+14	− 3
Prices, wages, and employment							
Basic commodity prices†	1947-49 = 100	91.7	92.9	92.7	89.4	− 1	+ 3
Wholesale prices†	1947-49 = 100	116.9p	116.3	115.9	111.9	+ 1	+ 4
Consumer prices†	1947-49 = 100	118.2	118.0	117.8	114.6	#	+ 3
Personal income (annual rate)*	billions of $	—	333.5p	333.5	316.7	#	+ 5
Composite index of wages and salaries*	1947-49 = 100	—	153p	153	145	#	+ 6
Nonagricultural employment*	thousands	52,112p	52,071p	51,950	51,080	#	+ 2
Manufacturing employment*	thousands	17,033p	17,079p	17,043	16,944	#	+ 1
Average hours worked per week, manufacturing†	hours	40.2p	41.0	40.6	40.7r	− 2	− 1
Unemployment	thousands	2,940	2,479	2,463	2,885	+19	+ 2
Banking and finance							
Total investments of all commercial banks	millions of $	73,660p	74,450p	74,360p	87,430	− 1	−16
Total loans of all commercial banks	millions of $	89,010p	91,240p	89,580p	81,980	− 2	+ 9
Total demand deposits adjusted	millions of $	109,210p	110,650p	108,210p	108,900	− 1	#
Currency outside the Treasury and Federal Reserve Banks*	millions of $	30,916p	30,970	30,859	30,498	#	+ 1
Bank debits (337 centers)*	millions of $	82,754	76,576	78,794	74,728r	+ 8	+11
Velocity of demand deposits (337 centers)*	1947-49 = 100	139.4p	138.1	140.0	134.4	+ 1	+ 4
Consumer instalment credit outstanding†	millions of $	—	31,552	31,024	28,886	+ 2	+ 9
United States Government finance (other than borrowing)							
Cash income	millions of $	4,886	5,899	6,332	4,729	−17	+ 3
Cash outgo	millions of $	5,599	7,448	6,577	5,323	−25	+ 5
National defense expenditures	millions of $	3,651	3,448	3,450	3,394	+ 6	+ 8
SECOND FEDERAL RESERVE DISTRICT							
Electric power output (New York and New Jersey)*	1947-49 = 100	163p	155	155	159	+ 5	+ 3
Residential construction contracts*	1947-49 = 100	—	n.a.	141p	222	−12	−18
Nonresidential construction contracts*	1947-49 = 100	—	n.a.	305p	373	+14	+11
Consumer prices (New York City)†	1947-49 = 100	115.6	115.5	115.6	112.1	#	+ 3
Nonagricultural employment*	thousands	7,841.8p	7,860.2	7,858.1r	7,762.8	#	+ 1
Manufacturing employment*	thousands	2,696.1p	2,698.3	2,686.2r	2,682.3	#	+ 1
Bank debits (New York City)*	millions of $	74,233	65,674	72,031	67,646	+13	+10
Bank debits (Second District excluding New York City)*	millions of $	5,470	5,070	5,115	4,989	+ 8	+10
Velocity of demand deposits (New York City)*	1947-49 = 100	183.6	174.8	186.3	173.7	+ 5	+ 6
Department store sales*	1947-49 = 100	119	116	120	114	+ 3	+ 4
Department store stocks*	1947-49 = 100	131	131r	131	123r	#	+ 7

Note: Latest data available as of noon, March 4, 1957.

p Preliminary.
r Revised.
n.a. Not available.

* Adjusted for seasonal variation.
† Seasonal variations believed to be minor; no adjustment made.
\# Change of less than 0.5 per cent.

Source: A description of these series and their sources is available from the Domestic Research Division, Federal Reserve Bank of New York, on request.