MONTHLY REVIEW

Of Credit and Business Conditions

FEDERAL RESERVE BANK OF NEW YORK

Volume 39 | JANUARY 1957 | No. 1

MONEY MARKET IN DECEMBER

The money market and the Government securities market were under substantial pressure during December. Seasonal increases in reserve needs and the churning connected with end-of-the-year tax and dividend payments were accentuated by the Treasury's cash offering of tax anticipation bills, which in turn reflected one aspect of the uncertainties arising out of the Suez crisis. In addition, the prospects for heavy corporate demands for capital in January and February and the expectation that municipal flotations would be substantial later in the year also contributed to the uneasiness of the market. Reserve needs arose in part from an expansion of business loans which in the four weeks through December 19 appeared to be as rapid as a year earlier. Pressures were partly relieved through Federal Reserve open market operations which added 401 million to reserves through outright purchases of Treasury bills and bankers' acceptances and 290 million through repurchase agreements with Government securities dealers and acceptance dealers.

Although these operations, in conjunction with other influences, resulted in a decline in average monthly member bank borrowings from Federal Reserve Banks to the lowest level since July 1955, the money market remained tight and Treasury bill rates rose. The year-end cash requirements of corporations, as well as the Treasury's 1 billion dollar cash offering of tax anticipation bills, pushed up yields on Treasury bills early in the month; the average issuing rate reached a postwar high of 3.331 per cent in mid-December, and rates receded only moderately later in the month. The effective rate on Federal funds was 3 per cent through most of the month and Government securities dealers frequently found that other demands for money were restricting the availability of funds with which to meet their financing needs.

The prices of longer-term Government bonds, after drifting lower early in December, declined sharply around the middle of the month, reflecting in part a delayed adjustment to the higher yields on shorter Government issues and on corporate and municipal bonds. The price declines were also influenced by the unusually heavy calendar of corporate flotations in January and February, by the expectation that substantial municipal offerings would be scheduled later on, and by a feeling in some quarters that after the turn of the year a continued policy of credit restraint might be signaled by a rise in the discount rate. The atmosphere in the corporate and municipal bond markets, after improving early in the month, subsequently turned heavy. However, the small volume of flotations in the last half of December helped dealers in their efforts to clear out issues which had moved slowly when originally offered. As a result, the year closed with most underwriting and distributing facilities well prepared for the exceptionally large flow of corporate issues scheduled for public offering in January.

Rates on bankers' acceptances were raised ⅛ per cent on December 7, in the wake of three similar increases during November. This brought the bid rate on 90-day acceptances to 3½ per cent. As in November, the rate increases were reportedly connected with the large shift of cotton financing from commercial banks into the acceptance market and the general weakening of foreign demand. By the end of the month the outstanding volume of acceptances had reached a new high for the postwar period, and activity in the dealer market was the greatest since 1931.

Member Bank Reserve Positions

Member bank borrowings from the Federal Reserve Bank averaged 581 million dollars in the four weeks ended December 26, 184 million dollars lower than in the pre-

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ceding four weeks, while average excess reserves, at 550 million dollars, declined by 53 million. Thus, on the average, net borrowed reserves amounted to 31 million dollars, compared with 162 million in November this year and 245 million in December 1955. The chief factors tending to reduce reserves over most of the month were the seasonal increase of currency in circulation and the rise in required reserves associated both with the seasonal increase in lending and with bank payments for the new issue of tax anticipation bills. These influences were more than offset, however, by a higher average level of float and by System open market operations.

During the first two statement weeks ended in December, bank reserve positions tightened somewhat, as float receded from the high levels associated with the November holiday period and as currency continued to flow into circulation. In order to meet the seasonal needs for reserves and to assist in the smooth functioning of the money market, System open market operations added almost 295 million dollars to bank reserves through outright purchases of Treasury bills, and another 90 million dollars through an increase in outstanding repurchase agreements with Government securities dealers.

Later in the month, the required reserves of member banks rose sharply, as a result of both the December 17 payment by banks through credit to Tax and Loan Accounts for their subscriptions to the new tax anticipation bill and the continued seasonal expansion in lending. A continued outflow of currency into circulation, somewhat larger than usual for this time of year, also resulted in a drain on reserves. The combined effect of these factors was, however, more than offset by the midmonth float expansion and a 287 million dollar increase in reserves through System open market operations. As a result, in the two final statement weeks, member banks, on a weekly average basis, held free reserves of about 36 million dollars.

Wide swings in the Treasury's balances at the Federal Reserve Banks occurred over the course of the month. These balances declined early in the month, partly as an indirect result of British borrowing from the International Monetary Fund. Although calls on Class C banks were twice advanced, Treasury balances at Federal Reserve Banks fell to 314 million dollars by December 12, compared with 479 million on November 28. Later in the month these balances were rebuilt sharply as tax payments due in mid-December came in at an unusually rapid rate.

In offsetting the year-end reserve strains, the System relied to a considerable degree on the use of repurchase agreements with Government securities dealers. Dealers' financing needs rose substantially as their portfolios expanded because of seasonal influences, including the tapering-off of the nonbank demand for Treasury bills—in part due to corporate cash needs for making tax and dividend payments. As a result, dealers had to finance additions to their portfolios as well as their other holdings. Moreover, corporate funds that had earlier helped in the financing of dealer positions also tended to decline in volume. In these circumstances, and with bank reserve positions under seasonal pressure, the volume of System repurchase agreements with Government securities dealers, following the patterns of previous years, increased from 64 million dollars on November 28 to 341 million on December 19 and remained at high levels through the rest of the month.

In addition to the increases in bank reserves resulting from the extension of repurchase agreements, the System continued to provide for seasonal credit requirements through substantial outright purchases. The bulk of these purchases were concentrated in the first two statement weeks. For the month as a whole, through December 26, the rise in bill holdings was 390 million dollars; in repurchase agreements on Government securities, 267 million; and in holdings or repurchases of bankers' acceptances, 35 million.

Table I
Changes in Factors Tending to Increase or Decrease Member Bank Reserves, December 1956
(In millions of dollars; (+) denotes increase, (−) decrease in excess reserves)

Factor	Daily averages—week ended Dec. 5	Dec. 12	Dec. 19	Dec. 26	Net changes
Operating transactions					
Treasury operations*	+ 34	+ 48	−140	−124	−182
Federal Reserve float	−246	− 42	+609	+373	+694
Currency in circulation	− 95	−210	−175	−157	−637
Gold and foreign account	+ 6	− 27	− 44	+ 18	− 47
Other deposits, etc	− 43	−127	+ 85	−102	−187
Total	−344	−358	+334	+ 9	−359
Direct Federal Reserve credit transactions					
Government securities:					
Direct market purchases or sales	+177	+206	− 4	+ 85	+464
Held under repurchase agreements	+ 25	+ 42	+137	+ 36	+240
Loans, discounts, and advances:					
Member bank borrowings	−171	+241	−172	+114	+ 12
Other	—	+ 7	+ 19	− 2	+ 24
Bankers' acceptances:					
Bought outright	+ 3	+ 5	+ 3	+ 1	+ 12
Under repurchase agreements	+ 4	+ 6	− 1	+ 13	+ 22
Total	+ 37	+510	− 19	+246	+774
Total reserves	−307	+152	+315	+255	+415
Effect of change in required reserves†	+ 31	− 72	−257	−170	−468
Excess reserves†	−276	+ 80	+ 58	+ 85	− 53
Daily average level of member bank:					
Borrowings from Reserve Banks	458	699	527	641	581‡
Excess reserves†	440	520	578	663	550‡

Note: Because of rounding, figures do not necessarily add to totals.
* Includes changes in Treasury currency and cash.
† These figures are estimated.
‡ Average for four weeks ended December 26.

Government Securities Market

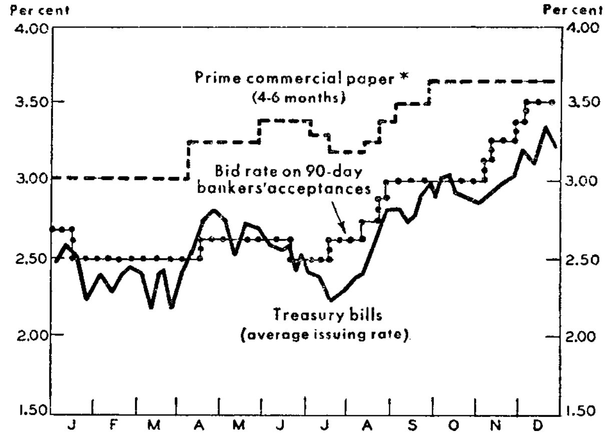
Seasonal pressures, together with the Treasury's cash financing, resulted in rising rates on Treasury bills during most of December, thus reversing the downward movement of rates that had temporarily developed in the last few days of November. Rates on outstanding issues moved up almost without interruption during the first week of December, under the influence of sales by corporations that were preparing to meet December dividend and tax payments and reduced demand from corporations and other nonbank investors. Repeated System purchases of bills offset part of the related reserve strain, as the pre-Christmas drains of currency began to increase. However, yields advanced still further after the Treasury's announcement on the afternoon of December 7 that it intended to raise 1 billion dollars through an issue of tax anticipation bills, dated December 17 and maturing March 22, 1957.

Although the announcement caught the market by surprise, the customary practice in new cash offerings of permitting commercial banks to make payment for their own and their customers' subscriptions through credit to Treasury Tax and Loan Accounts, and the fact that the bills were redeemable at face value on March 15, if applied against income or profits taxes due on that date, contributed to a good reception. Commercial banks bid aggressively in the auction held on December 12, and the average issuing rate was 2.585 per cent. Trading opened with a bid of about 3.08 per cent on a "when-issued" basis; by the end of the month the new bill was bid at 3.11 per cent.

The special offering pre-empted some bank and nonbank funds that would otherwise have gone into regular bills. Partly as a result, rates on outstanding bills moved higher and the average issuing rate advanced to 3.268 per cent, a new postwar record, in the December 10 auction. Subsequently liquidation of bills, mainly by corporations, continued to depress the market and the average issuing rate rose to 3.331 per cent in the next regular auction. Rates declined and then leveled off later in the month, as the prospects for renewed corporate demand stemming from the accumulation of tax reserves after the mid-December tax date, as well as System and foreign account purchases, provided new buying power in the market. In the last two auctions, the average issuing rate was successively 3.217 per cent and 3.262 per cent, down slightly from midmonth. Over the month as a whole the longest outstanding bills rose in yield by 18 basis-points to 3.22 per cent (bid).

The decline in the prices of Government notes and bonds, which had marked the latter half of November, continued in early December. In part this reflected the persistent pressure on rates in the Treasury bill market, but, in addition, market psychology was influenced by uneasiness over year-end strains and perhaps at times, to some limited extent, by the uncertainties surrounding the economic repercussions of the Suez crisis. Symptomatic of the kind of concern over possible future developments that became influential from time to time, market opinion tended in the middle of the month toward the expectation that a discount rate advance might be in the offing for early

SELECTED MONEY MARKET RATES IN 1956



Note: Latest data plotted are for December 27.
* Midpoint of range of rates.

1957. At the same time indications of a substantial flow of new capital issues after the turn of the year imparted a heavier atmosphere to the market. In this setting, longer-term bonds were particularly vulnerable inasmuch as yields in this section had not previously adjusted upward to the same degree as had corporate and municipal bonds and short-term Treasury issues. Issues callable after 1963 were marked down sharply, declining to all-time lows. Offerings were not, however, pressed aggressively and most actual trading arose out of tax operations. Most issues maturing from 1963 on out showed declines of between 1½ and 2¼ points over the month; the 3's of 1995 closed at 91$\frac{2}{32}$ bid, down 2¼ points, and the 3¼ per cent bonds of 1978-83 at 96$\frac{10}{32}$, down about 2 points. Intermediate and shorter issues showed more moderate price changes, generally ranging from increases of $\frac{2}{32}$ to declines of $\frac{8}{32}$.

Other Securities Markets

The tone of the corporate and municipal bond markets improved during early December, but subsequently a heavier atmosphere developed as these markets responded to the same influences as those tending to depress the market for longer-term Treasury securities, including prospects for a heavy calendar of flotations in January. The over-all pattern was reflected in Moody's Aaa-rated corporate bond index, which declined 3 basis-points to 3.71 per cent on December 7 and then rose almost steadily, reaching 3.82 per cent on December 31. Average yields on similarly rated municipal bonds tended to level off early in the month, but by the end of the month had advanced 4 basis-points to 3.05 per cent.

The estimated volume of public offerings of corporate bonds for new capital in December rose to 370 million dollars, from 130 million in November. The December volume was swelled, however, by a large petroleum company issue of convertible debentures, the rights to which expired in December, following the original offering to stockholders in November. As the month opened, two new Aaa-rated utility issues met with a good response when reoffered to yield 4.20 per cent and 4.25 per cent. Later, however, some investor resistance to new issues developed. In the latter half of the month, the decline in the volume of offerings helped underwriters to work off inventories of earlier issues that had been moving slowly.

Issues of new municipal bonds amounted to an estimated 360 million dollars during the month, up about 100 million from November. However, aside from a large issue of electric light plant revenue bonds that was well received just before midmonth, the volume of issues was substantially lower than in November or the two preceding months. As a result, despite the heavier tone of the market for outstanding issues toward the end of the month, underwriters found it possible to reduce their unsold holdings of recently offered issues.

Member Bank Credit

A further growth in business demands for bank credit was reflected in the sharp increase in business loans at weekly reporting banks during the four weeks ended December 19. Business loans advanced by 814 million dollars, at about the same rate as in both the preceding four weeks and the comparable weeks last year. Most categories of business loans showed increases in the recent period, the largest advances being recorded by loans to sales finance companies, food processors, and metal and metal products firms.

Largely as the result of a rise in business loans, total loans rose by 1,042 million dollars over the four-week period. Contributing to the advance was a 157 million dollar rise in security loans, which only partly offset substantial declines earlier in the year and was about half as large as in the comparable weeks of 1955. A 63 million dollar increase in "all other" loans (largely consumer) was also only about half as large as a year earlier, and was somewhat smaller than in the previous four-week period this year.

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. 28, 1955 to Dec. 19, 1956p
	Nov. 28	Dec. 5	Dec. 12	Dec. 19p	
Assets					
Loans and investments:					
Loans:					
Commercial and industrial loans	− 45	+ 84	+ 330	+ 445	+4,546
Agricultural loans	+ 3	− 11	+ 1	− 3	
Security loans	− 41	+148	− 86	+ 136	− 805
Real estate loans	− 5	− 7	+ 8	+ 10	+ 719
All other loans (largely consumer)	+ 3	+ 47	+ 9	+ 4	+ 857
Total loans adjusted*	− 84	+261	+ 275	+ 590	+5,197
Investments:					
U.S. Government securities:					
Treasury bills	− 5	−116	+ 117	+ 621	+ 347
Other	−108	−205	− 53	+ 36	−3,928
Total	−113	−321	+ 64	+ 657	−3,581
Other securities	− 27	+ 24	− 37	− 46	− 678
Total investments	−140	−297	+ 27	+ 611	−4,259
Total loans and investments adjusted*	−224	− 36	+ 302	+1,201	+ 938
Loans to banks	+ 68	− 37	+ 92	− 192	− 31
Loans adjusted* and "other" securities	−111	+285	+ 238	+ 544	+4,519
Liabilities					
Demand deposits adjusted	+732	+113	+1,521	− 129	− 745
Time deposits except Government	− 3	+ 19	+ 91	+ 43	+ 253
U. S. Government deposits	−423	−791	− 935	+1,187	+ 81
Interbank demand deposits:					
Domestic	−218	+160	+ 190	+ 375	+ 314
Foreign	− 2	+ 29	− 44	+ 23	+ 177

p Preliminary.

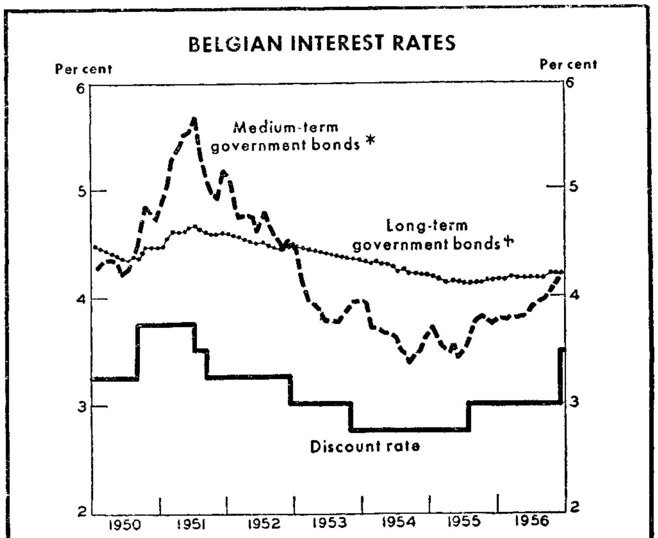
* Exclusive of loans to banks and after deduction of valuation reserves; figures for the individual loan classifications are shown gross and may not, therefore, add to the totals shown.

Total investments at weekly reporting banks advanced by 201 million dollars over the four weeks, the advance being largely accounted for by subscriptions to the new tax anticipation bills paid for on December 17. Aside from the increase in bill holdings, banks continued to liquidate Government securities. Total loans and investments increased by 1,243 million dollars in the four weeks, somewhat less rapidly than the 1,477 million rise recorded in the comparable 1955 period.

INTERNATIONAL MONETARY DEVELOPMENTS

Monetary Trends and Policies

The National Bank of Belgium raised its discount rate from 3 to 3½ per cent effective December 6; this was the fourteenth discount rate change by a European central bank in 1956. The last previous change in the Belgian discount rate had been an increase of ¼ per cent in August 1955 (see chart). The Belgian economy has been expanding rapidly; industrial production averaged nearly 7 per cent higher during January-October than in the same 1955 period. An important factor in the expansion has been a strong demand for Belgian exports, which rose more rapidly last year than imports. The developing pressure on domestic resources was reflected in a 2 to 3 per cent increase in prices last year; the November retail price index was less than ½ point below the level at which further automatic wage increases must be granted. While



* Two to five years to maturity.
† 4 per cent unified perpetual debt.
Source: National Bank of Belgium.

total bank credit increased only slightly in 1956, bank liquidity currently appears large enough to make possible a substantial expansion of internal demand at the very time that the Middle East crisis is threatening to accentuate inflationary pressures. The authorities, in raising the discount rate, stated that it had for some time been lower than in many other countries, and expressed the view that a higher rate would help to ward off speculation and check the flight of capital brought on by the recent international disturbances. The discount rate has special significance in Belgium, owing to the relatively heavy reliance of the banking system on central bank credit.

In the United Kingdom, the Chancellor of the Exchequer stated in Parliament that, as a first requisite for restraining domestic demand in the face of the Middle East crisis, the policy of credit restraint "which has played so important a part already, must be firmly maintained and if need be strengthened". During the five weeks ended November 21, the London clearing banks increased their advances by 20 million pounds, but reduced their Treasury bill holdings, for the first time in seven months, by 72 million pounds; the banks' liquidity ratio fell for the first time since May, but, at 36.3 per cent, was still 1.3 per cent greater than in November 1955. However, over the first eight months of the current fiscal year, the clearing banks' advances declined 23 million pounds, compared with 110 million pounds in the same period in 1955, while net deposits rose 260 million pounds, compared with a 27 million pound decline in 1955. The latest quarterly analysis of advances by the British Bankers' Association shows a 72 million pound decline from August to November, almost half in loans to the public sector (the heaviest decline was in borrowing by the public utilities, which now obtain their capital financing from the Treasury); other major decreases were reported for personal and professional borrowers, the textile industry, and agriculture, while the only sizable increase was shown by the engineering industries. British interest rates reached record levels in 1956; in December, however, the yield on 2½ per cent Consols moved down from the previous month's peak to 4.76 per cent on December 31, while the average tender rate for three months' Treasury bills fell to 4.86 per cent at the fourth December tender. The government, as part of its restraint policy, sought during 1956 to encourage small savings and thereby limit the drains on the Exchequer; from April 1 through December 15, net receipts from all savings-type bonds totaled 67 million pounds, compared with net repayments of 8 million a year earlier. Consumer credit restrictions were tightened several times during the year, and by the end of October total hire-purchase debt outstanding was 19 per cent below the end of 1955; however, in order to aid the automobile industry, the minimum downpayment required on sales of both new and used cars, motorcycles, and light trucks was reduced to 20 per cent from 50, effective December 21.

The rising trend of Canadian interest rates during 1956 continued in December; government bond yields edged upward and at the fourth tender in the month the average Treasury bill rate rose for the sixth successive time, reaching 3.67 per cent, a new high. The discount rate was accordingly raised to a record 3.92 per cent on December 27, under the Bank of Canada's new policy of keeping it ¼ per cent above the Treasury bill rate. Business loans by the chartered banks tended to decline further in December; they had already begun to level off in mid-1956 and on December 19 were only 13 per cent above a year previous, compared with 29 per cent as of the end of June. During 1956 the money supply rose only slightly, but velocity seems to have increased substantially, as evidenced in the 20 per cent rise over 1955 in total Canadian check clearances during January-October. A tightening of consumer credit financing took place last month when the chartered banks reportedly undertook to restrict their loans to the instalment finance companies to the peak loan total during the twelve months ended September 30.

In Austria, restraints on credit to the private sector have been tightened under a new agreement between the Finance Minister and the credit institutions, following consultations with the central bank. The supplementary reserve requirements against increases in deposits, which take the form mainly of cash, day-to-day loans, and government securities, were raised to 75 per cent from 50. Moreover, certain heretofore-privileged credits, such as export-promotion loans, are now to be treated as ordinary loans, and thus will come under the credit restrictions. In addition, the government has requested the banks to make a cut of 10 per cent in the total of their outstanding credits before the end of February. Due to the influx of foreign exchange, the liquidity of the banking system has recently been increasing.

The Reserve Bank of India on November 21 raised the rate on advances granted under the Bill Market Scheme from the preferential 3¼ per cent to the full discount rate of 3½. The Bill Market Scheme was introduced in 1952 to provide the commercial banks with paper eligible for discounting, and has since become a major form of borrowing; the gap between the discount rate and the rate on advances made under this scheme was reduced last March to ¼ per cent from the original ½ per cent. The present action comes against the background of a rapid expansion of production and investment in India, pronounced price increases, and a sharp decline in foreign exchange reserves. The current strong seasonal demand for credit has led the banks to raise their short-term rates to new highs, as well as to borrow record amounts from the Reserve Bank and the State Bank.

Exchange Rates

Following official statements that Britain was determined to defend the \$2.80 par value of the pound, American-account sterling rose 5/32 cent, to \$2.78 15/32, early in December. However, forward sales of sterling on commercial account soon had the effect of bringing supplies of spot sterling on the market and the rate declined to \$2.78¼, where it was held principally by official support operations. On December 10, the market was encouraged by the announcement of arrangements with the International Monetary Fund whereby Britain may purchase dollars or other currencies up to the amount of its quota of 1,300 million dollars' equivalent, and the rate firmed immediately to \$2.78 13/16, the highest since late July. The Monetary Fund noted that the United Kingdom Government intended to maintain the present parity of the pound sterling, avoid the reimposition of external controls, and "follow fiscal, credit and other policies designed to strengthen the economy, both internally and externally". Subsequently, commercial demand, along with purchases of sterling for covering short positions, held the rate well above the earlier low levels, although some easiness was apparent on occasion. On December 31 American-account sterling was quoted at \$2.78 11/16.

In the forward market, good commercial offerings early in the month widened discounts on three and six months' sterling to as much as 3¼ and 5 5/16 cents, but on December 11 these narrowed sharply to 1 27/32 and 3 27/32. Although they again widened at the midmonth, they moved erratically thereafter, and were quoted at 2 15/32 and 4 15/32 cents at the month end.

Other types of sterling generally followed American account, with early weakening tendencies followed by firmer rates after December 10. Thus, transferable sterling eased to \$2.7420 on December 6 but then became stronger, moving to \$2.7520 on December 18 as it met with demand on the part of central banks and for short-covering purposes; at the month end, the quotation stood at \$2.7495. Securities sterling also declined early in December, and then held at about the \$2.55 level until December 10 when increased interest in British securities began to strengthen the rate, which reached \$2.64 on December 13. Subsequent offerings of securities sterling, however, tended to depress the rate; it was quoted at \$2.62 on December 31.

In a relatively small market and with some movement of funds out of Canadian dollars into sterling, the Canadian dollar declined to \$1.03 11/16 on December 5. The rate subsequently moved somewhat erratically, rising to \$1.04⅜ on December 18 as commercial and investment demand entered the market, but easing two days later to slightly below \$1.04 when there was demand from Canada for United States dollars. On balance, however, the Canadian dollar continued to be firm, with a month-end quotation of \$1.04 3/16.

RECENT DEVELOPMENTS IN SECURITIES MARKET CREDIT

Although most types of private credit rose to new highs in 1956, the total volume of credit extended for the purpose of purchasing or carrying securities (exclusive of United States Government obligations) declined. During most of 1955, by contrast, the demand for additional credit in securities markets was added to the growing credit demands of other economic sectors.

The reductions in securities market credit over the past year are the result of substantially lower borrowing by brokers and dealers and small declines in borrowing by other investors and traders. From a peak of 2.6 billion dollars in December 1955, loans by the weekly reporting member banks in ninety-four leading cities to brokers and dealers declined below the 2 billion dollar mark by mid-August, and have since remained at that reduced level.[1] Loans by these banks to individuals and institutions other

[1] Throughout this article the statistics on bank loans exclude credit extended for the purpose of purchasing or carrying United States Government obligations, while the statistics on borrowing by New York Stock Exchange member firms and on debit balances carried by these firms exclude amounts collateraled by such obligations. Since March 1953, however, it has not been possible to exclude from the banking statistics the amount of lending on Government obligations by banks outside New York City and Chicago.

than brokers and dealers (lumped together as "others" in the reported statistics) for purchasing or carrying securities have tended downward since the early part of 1956 and were lower at the end of November than a year earlier. The changes in customers' net debit balances with New York Stock Exchange member firms during 1956 have been small, though slightly on the downside, but the latest statistics indicate a modest rise in November.

It is not so unusual to find credit to the securities markets moving in the opposite direction from most other types of credit. This happened in 1951, when securities market credit was stable or declining while bank loans to business and consumers made large gains; furthermore, securities market credit advanced rapidly in 1954, which was not a period of general credit expansion. These divergent credit patterns can be explained partly by the tendency for securities market credit to vary with developments in the stock and bond markets, while other types of credit generally fluctuate with private and government spending. In addition, securities market credit is affected not only by general credit controls, but also by margin requirements imposed by the Board of Governors of the Federal Reserve System. Prices in the stock market moved against the 1953-54 business decline, and so did securities market credit. Soon after the increases in margin requirements in January and April 1955 and the halting of the rise in stock prices a few months later, securities market credit leveled off, even though business activity continued to expand.

This article examines the important factors which influence the volume of customer credit and broker-dealer borrowing for purchasing or carrying securities and reviews recent trends in the use of credit in non-Government securities markets.

Customer Credit

Individual and institutional investors seeking credit for purchasing new or outstanding securities borrow from two principal sources: (1) security brokers carrying margin accounts and (2) commercial banks.

When a customer borrows from a broker, the purchase of the securities is debited against the customer's account and the securities are held in his account. Cash paid toward the purchase is credited against the account, so that the remaining debit balance represents the amount actually loaned to the customer.[2] In the case of borrowing from a bank, the securities purchased are ordinarily deposited with the bank as collateral for the loan. Under Federal Reserve Regulation T, issued pursuant to the *Securities and Exchange Act of 1934,* brokers are prohibited from extending credit for purchasing securities not registered on a national securities exchange (except Federal, State, and municipal bonds which are specifically exempted from the regulation). However, the companion Regulation U does not prevent banks from lending against unregistered securities, and banks will frequently make such loans if the asset is of acceptable quality.

Information on the magnitude of customer borrowing from brokers and dealers and from banks is provided in monthly reports of the New York Stock Exchange on customers' debit balances carried by its member firms, and in the annual reports of the Comptroller of the Currency, the call reports for the Federal Reserve member banks, and the Wednesday condition statements of the weekly reporting member banks in ninety-four leading cities. More than 90 per cent of all of the customer borrowing from brokers is believed to be from New York Stock Exchange member firms. With respect to customer borrowing from banks, the weekly reporting banks accounted for 72 per cent of the total at all commercial banks on June 30, 1956. A reasonable estimate of total customer credit outstanding can be built up from the New York Stock Exchange report for November 30, 1956, showing net debit balances of 2.8 billion dollars secured by non-Government collateral, and the November 28 statement for the weekly reporting banks indicating 1.2 billion dollars of loans to "others" for the purpose of purchasing or carrying non-Government securities. Raising the combined total of 4.0 billion dollars in line with the aforementioned ratios provides an estimate of about 4.7 billion dollars for total customer borrowing outstanding as of the end of November 1956.[3]

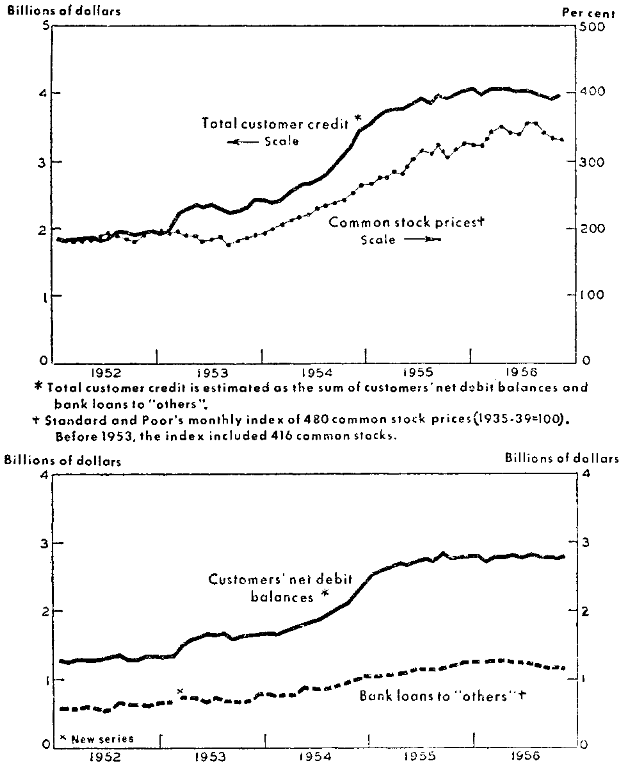
As shown in Chart I, the changes in customer credit (and particularly in net debit balances) since 1952 have closely paralleled the movement of stock prices. During 1954, for example, credit rose by 41 per cent and prices by 39 per cent; in 1955 the increases were 17 per cent for credit and 23 per cent for prices.[4] Similarly, the relative stability of customer credit during the first seven months

[2] Customers' debit balances sometimes reflect borrowing for purchasing bonds and trading in commodities, but the bulk of the balances undoubtedly represents money borrowed to purchase registered stocks.

[3] It should be noted that the statistics for security loans by banks are on a "purpose" basis and do not include loans against securities collateral for stated purposes other than purchasing or carrying securities. Such "nonpurpose" loans are included in other types of bank loans, such as business loans or single-payment loans to individuals. The security loan classification may be understated because some "nonpurpose" loans may actually be used for financing security purchases; moreover, the classification is also subject to reporting errors, such as would occur if a bank did not examine the "purpose" statements closely, or if it reasoned that all loans against securities collateral were likely to be "purpose" loans and therefore did not press the borrowers for information on how the loan proceeds will be used.

[4] The price changes are computed from Standard and Poor's combined index of 480 common stocks.

Chart I
CUSTOMER CREDIT AND COMMON STOCK PRICES



* Total customer credit is estimated as the sum of customers' net debit balances and bank loans to "others".
† Standard and Poor's monthly index of 480 common stock prices (1935-39=100). Before 1953, the index included 416 common stocks.

* Customers' net debit balances (excluding those secured by Governments) are reported by NYSE firms carrying margin accounts for the last day of the month.
† Weekly reporting member bank loans on the last Wednesday of the month to borrowers other than brokers and dealers for purchasing or carrying securities (excluding Governments). Since March 1953, the series excludes only Governments reported by Chicago and New York City banks.
Sources: Standard & Poor's, New York Stock Exchange (NYSE); Board of Governors of the Federal Reserve System.

of 1956 occurred when the market was following an irregular course, while the reduction from July to November coincided with price declines.

Another way of illustrating the general correspondence between price and credit changes is to compare the volume of customer credit with the market value of all stocks listed on the New York Stock Exchange. This value reflects the increase in the number of listed stocks as well as price changes. On the basis of end-of-month data, the volume of credit averaged 1.95 per cent of the market value of listed stocks during 1954, 2.02 per cent during 1955, and 1.85 per cent during the first eleven months of 1956. While the monthly estimates for the 1954-56 period indicate a wider range of fluctuation—from a high of 2.12 in March 1955 to a low of 1.75 in July 1956—the relative stability of this ratio is noteworthy, in view of the substantial changes in prices and credit during the period under review.

When stocks are considered a relatively attractive investment, buyers can be expected to bid up prices in the market, financing part of their additional purchases with borrowed funds; conversely, when the stock market is under selling pressure, some borrowing tends to be repaid. Furthermore, new investors, including some who purchase on margin, are more likely to purchase stocks in a rising than a declining market, and the higher the price of the stocks, the higher their loan value. According to the New York Stock Exchange's *Public Transactions Study,* margin trading by individuals (other than Stock Exchange members) declined from 23.8 per cent of total share volume on June 8 and 15, 1955 to 21.7 per cent on March 14 and 21, 1956. After a rough correction by the Stock Exchange for the different basis of reporting in the 1954 study, it appears that the proportion of margin trading was appreciably larger at the time of the previous survey (December 8 and 15, 1954) than on the trading days surveyed in 1955 and 1956. These declines in margin trading may well be associated in part with the fact that prices were rising more rapidly in 1954 than in 1955, and more rapidly in 1955 than in early 1956, when the bull market lost much of its previous vigor and trading activity fell off.

The volume of customer borrowing is also influenced by margin requirements (see next section). These requirements were at 50 per cent from early 1953 until January 1955, when they were raised to 60 per cent. A further increase to 70 per cent was made in April 1955.[5] Since the latter date, therefore, purchasers of stocks on margin have been able to borrow only 30 per cent of the market value of the securities, whereas during 1954 and most of 1953 they could borrow as much as 50 per cent.

Finally, changes in the cost of borrowing and in the spread between this cost and the return on securities tend to influence the volume of customer credit and, indirectly, the course of stock prices and the volume of trading. The cost of borrowing is, of course, determined by general credit conditions and the prevailing rates on various types of loans. Brokers generally charge their customers at least ½ percentage point more than the interest rate charged by banks on loans to brokers against customers' stock market collateral. The latter rate was 3 per cent from early 1954 until August 1955 when it was advanced to 3¼-3½ per cent. A series of increases since then have raised the rate on brokers' borrowing against customers' stock market collateral to the present level of 4¼ to 4½ per cent. Thus, the higher cost of carrying margin accounts, which was accompanied by corresponding rate increases on bank loans to individual and institutional investors in securities, has been another restraining factor affecting customer borrowing in 1956.

Regulations T and U

Legislative concern over possible misuse of credit in the securities market was registered as early as 1913 by the provision of the original *Federal Reserve Act* declaring

[5] The margin requirement is the difference between the market value and the maximum loan value of the security.

ineligible for discount any notes drawn for the purpose of trading in stocks. In the light of the flagrant misuse of credit in the securities market in the late twenties, Congress provided in the *Banking Act of 1933* that each Federal Reserve Bank, in determining whether to grant or refuse credit accommodation, should give consideration to "whether undue use is being made of bank credit for the speculative carrying of or trading in securities . . ." [6] In the following year Congress included the following mandate in the *Securities Exchange Act of 1934:* "for the purpose of preventing the excessive use of credit for the purchase or carrying of securities, the Federal Reserve Board shall . . . prescribe rules and regulations with respect to the amount of credit that may be initially extended and subsequently maintained on any security (other than an exempted security) registered on a national securities exchange".[7] The rules and regulations issued under this legislation were made applicable to all banks, both member and nonmember, to every member of a national securities exchange, and to every broker and dealer who transacts a business in securities through the medium of any such member.

Regulation T, which limits the amount of credit which may be extended by brokers and dealers, became effective October 1, 1934, while the related measure, Regulation U, applying to credit extended by banks, became effective May 1, 1936. These regulations prescribe a maximum loan value, which is a specified percentage of the market value of the security at the time of the credit extension. As already mentioned, Regulation T prohibits brokers and dealers from extending credit against unlisted securities except Federal Government, State, and municipal bonds which are exempt from both regulations. In borrowing from banks, brokers and dealers segregate their customers' securities from their own holdings, since loans against securities that have already been "margined" under Regulation T are excluded from Regulation U. Banks usually will lend larger amounts against customers' collateral than against comparable securities owned by the brokers themselves.

The margin requirements, which are the difference between the market value and the maximum loan value, were originally set in accordance with a sliding scale which averaged out to about 28 per cent when they first went into effect. In early 1936 the sliding scale was replaced with a uniform requirement of 55 per cent. Since then the margin requirements have never been less than 40 per cent and were as high as 100 per cent from early 1946 to early 1947.

Although Regulations T and U contain provisions restricting withdrawal of collateral or of the proceeds of sales, they do not require that securities be liquidated or that the customer deposit additional margin if a fall in prices makes the account undermargined. Under rules of the New York Stock Exchange, however, member firms require a maintenance margin of 25 per cent. Additional margin must be provided by the customer when that level is reached; otherwise the securities in the account are subject to forced sale.

The most obvious consequence of the existence of margin regulations is that the danger of excessive use of credit in the stock market is reduced. Since the regulations were introduced, margins have been higher, and for most of the time substantially higher, than was generally the case when margin requirements were not subject to official controls and varied among lenders.

The numerous influences on the behavior of the stock market and on customer demand for credit make it difficult to trace the specific effects of changes in margin requirements. Apart from the "psychological" impact on sentiment in the market, the immediate effects of changes are likely to be felt only gradually, due to the fact that under present rules only new extensions of credit, and not already existing credit, come under the new margin requirements. Moreover, if stock prices are rising, investors can use any excess margin or equity in existing margin accounts as a basis for additional borrowing.

The significance of customer borrowing as a source of supplementary purchasing power for buying securities will vary with the general financial position of investors as well as with the state of the securities markets. After the reduction in margin requirements from 75 per cent to 50 per cent in February 1953, customers' net debit balances rose, even though stock prices continued downward until September of that year (see Chart I). Margin requirements were increased from 50 per cent to 60 per cent in January 1955, but there was no marked slowing-down of the upward course of credit until after the second increase from 60 per cent to 70 per cent in April.

Broker-Dealer Borrowing

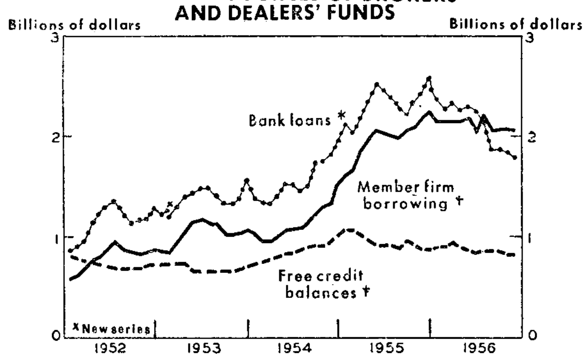
The trend of borrowing by brokers and dealers since 1953 is illustrated in Chart II. Two series are plotted, in addition to the series for customers' free credit balances: (1) loans by weekly reporting member banks to brokers and dealers for purchasing or carrying non-Government securities; and (2) total borrowing (except borrowing against Government collateral) by member firms of the New York Stock Exchange carrying margin accounts.

A large part of the loans by the weekly reporting banks to brokers and dealers is to New York Stock Exchange firms, just as a large part of the total borrowing of the

[6] *Federal Reserve Act* (as amended), Section 4, paragraph 8. In addition, the *Banking Act of 1933* prohibits Federal Reserve member banks from making loans to brokers and dealers for the account of nonbanking corporations or individuals.

[7] Section 7(a), *Securities Exchange Act of 1934.*

Chart II
SELECTED SOURCES OF BROKERS' AND DEALERS' FUNDS



* Weekly reporting member bank loans on last Wednesday of month to brokers and dealers for purchasing or carrying securities (excluding Governments). Since March 1953, the series excludes only Governments reported by Chicago and New York City banks.
† Total money borrowed (except on Governments) from banks and other lenders by NYSE firms carrying margin accounts as reported for the last Wednesday of each month. Before June 1955, borrowing is as of end of calendar month.
‡ Customers' free credit balances reported by NYSE firms carrying margin accounts as of the last day of the month.
Sources: Board of Governors of the Federal Reserve System, New York Stock Exchange (NYSE).

latter firms is from the weekly reporting member banks. As a consequence, the statistics on bank loans and member firm borrowing overlap to a considerable extent and usually tend to move in the same direction, except when the changes are small. For obvious reasons, however, the series may sometimes diverge. A shift of some borrowing by Stock Exchange member firms from the weekly reporting to other banks, for example, would lower the weekly reporting series but would not show up in the Stock Exchange series which covers member firm borrowing from all sources. Similarly, changes in loans by the weekly reporting banks to brokers and dealers that are not members of the New York Stock Exchange will not be reflected in the borrowing by Stock Exchange member firms.

It is significant that the relationship between the series on bank loans and on member firm borrowing shown in the chart has undergone a sizable shift in 1956, as a result of a decline in broker-dealer lending by the weekly reporting banks that is about three times as large as the reduction in total member firm borrowing. Some member firm borrowing has been transferred to banks outside the weekly reporting group, in some cases because of the large city banks participating such loans to smaller banks, but it also appears that the reduction in borrowing has been considerably larger for nonmember than for member firms. The borrowings of both groups of firms have declined over the past year, partly because the rising cost of borrowed funds and tighter credit conditions created pressure for most firms to reduce their own holdings of securities in trading and investment accounts and to hold unsold balances in underwriting accounts to a minimum; in addition, generally declining bond markets in 1956 and the recurrence of price weakness in stocks probably made them more cautious about purchasing securities this year than in the advancing markets of 1954 and 1955. Although underwriting volume in 1956 has been as large or larger than in 1955, some economizing of borrowing by underwriting syndicates may nevertheless have been effected. Individual firms may also have reduced their borrowing needs by adding to their capital and by substituting securities for cash deposits in clearings accounts with certain exchanges which have modified their collateral requirements for such accounts.

For brokers and dealers carrying margin accounts, the largest single need for funds is for lending to their customers. On the other hand, customers' funds left on deposit in the form of "free credit balances" provide a supplementary source of funds for brokers (see Chart II). These balances represent cash deposits and the proceeds of stock sales or dividend receipts not immediately withdrawn by customers or used to reduce any outstanding indebtedness in their accounts. The balances are classified as "free" when there is no offsetting customer liability (such as a liability resulting from a short sale).

From December 31, 1955 to November 30, 1956 customers' free credit balances with New York Stock Exchange member firms carrying margin accounts declined by 72 million dollars. However, customers' net debit balances with these firms also declined in this period, by 7 million dollars (exclusive of balances secured by United States Government securities), leaving a net loss of funds on account of customers' financing of 65 million dollars. If it had not been for this loss of available funds, these Stock Exchange member firms would have been able to reduce their total borrowing between December 1955 and November 1956 by even more than the actual decline of 175 million dollars.

An over-all picture of the relative importance of different sources and uses of brokers' funds as of June 30, 1956 (the latest reporting date) is presented in the table, which covers all Stock Exchange firms carrying margin accounts. The table shows the dominant position of borrowings and customers' credit balances, along with the firms' capital, on the "sources" side, and the large importance of customers' debit balances and balances in firm investment and trading accounts, on the "uses" side. Generally speaking, any large change in money borrowed that is not

Sources and Uses of Funds of Brokers and Dealers in Securities, June 30, 1956*

(In millions of dollars)

Account	Amount
Sources of funds	
Money borrowed—total	(2,266)
From banks and trust companies	2,231
From others†	35
Customers' credit balances—total	(1,175)
Free credit balances†	837
Net credit balances due to other brokers and dealers‡	131
Other net credit balances	207
Securities loaned minus securities borrowed	59
Securities bought minus securities sold (delivery pending)	8
All other credit balances§	145
Capital (including net balance in partners' drawing accounts)	466
Total sources	4,119
Uses of funds	
Net debit balances—total¶	(2,997)
Due from customers⁑	2,811
Due from other brokers‡	165
In partners' accounts	21
Debit balances in firm investment and trading accounts	625
All other debit balances	175
Cash on hand and in banks	322
Total uses	4,119

* Member firms of the New York Stock Exchange carrying margin accounts. These statistics are derived from money balances as shown in ledger accounts and do not reflect the current value of the securities held by the reporting firms for their customers or in their own trading and investment accounts. For this reason, and also for the added reason that some firms eliminate from their books such assets as exchange seats, the reported statistics do not disclose the "financial condition" of the firms. Furthermore, the amount shown for "capital" does not represent the firms' actual net capital.

† Not including borrowing from, or balances due to, other brokers and dealers.

‡ Includes only member firms of national securities exchanges.

§ Including balances in partners' and firm investment and trading accounts and in other credit balances not shown separately above.

¶ Not including balances in firm investment and trading accounts.

⁑ Not including other brokers and dealers.

Source: Compiled from *Federal Reserve Bulletin*, September 1956, p. 994.

counterbalanced by compensating changes in customers' credit or debit balances will reflect primarily a change in the firm investment or trading accounts.

Influence of Credit Control Measures

Securities market credit, and more specifically the amount flowing to the stock market, is in the unique position at the present time of being the only type of credit subject to selective as well as general credit control measures.[8] As explained above, selective controls are exercised through Regulations T and U, applying to lending for purchasing listed securities by brokers and dealers and by banks, respectively, while the general control instruments, including bank reserve requirements, discount rates, and Federal Reserve open market operations, affect the total amount of credit extended to the economy as a whole, including the amount put to use in securities markets. As important users of credit, brokers, dealers, investors, and traders in securities are affected by both types of credit control measures.

The most significant developments in securities market credit during the past year of general credit restraint have been the small reduction in the outstanding amount of customer credit after several months of sidewise movements, and the sizable reduction in bank lending to brokers and dealers.[9] Because of these declines, which coincided with continued growth in most other types of credit, there has been a relative shift—though of modest proportions—in the allocation of the available credit supply from the securities market to other borrowers. Part of this shift can be attributed to the influence of the 1955 increases in margin requirements, but the shift is also in part a result of the tightened availability of credit and a series of advances during 1955 and 1956 in the cost of borrowed funds. The demand for credit on the part of brokers, dealers, and investors may also have been reduced, however, as a consequence of the generally declining trend in bond prices, which adjusted during 1956 to the highest yield basis in many years, and of less favorable profit opportunities in the stock market, which made a much smaller advance from 1955 to 1956 than in either of the preceding two years.

The level of securities market credit still remains higher, however, than in most past periods excepting, of course, the late twenties. Bank loans to brokers and dealers, for example, which reached a post-1930 peak at the end of 1955, are still above any amount outstanding between 1930 and mid-1954. Moreover, total estimated customer credit—measured as the sum of net debit balances and security loans by weekly reporting member banks to individuals and institutional investors—attained its post-1930 high as recently as May 1956 and was only slightly below that record at the end of November 1956. On the other hand, the volume of securities outstanding has grown at a rapid rate in recent years, as have other economic magnitudes. There does not appear to be any evidence in the recent record, however, of a general spreading of those abuses of credit facilities, in the financing of stock speculation, which have at some times in the past generated serious problems during periods of sustained economic prosperity.

8 Regulation W, which specified minimum downpayments and maximum lengths of contracts for instalment sales credit, was in force from 1941 to 1947 and again from 1950 to 1952, during the Korean war emergency. Regulation X, which regulated the terms of real estate construction credit, was introduced in 1950 and suspended two years later. However, lending terms on mortgages insured or guaranteed by the Federal Housing Administration or the Veterans Administration remain subject to control by these agencies.

9 Some limitations of the available statistics, as a result of possible reporting errors, are mentioned in footnote 3.

SELECTED ECONOMIC INDICATORS
United States and Second Federal Reserve District

Item	Unit	1956			1955	Percentage change	
		November	October	September	November	Latest month from previous month	Latest month from year earlier
UNITED STATES							
Production and trade							
Industrial production*	1947-49 = 100	147*p*	146	145	143	+ 1	+ 3
Electric power output*	1947-49 = 100	218*p*	216	217	206*r*	+ 1	+ 6
Ton-miles of railway freight*	1947-49 = 100	—	105*p*	111	104	− 5	− 3
Manufacturers' sales*	billions of $	—	28.2*p*	27.6	27.3	+ 2	+ 6
Manufacturers' inventories*	billions of $	—	50.7*p*	50.1	45.7	+ 1	+12
Manufacturers' new orders, total*	billions of $	—	28.8*p*	28.1	28.3	+ 2	+ 5
Manufacturers' new orders, durable goods*	billions of $	—	14.5*p*	14.3	14.7	+ 1	+ 3
Retail sales*	billions of $	—	16.1*p*	16.0	15.8	+ 1	+ 2
Residential construction contracts*	1947-49 = 100	205*p*	230	250	252	−11	−19
Nonresidential construction contracts*	1947-49 = 100	282*p*	260	251	282	+ 8	#
Prices, wages, and employment							
Basic commodity prices†	1947-49 = 100	92.7	90.7	91.6	88.5	+ 2	+ 5
Wholesale prices†	1947-49 = 100	115.9*p*	115.6	115.5	111.2	#	+ 4
Consumer prices†	1947-49 = 100	117.8	117.7	117.1	115.0	#	+ 2
Personal income (annual rate)*	billions of $	—	332.6*p*	329.5	314.5	+ 1	+ 7
Composite index of wages and salaries*	1947-49 = 100	—	151*p*	150	144	+ 1	+ 5
Nonagricultural employment*	thousands	51,886*p*	51,869*p*	51,676	50,745	#	+ 2
Manufacturing employment*	thousands	17,020*p*	17,027*p*	16,864	16,941	#	#
Average hours worked per week, manufacturing†	hours	40.6*p*	40.7	40.7	41.2	#	− 1
Unemployment	thousands	2,463	1,909	1,998	2,398	+29	+ 3
Banking and finance							
Total investments of all commercial banks	millions of $	74,360*p*	73,710*p*	73,530*p*	78,000	+ 1	− 5
Total loans of all commercial banks	millions of $	89,580*p*	88,830*p*	88,520*p*	81,390	+ 1	+10
Total demand deposits adjusted	millions of $	108,210*p*	107,450*p*	105,440*p*	106,920	+ 1	+ 1
Currency outside the Treasury and Federal Reserve Banks*	millions of $	30,859*p*	30,741	30,772	30,456	#	+ 1
Bank debits (337 centers)*	millions of $	78,794	78,658	72,235	72,908*r*	#	+ 8
Velocity of demand deposits (337 centers)*	1947-49 = 100	140.6*p*	138.1	135.6	130.6	+ 2	+ 8
Consumer instalment credit outstanding†§	millions of $	—	30,811	30,707	28,269	#	+10
United States Government finance (other than borrowing)							
Cash income	millions of $	6,332	3,434	6,877	5,934	+84	+ 7
Cash outgo	millions of $	6,576	6,409	5,649	5,951	+ 3	+11
National defense expenditures	millions of $	3,450	3,892	3,265	3,289	−11	+ 5
SECOND FEDERAL RESERVE DISTRICT							
Electric power output (New York and New Jersey)*	1947-49 = 100	155*p*	150	149	149	+ 3	+ 4
Residential construction contracts*	1947-49 = 100	—	160	186	173	−14	− 3
Nonresidential construction contracts*	1947-49 = 100	—	268	244	274	+10	+16
Consumer prices (New York City)†	1947-49 = 100	115.6	115.7	115.1	112.5	#	+ 3
Nonagricultural employment*¶	thousands	—	7,709.3*p*	7,691.7	7,684.2	#	+ 1
Manufacturing employment*¶	thousands	—	2,651.7*p*	2,642.8	2,664.4	#	#
Bank debits (New York City)*	millions of $	72,031	70,093	61,841	68,178	+ 3	+ 6
Bank debits (Second District excluding New York City)*	millions of $	5,115	5,128	4,702	4,681	#	+ 9
Velocity of demand deposits (New York City)*	1947-49 = 100	186.3	177.9	166.8	175.2	+ 5	+ 6
Department store sales*	1947-49 = 100	120	112	120	110	+ 7	+ 9
Department store stocks*	1947-49 = 100	131	129	123	119	+ 2	+10

Note: Latest data available as of noon, January 2, 1957.

p Preliminary.
r Revised.
* Adjusted for seasonal variation.
† Seasonal variations believed to be minor; no adjustment made.

Change of less than 0.5 per cent.
§ Revised series. Back data published in *Federal Reserve Bulletin*, October 1956.
¶ Revised series. Back data available from the Domestic Research Division, Federal Reserve Bank of New York.

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