FEDERAL RESERVE BANK OF NEW YORK



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The Money Market in November

The entire financial community shared the shock of the nation over the assassination of President Kennedy on the afternoon of Friday, November 22, but an emotional backlash on financial values that could have had disturbing consequences for the economy was largely avoided. In an atmosphere of great uncertainty, the stock exchanges suspended trading shortly after 2 p.m., Friday. The Government securities market, where trading had come to a standstill upon receipt of the news, also closed early, as did other securities markets. Over the week end and the day of national mourning on Monday, November 25, the public had ample opportunity to reflect on the orderly transfer of authority to the new President and on President Johnson's assurances that the nation's purposes and policies would remain unchanged. When trading was resumed on Tuesday, a basically confident tone quickly reappeared in the financial markets, and by Wednesday the underlying tension seemed to have been dispelled from these markets, with operations returning to normal.

This general tone of continuity in the financial markets was already evident at a special meeting of the General Committee of the New York Money Market, called by Alfred Hayes, President of this Bank, on Friday afternoon. Representatives of commercial banks, investment banking houses, insurance companies, stock exchanges, and Government securities dealers agreed with the Federal Reserve Bank that there was no need for special action in the financial markets. Mr. Hayes, after conferring with Chairman Martin of the Board of Governors of the Federal Reserve System, stated that the System had ample power to deal with any situation that might arise. Mr. Hayes added that he was confident that the close cooperation among central banks would be maintained. A public announcement summarizing the sense of the meeting was released to the press by this Bank before the end of the day.

In contrast to most domestic markets, the New York foreign exchange market remained open throughout Friday afternoon. Immediately upon receipt of the news from Dallas, the Federal Reserve Bank of New York moved into the market with sizable offerings of five major foreign currencies at existing market rates to help keep exchange rates stable and the markets orderly. These offerings had

the backing, not only of the actual foreign currency holdings of the United States, but also of the nearly \$2 billion of foreign currencies available under the Federal Reserve's network of swap arrangements with foreign central banks. Before the end of Friday, joint plans of action for Saturday and Monday were worked out in telephone contacts with foreign central banks. With foreign exchange markets abroad open on Saturday and Monday, operations by foreign central banks in their respective markets reinforced the New York Federal Reserve Bank's intervention on Friday afternoon in New York. As a result, foreign exchange markets remained orderly and speculative movements were held to a minimum. The speed of action and the stability of the markets once again demonstrated the crucial role that central bank cooperation can play in mobilizing massive amounts of liquidity to buttress the world's payments system.

* * *

The money market remained generally firm in November. Although nation-wide reserve availability increased somewhat for the month as a whole, reserve distribution continued to favor banks outside the money centers and the reserve positions of money market banks remained under some pressure through most of the interval. With these banks strongly bidding for Federal funds over much of the period, the effective rate on such funds generally was 3½ per cent while borrowings from the Federal Reserve Banks were little changed over the month as a whole. Rates posted by the major New York City banks on call loans to Government securities dealers were quoted in a 3½ to 3% per cent range during the month. Rates on other short-term money market instruments were little changed over the period as a whole. Offering rates for new time certificates of deposit issued by the leading New York City banks rose slightly, and the range of rates at which such certificates were offered in the secondary market held steady throughout November.

A heavy atmosphere carried over from October into the Government securities market at the start of November, reflecting continuing market concern about further increases in interest rates that might result from expanding economic activity. An improved tone subsequently emerged, however, as the Treasury cut back by \$100 million the amounts offered at two consecutive weekly bill auctions. Furthermore, the market learned that the balance-of-payments deficit had declined sharply in the third quarter of 1963. Thus, bill rates generally rose early in November, then receded gradually in the latter part of the month, while prices of Treasury notes and bonds gave ground through November 6 but were steady to higher thereafter. Elsewhere in the capital markets, prices of corporate bonds also drifted lower at the beginning of November and then firmed over the remainder of the month; prices of tax-exempt bonds generally declined but steadied late in the month.

BANK RESERVES

Market factors absorbed a substantial volume of reserves from the last statement period in October through the final statement week in November. Reserve drainslargely reflecting a seasonal expansion of currency in circulation, an increase in required reserves, and the effects of a routine Treasury interest payment to System Account -more than offset reserves released by a sharp midmonth expansion in float. System open market operations during the period, however, partially counterbalanced the net reserves drained by market factors, with System outright holdings of Government securities expanding on average by \$605 million from the last statement period in October through the final statement week in November, while holdings under repurchase agreements rose by \$32 million. Net System outright holdings of bankers' acceptances increased by \$1 million, and such holdings under repurchase agreements declined by \$2 million. From Wednesday, October 30, through Wednesday, November 27, System holdings of Government securities maturing in less than one year rose by \$2,942 million, while holdings maturing in more than one year declined by \$2,395 million. Most of this shift in the maturity structure of Federal Reserve holdings simply reflected the passage of time.

THE GOVERNMENT SECURITIES MARKET

The hesitant mood which had settled over the Government securities market in October persisted through early November. Market apprehension over the future course of interest rates was intensified by several factors—an apparent acceleration in the pace of economic expansion; the rise in the three-month bill rate above the Federal Reserve discount rate, which led some observers to talk of a possible increase in that rate; and the November

6 increase in margin requirements on stocks, which was interpreted by some as heralding a further shift toward a less easy monetary policy. A more confident atmosphere, however, subsequently emerged, as market participants were encouraged to believe—by a cutback in the month's last two weekly Treasury bill auctions—that the financial authorities were in fact satisfied with current levels of interest rates.

Against this background, prices of Government notes and bonds drifted progressively lower through November 6. Although no real selling pressure developed, dealers marked down quotations, in order to reduce inventories, and investor demand remained at a low ebb. A mild reversal in sentiment commenced on November 7, and prices of coupon issues edged irregularly higher during the remainder of the month, but the rise seemed to be topping off toward the end of November. Investment demand revived, some professional short covering took place, and the technical position of the market strengthened. Trading

CHANGES IN FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, NOVEMBER 1963

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

	Daily averages—week ended				
Factor	Nov. 6	Nov. 13	Nov. 20	Nov. 27	Net changes
Operating transactions Treasury operations* Federal Reserve float Currency in circulation Gold and foreign account Other deposits, etc	- 101 184 + 12 + 33	$ \begin{array}{r} - 71 \\ + 266 \\ - 375 \\ + 9 \\ + 13 \\ \hline - 158 \end{array} $	$ \begin{array}{r} -162 \\ +599 \\ -97 \\ +2 \\ -220 \\ \hline +122 \end{array} $	+ 53 - 54 - 150 - 7 - 30	- 85 + 710 - 806 + 16 - 204
Direct Federal Reserve credit transactions Government securities: Direct market purchases or sales Held under repurchase agreements Loans, discounts, and advances: Member bank borrowings Other Bankers' acceptances: Bought outright Under repurchase agreements	+ 148 + 205 + 2 + 16	- 104 - + 1 - 14	$ \begin{array}{r} -107 \\ -123 \\ +131 \\ +1 \\ -1 \\ -4 \\ -102 \end{array} $	+ 245 - 83 - 231 + 2 - 1 - 69	+605 + 32 + 1 + 3 + 1 - 2 + 639
Member bank reserves					
With Federal Reserve Banks		-128 + 32	$^{+\ 20}_{+\ 162}$	- 257 + 46	+ 270 + 11
Total reserves† Effect of change in required reserves†	+ 406 - 284	- 96 + 54	+ 182 - 104	- 211 + 43	+ 281 - 291
Excess reserves†	+ 122	- 42	+ 78	- 168	- 10
Daily average level of member bank; Horrowings from Reserve Banks Excess reserves† Free reserves†	404 470 66	300 428 128	431 506 75	200 338 138	334‡ 436‡ 102‡

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 November 27, 1963.

was also stimulated by investment switching operations which tended to favor the 2½ per cent wartime issues. As mentioned earlier, the market was closed from late Friday afternoon, November 22, through Monday, November 25. Over the month as a whole, prices of short- and intermediate-term obligations were generally 32 lower to 32 higher, while prices of longer term Governments were generally 32 lower to 32 lower to 33 lower

In the market for Treasury bills, rates moved generally higher through November 13, with the three-month bill rate reaching a peak of about 3.58 per cent (bid), somewhat above the 3.50 per cent discount rate. During this period, however, scarce shorter bill maturities, for which some demand continued in evidence, edged further downward. A stronger tone emerged in the latter part of the month when the Treasury twice trimmed \$100 million from the three-month bills sold at its regular weekly auctions on November 18 and 26, with the express purpose of avoiding any disturbance in the balanced relation between money market rates here and abroad. Both bank and nonbank demand for bills expanded moderately, while market offerings gradually tapered off, and bill rates edged lower in the final half of November.

At the last regular weekly auction of the month held on November 26, average issuing rates were 3.480 per cent for the new three-month issue and 3.631 per cent for the new six-month bill—3 and 5 basis points, respectively, above the rates established in the final auction in October. An average issuing rate of 3.590 per cent was set at the November 27 auction of \$1 billion of new one-year bills, which were sold with banks permitted to pay for 50 per cent of their awards through direct crediting of Treasury Tax and Loan Accounts. A month earlier—with no Tax and Loan privilege accorded—the one-year bill was auctioned at 3.633 per cent. The outstanding three-month bill closed the month at 3.50 per cent (bid) as against the end-of-October rate of 3.48 per cent (bid), while the outstanding six-month bill was quoted at 3.64 per cent (bid) on November 29, compared with 3.60 per cent (bid) on The new one-year bill closed at 3.68 per October 31. cent (bid) in "when-issued" trading.

OTHER SECURITIES MARKETS

Prices of seasoned corporate bonds receded in quiet trading at the beginning of November, then steadied, and moved narrowly during the rest of the month. In the taxexempt sector, a more cautious tone was evident until late in the period, as the market assessed the potentially adverse effect on the demand for municipal issues of an apparent pickup in demand for bank credit. Prices of seasoned tax-exempt bonds accordingly declined, and widespread price cutting on undistributed recent issues occurred, raising reoffering yields as much as 20 basis points. Toward the end of the month, a steadier tone emerged in the tax-exempt sector. Over the month as a whole, the average yield on Moody's seasoned Aaa-rated corporate bonds rose 1 basis point to 4.33 per cent, while the average yield on similarly rated tax-exempt bonds also increased by 1 basis point to 3.17 per cent.

The total volume of new corporate bonds reaching the market in November amounted to approximately \$200 million, compared with \$510 million in the preceding month and \$295 million in November 1962. The largest new corporate bond issue publicly marketed during the month was a \$40 million A-rated utility company offering of 4% per cent first mortgage bonds. Reoflered to yield 4.60 per cent, the bonds which mature in 1993 quickly sold out. New tax-exempt flotations during the month totaled approximately \$665 million, as against \$1,245 million in October 1963 and \$470 million in November 1962. The Blue List of tax-exempt securities advertised for sale declined by \$73 million during the month to \$553 million on November 29. The largest new tax-exempt offering during the period was a \$70 million state turnpike authority revenue bond issue which was not rated. The flotation consisted of \$24 million of serial revenue bonds reoffered to yield from 3.00 per cent in 1969 to 3.80 per cent in 1985, which moved slowly, and \$46 million of term bonds priced at par to yield 4.10 per cent in 2002 which quickly sold out. Investor reaction to other new corporate and tax-exempt issues marketed in November was mixed.

The Business Situation

The full impact of the change in the Presidency on November 22 cannot, of course, be assessed as yet. Nevertheless, it appears that at the time of the change the economy had already developed sufficient momentum to assure further expansion over the months ahead. The reaction of various economic groups to the change in the Presidency conveys the impression of continued confidence in the working of our institutions, in the strength of the economy, and in the prospect for future economic gains.

This confidence partly reflects the fact that, with the final quarter of the year well under way, most measures of activity were continuing to post new advances. In October, industrial production, nonfarm payroll employment, personal income, and retail sales each rose more than seasonally. Among the various leading indicators, both housing starts and building permits rose sharply from already high levels, while new orders for durable goods also scored a good gain. Fragmentary data for November show a modest pickup in steel ingot production and a further rise in the rate of automobile assemblies. Retail sales appear to have held up well, except for a few days following President Kennedy's death.

On the other hand, assessments of the longer term picture had been somewhat mixed even before the President's assassination, with uncertainties relating particularly to the timing of a Congressional decision on tax legislation. It is thus heartening that President Johnson in his November 27 address to a joint session of Congress announced his full support of an early enactment of the proposed tax cut.

One recent study bearing on the prospects for next year, the McGraw-Hill October survey of businessmen's capital spending intentions for 1964, suggests that current plans call for no further increase in outlays beyond the annual rate of spending estimated for the final quarter of 1963 in the August survey of the Department of Commerce-Securities and Exchange Commission. On the other hand, the National Industrial Conference Board reports that capital appropriations by large manufacturing corporations were higher in the third quarter of 1963 than at any time since the first quarter of 1956. Capital appropriations for these firms have tended to lead capital outlays by

six to nine months. The high third-quarter level of appropriations, following a substantial rise the quarter before, would seem to indicate more strength in capital outlays during 1964 than is suggested by the McGraw-Hill survey. The likelihood that actual spending will exceed this survey's levels would be further increased if other forces continued to push the economy upward. In this regard, it is encouraging that the Census Bureau's latest survey of consumer buying intentions, taken in October, shows that plans to purchase durable goods within six months are above the relatively high levels of a year earlier.

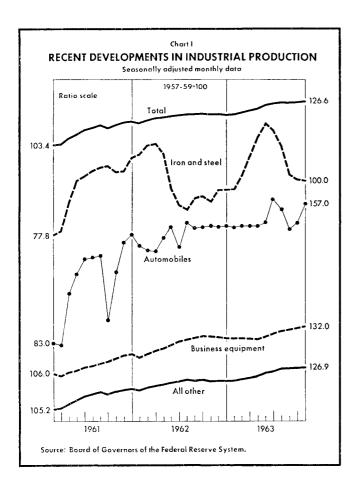
PRODUCTION, EMPLOYMENT, AND CONSUMER SPENDING

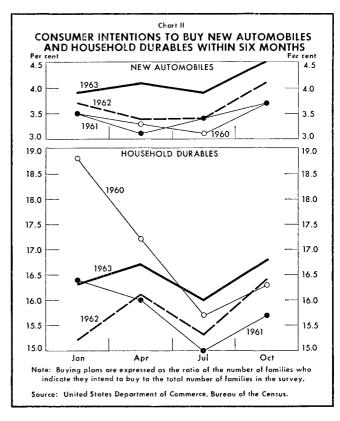
After declining in August and showing little change in September, the Federal Reserve's index of industrial production moved up by 0.7 percentage points in October to reach 126.6 per cent (seasonally adjusted) of the 1957-59 average. This figure very slightly surpasses the previous all-time high, reached in July. The automobile industry provided the largest single source of strength in October, as assembly of the new models moved into full swing. At the same time, producers of business equipment posted their sixth consecutive increase in output (see Chart I). It is also worth noting that iron and steel production was essentially unchanged in October, following the appreciable declines registered in the previous several months. Although steel users apparently still have some surplus inventories of finished steel products, which probably will be worked down over the balance of the year, recent reports from the trade suggest that new orders are being placed in sufficient volume to support a moderate increase in steel production in the near term (on a seasonally adjusted basis). Ingot production in November did indeed score about a 6 per cent advance over October. Auto production also posted a modest rise in November, despite a series of work stoppages.

The employment situation showed further improvement in October, as the number of persons on nonfarm payrolls rose by 92,000 (seasonally adjusted). Most of this rise was centered in the government sector—particularly

at the state and local levels—with some increases in employment in the trade and service industries as well. In contrast, employment in the manufacturing sector showed relatively little change, despite the increase in output in the month. In November total employment remained about unchanged, according to the Census Bureau's household survey. Because of an increase in the number of persons looking for work, however, the unemployment rate rose to 5.9 per cent of the civilian labor force. The number of unemployed persons has remained at 4 million or more for thirteen consecutive months.

Recent indicators of consumer spending, on balance, are more encouraging than was the case several weeks ago. Thus, after faltering in August and September, retail sales turned around in October and rose to a new record. Fragmentary data for November suggest a possible weakening of total sales. This apparent slippage, however, was probably in some part related to a few weak shopping days following the assassination of the late President Kennedy. (Most retail outlets, of course, did not open for business November 25, a day of national mourning for the late



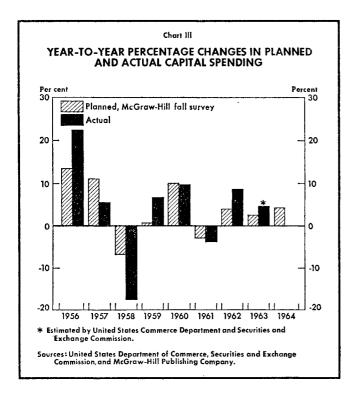


President.) Also, sales of new automobiles probably fell slightly during November. Dealers reported that the new models have been well received but that sales had been held up early in the month by shortages in popular lines. These reports on continued strength in the market for automobiles seem to be corroborated by the Census Bureau's October survey of consumer buying intentions (see Chart II). To be sure, consumer intentions surveys do not correlate very precisely with later data on actual purchases—an imprecision that appears to be even more marked for the October surveys than for those taken in other months of the year. Nevertheless, it is noteworthy that plans to buy new cars within six months were in October significantly above the level recorded in the fall of 1962 and only slightly below the all-time high reached in October 1959, while intentions to purchase used cars also showed strength. Plans to buy household durables and new homes likewise continued at a high level.

PLANT AND EQUIPMENT SPENDING IN 1964

In assessing the prospects for continued over-all economic expansion in 1964, much attention has been focused on the likely course of spending for new plant and equipment. The first impression of capital spending plans for next year, derived from the October McGraw-Hill survey, appears to have been one of disappointment to many observers. The survey indicated that businesses in the aggregate were planning to spend only about \$41 billion for plant and equipment in 1964—4 per cent more than the estimated amount of such spending for 1963 as a whole, but actually slightly below the planned rate of spending for the current quarter adjusted to an annual rate basis.

Upon closer examination, however, the picture is somewhat more encouraging. Past experience suggests that the McGraw-Hill fall surveys have tended to be very reliable in predicting the direction of change in capital spending but have tended to understate the amount of increases by considerable margins. Thus, in each of the



years since 1955 for which the McGraw-Hill fall survey pointed toward a rise in capital spending an increase was in fact realized (see Chart III). However, the rate of increase actually rung up in such years exceeded the projected advance by an average of about 21/2 percentage points. The difference between the actual amount of gain in capital outlays, compared with that shown by the survey, is even more pronounced in years of continually rising over-all economic activity. Some respondents to the survey have already indicated that their capital outlays will probably exceed present plans if the proposed tax cut is passed. It is also worth noting that this year's survey included a much larger representation of smaller firms in the sample than had been the case in previous years. There is some evidence that small firms do not tend to make very definite long-range plans for capital spending, which suggests that the latest survey may have had an even larger downward bias than those taken in some past years.

About 80 per cent of the McGraw-Hill survey's projected increase in capital spending for 1964 is accounted for by the manufacturing sector, where the largest push is expected to come from the iron and steel industry. Although utilization of over-all capacity is relatively low in this industry at present, there may be some need for additional finishing mill capacity. Furthermore, competitive pressures—both from foreign steel producers and from alternative products-have increased the need for modernization. It is also possible that several industries which in September were already very near to their preferred operating rates-most notably textiles and petroleum and coal products-may find it necessary to revise upward their relatively modest 1964 capital spending plans should sales turn out well. The only industries that reported significant reductions in planned capital outlays in 1964, compared with 1963, were the railroads and manufacturers of transportation equipment. However, the railroads have frequently noted a shortage of modern rolling stock and other equipment, which in the past several weeks has become even more pressing. This development, in turn, could cause some upward revision in their planned 1964 capital spending.

Commercial Banks as Suppliers of Capital Funds to Business*

Commercial banks are an important source of the funds business requires for financing expansion or modernization of plant and equipment and for other long-term needs. To be sure, commercial banks have not been permitted since 1934 to engage in underwriting new corporate securities issues. This function is performed by investment banking houses. Many smaller businesses, however, do not have access to the securities market; and larger businesses sometimes prefer to borrow capital funds for shorter periods than are typical of the bond, stock, or mortgage markets. These financing needs can be, and often are, met by banks through the offer of medium-term credits of up to eight years' maturity. Thus, commercial banks and the securities market are in many cases viewed as alternative sources of capital funds by the business borrower, who can draw on one or the other according to convenience and cost. After describing how banks participate in the provision of capital funds to business, this article examines secular and cyclical trends in the relative use of these alternatives.

NATURE AND MAGNITUDE OF COMMERCIAL BANK PARTICIPATION

Commercial banks participate in supplying capital funds to business through term loans in two different, although interrelated, ways. First, they extend intermediate-term loans that are repaid from the borrower's earnings or from other internal sources; second, they extend interim credits of one- to two-year maturity, which are repaid from the proceeds of new bond or stock issues in the securities market.

For the first type of credit, commercial banks are very attractive sources to many businesses. Many small firms that do not have ready access to the long-term securities market find bank credit the only practicable source of new capital funds. And for large businesses, borrowing from banks is often a quicker, cheaper, and more convenient

Since these bank loans are generally used by borrowers to finance capital expenditures and are repaid from internal cash flows—current earnings or depreciation allowances—they are akin to long-term credits extended by life insurance companies, pension funds, and other financial institutions and by individual investors in the bond, stock, and mortgage markets. However, the original maturity of new corporate bonds publicly offered during 1950-61 averaged about twenty-five years, whereas that of term loans outstanding at member banks is estimated to have averaged about five years recently. Consequently, commercial banks are provided each year with a relatively larger flow of repayments for relending to other customers than nonbank holders of corporate bonds, equities, and mortgages. To be sure, the funds repaid to, and relent by, banks reflect only shifts of existing credits from one business firm to another. But these shifts represent a redirection of resources-from firms that are no longer in need of them to firms seeking to increase their resources through external financing. In thus shifting existing credits among various businesses in the economy, commercial banks contribute a great deal of flexibility to the financing of capital formation.

Banks offer a second type of capital financing assistance to business by providing interim credits for financing the initial stages of new plant construction. This type of bank activity tends to come about in the following way. The need for funds in heavy capital investment projects arises only gradually as work proceeds. Some business firms, therefore, may be reluctant to borrow the full amount in

method of raising long-term funds—particularly for loans with maturities of five to eight years—than the public offering of bonds or the flotation of equities in the securities market. Also, bank loans can be tailored to individual borrower needs through direct negotiations with the lending bank, thus giving the borrower more leeway in determining repayment schedules and frequently permitting more efficient use of loan proceeds.¹

^{*}George Budzeika had primary responsibility for the preparation of this article.

¹The nature of term loans and their trends at large New York City banks during 1955-60 were discussed in "Term Lending by New York City Banks", this *Review*, February 1961, pp. 27-31.

the securities market at the outset, preferring to borrow temporarily from banks—in the form of either a formalized revolving credit agreement or a short-term line of credit—with such credits remaining on the books for one to two years.² These arrangements enable firms to borrow only the amount needed at each stage of construction, which economizes on borrowing costs. At or near the time of completion of the project—when exact long-term credit needs are finally known—the borrower normally repays the interim bank debt from the proceeds of a new bank loan carrying a longer maturity or, more typically, from the proceeds of sales of new securities in the capital market.

This role of bank term credit as an interim substitute for securities market credit is most pronounced in the financing of capital expenditures by electric, gas, and water public utilities. On the basis of data provided by the Securities and Exchange Commission, it is estimated that during 1959-62 commercial banks initially financed nearly half of the total capital expenditures of public utilities that were ultimately financed in the securities market. In manufacturing industries, the interim financing by banks covered about one quarter of the capital expenditures eventually financed in the securities market.

The gross flow of capital funds from banks to business is sizable. During 1959-62, for instance, extensions of intermediate-term loans by banks to nonfinancial, nonfarm corporate and noncorporate businesses are estimated to have averaged nearly \$7 billion annually,3 while extensions of interim credits—granted under both revolving credit agreements and line-of-credit arrangements—are es-

timated at \$2 billion or more per year. (Routine renewals of loans are excluded from these figures.) It happens that, over the same period, the volume of new bond issues sold by nonfinancial corporations to investors also averaged nearly \$7 billion, and the volume of new stock issues about \$2 billion. Although these data are on a gross basis, the comparison provides some notion of the place of commercial banks in satisfying the demands of American business for external capital financing.

TRENDS IN THE USE OF COMMERCIAL BANK AND BOND MARKET CREDITS

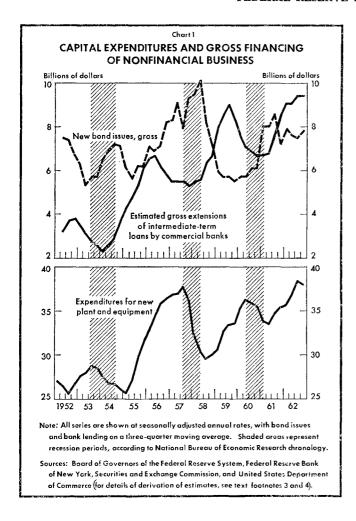
Over the business cycle as well as over longer periods, the role of banks in supplying capital funds to business is significantly affected by the over-all demand and supply conditions for such funds. In the last five years, the most important factor affecting business demand for capital funds has been a sharp rise in corporations' internal cash flows (comprising retained earnings and depreciation allowances) relative to their capital expenditures. According to the flow-of-funds tabulations prepared by the Board of Governors of the Federal Reserve System, internal cash flows of nonfinancial corporations were \$2.6 billion a year lower in 1952-57 than corporate expenditures for fixed investment, but exceeded fixed capital expenditures by \$1.9 billion per year during 1958-62.

The effects of this relative increase in the internal cash flows of corporations were a reduction in the corporate demand for bond market credit, little change in the demand for equity funds, and increased demand for intermediate-term bank credit. Chart I presents the figures given above on these major types of credit for a longer period and in a slightly different form. As this chart shows, the dollar volume of gross new bond issues by nonfinancial corporations declined sharply after 1957 to an average of about \$7 billion per year during 1960-62, only slightly more than the 1952-54 average. Gross new stock issues increased slightly, from \$1.7 billion to \$2.0 billion per year. In contrast, gross extensions of intermediate-term loans and interim credits by banks during 1960-62,4 at about \$8 billion per year, were around 2½ times their \$3 billion annual average for the years 1952-54. The relative im-

² The revolving credit agreement permits the borrower to draw short-term notes on the bank from time to time up to the maximum amount of the commitment, with the privilege of repaying and reborrowing during the life of the agreement. The bank's promise to extend credit is a firm commitment. The line-of-credit arrangement is similar, differing mainly in the lack of a formal agreement and of a legally binding obligation to extend credit.

³ The figures on extensions of term loans by banks were pieced together from a number of sources, including the Commercial Loan Surveys of 1946, 1955, and 1957, conducted by the Federal Reserve System; the Quarterly Financial Report for Manufacturing Corporations, compiled jointly by the Federal Trade Commission and the Securities and Exchange Commission; weekly reports on term loans by large New York City banks; statistics on bank loan refundings in the securities markets, provided by the Securities and Exchange Commission; and statistical material on New York City banks, developed from bank examination sources. The estimates thus derived refer to banks' commercial and industrial loans, mortgage-secured loans to business, and single-payment loans to individuals for business purposes, all with an original maturity of more than one year. Though the estimates are rough, they are considered workable approximations for an analysis of cyclical and secular trends.

⁴ The figures on bank lending, as plotted in Chart I, combine intermediate-term loans and interim credits, because their separation for years prior to 1959 was not possible. But extensions of interim credits under line-of-credit arrangements were not included in the combined figures because of the difficulty of statistically measuring their trends. This omission understates actual bank lending to business by perhaps as much as \$1 billion per year on the average.



portance of bank financing has also increased in terms of amounts outstanding; bank loans of the types indicated have grown faster than outstanding corporate bonds⁵—the primary alternative to such bank credits.

There is good reason to believe that the rise in the internal cash flows of corporations may actually have contributed in some degree to the augmented demand for bank funds. Expecting an increased flow of cash from internal sources, some companies have become able to repay borrowings in a shorter period than twenty-odd years, the

typical maturity for publicly offered bonds, and bank term loans therefore have emerged as a feasible alternative.

Shifts between banks and the bond market by borrowers are also a feature of business cycles. As can be seen in Chart I, bank lending and bond financing have moved inversely over the last three cycles. Bank extensions of intermediate-term loans rose sharply in the early part of business expansions, reached a peak around the midpoints, and thereafter declined through mid-recessions; bond financing generally reached its peak around recessions, and its trough during business expansions. However, these inverse cyclical movements of the two sources of credit are not necessarily attributable entirely to direct shifts of borrower demand from one to the other. In fact, there are numerous institutional and cyclical factors that induce business firms to borrow less in one credit market and to borrow more in another during a given stage of a business cycle. Some of these factors may be described briefly.

In the first half of a business expansion, when bank funds are in ample supply, business borrowers show a strong preference for bank rather than bond market credit. One explanation is probably the relative ease of obtaining bank credit, for at that time it is simpler to borrow from banks than to go through the relatively time-consuming procedures required by the bond market. In addition, many businesses are then embarking on new capital expenditures, and there is thus an increased desire for interim bank credits, to be repaid at the completion of construction from the proceeds of new bond issues.

During recessions, the long-term borrowing undertaken by business occurs mainly in the bond market. Many businesses have by that time completed their new construction projects and turn to the long-term bond market to refund their interim bank indebtedness. Furthermore, borrowers find that during recessions the cost of borrowing in the bond market is declining, and some of them decide to refund part of their outstanding high-coupon bond debt with low-rate new issues, as happened on a relatively large scale during the 1954 recession. Still other borrowers may tend to substitute bond credit for stock market financing during recessions, because stock prices are ordinarily depressed during such periods.

The role played by the alternating uses of bank credit and bond financing during a business cycle can be examined in more detail only for the most recent years.

⁵ According to estimates prepared for this study, the volume of commercial banks' outstanding term loans to nonfinancial business rose between 1952-54 and 1960-62 by about 130 per cent (from an average of \$12 billion to \$28 billion), while in the same period the volume of outstanding bonds of nonfinancial business, according to statistics compiled by the Board of Governors of the Federal Reserve System, rose by only 70 per cent (from an average of \$47 billion to \$79 billion).

⁶ The effect of such refunding is not evident in Chart I, since its figures on bond credit cover all new issues, regardless of purpose.

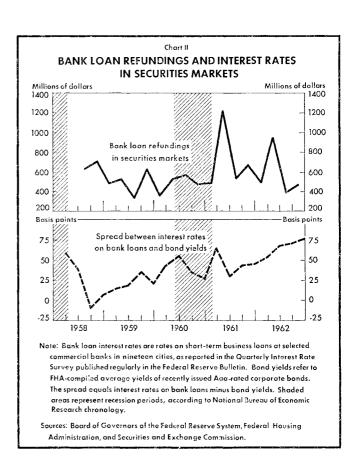
Pertinent bank loan refunding figures are available since mid-1958. These figures, which are shown in Chart II, cover repayments of bank credits from the proceeds of new corporate bond and stock issues sold in the securities market by nonfinancial corporations, as recorded in the registration files of the Securities and Exchange Commission. In bank loan refundings, as in the case of new borrowing to meet capital financing needs, bond rather than stock issues have been the main alternative in recent years.

Although the period covered by loan refunding statistics is relatively short, the figures are suggestive of the behavior of bank loan refundings during recessions. Refundings rose sharply during the second quarter of 1961, after the trough of the 1960-61 recession. As has been suggested above, such a rise is to be expected during, rather than after, recessions. To be sure, the 1961 increase in bank loan refundings lagged into the early post-recession period; but this may to some extent have been a reflection of the relatively short duration of the preceding expansion in capital expenditures. As Chart I shows, the expansion in expenditures for new plant and equipment lasted only 134 years in the 1958-61 cycle, compared with 2½ and 3¾ years during the 1954-58 and 1949-54 cycles. At the end of relatively short expansions many construction projects may remain uncompleted. Therefore, the upturn in refinancing may be delayed beyond the end of the recession.

The timing of bank loan refundings in the bond market is also related to the level of interest rates in the bond market, and to the anticipations of businessmen with respect to future rate changes. If borrowers expect bond rates to decline in the near future, they have little incentive to borrow in the bond market. If they anticipate a rise in interest rates, however, they may wish to borrow in the bond market before the rise takes place. Such considerations may have contributed to the sharp rise in refundings during the second quarter of 1961. By then it was clear that an upward trend in the economy had started. Judging from historical experience, this trend could be expected to bring about a rise in interest rates on bonds.

Changes in the relative costs of bank and bond market borrowing also help explain the timing of bank loan refundings. When relative costs move in favor of bond financing, firms that have to refinance their interim bank debt have an incentive to do so through bond borrowing. And, conversely, if the cost of bond market credit becomes relatively high, business borrowers have reason to postpone their loan refundings until a more favorable situation arises.

During the 1960-61 recession and the short periods preceding and following it, bank loan refundings rose —with a lag of about a quarter of a year—after increases in the spread between bank and bond market rates in favor of the latter (see Chart II). The lag may represent the time needed by borrowers to reach their decisions and to complete the procedures necessary for a new flotation in the securities market. This two-year performance suggests that bank loan refundings are sensitive to interest rate spreads during recessionary or near-recessionary periods, when business firms have completed the construction projects financed with interim bank credits and have an option about the timing of their refunding. On the other hand, during the nonrecessionary periods covered by the data—late 1958, early 1959, and 1962—when such an option did not exist, no direct relationship could be discerned between bank loan refundings and the relative cost of bank and bond market credits. The response of business borrowers to changing relative costs of bank and bond borrowing clearly requires further analysis once figures for longer periods are available.



CONCLUSIONS

Commercial banks now play an important role as a source of capital finance. They act as buffers for the capital market, absorbing a significant proportion of the initial pressures for capital funds by medium-sized and large corporations. Thus they contribute to the relative stability of the market for business capital finance within a business cycle, and to more efficient financial planning by borrowers and ultimate lenders of long-term funds.

Possibly even more important, commercial banks act as significant lenders to businesses that seek intermediate-term funds. These may be borrowers who do not have ready access to the securities market and do not generate sufficient amounts of funds from internal sources to finance their new plant expansion or their more permanent

working-capital needs. Or they may be firms whose internal cash flows allow them to contract for capital credits of shorter maturity than are typical in the bond market. Particularly for those borrowers who do not have access to the securities market, the possibility of borrowing from commercial banks may be the decisive factor in going ahead with expansion plans.

These activities are evidence of a changing function of commercial banks. In addition to supplying short-term funds to business—the traditional function of commercial banks—they are now also providing substantial amounts of medium-term funds and thus are emerging as an important financial intermediary in the savings-investment process. This service helps generate capital formation and is another instance of the evolutionary adaptation of the country's financial mechanisms to the economy's needs.

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