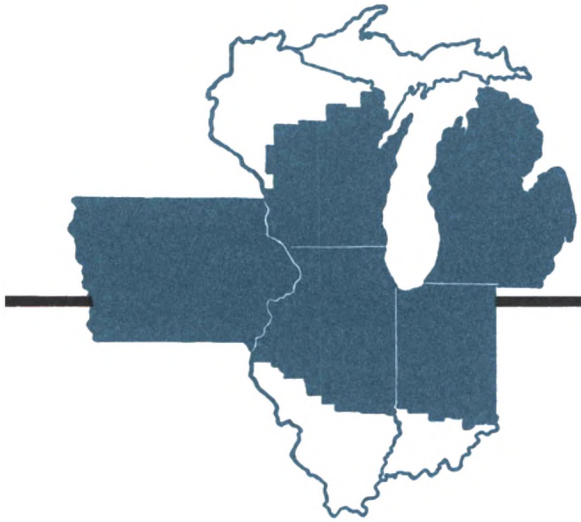
A review by the **Federal Reserve Bank of Chicago**

Business Conditions



1966 April

Contents

Trends in banking and finance

Interest rates move higher

With the boost from 5 to 5.5 per cent on March 10, the prime lending rate of the nation's major banks joined an already long list of interest rates that had risen to levels not seen in more than 35 years. This increase —the second advance of a half per cent since early last December—reflected the growing pressures on banks to meet large credit demands in the face of a slower inflow of funds.

The recent adjustment helped to correct an unusual situation that had developed, namely, where many banks were paying more for new money than they were earning on a large portion of their assets. In the past five years, the large money market banks have acquired the major portion of their additional deposits by issuing negotiable certificates of deposit (CDs). Almost one-third of the 16 billion dollars of outstanding CDs were scheduled to mature in March and April and rates on new issues of 90 days and longer generally exceeded 5 per cent. Furthermore, heavy loan demand was expected over the mid-March tax and dividend date. Under these circumstances, an upward adjustment in lending rates seemed clearly necessary to many bankers.

Does this boost represent another turn in an upward spiral of interest rates? Changes in the prime rate (and the discount rate), whether up or down, nearly always exert "announcement" effects on the financial markets partly because they crystalize important market developments not previously publicized widely. But while these rates may appear to the sideline observer to set the trend for other rates, their effects are sustainable only to the extent that they are consistent with basic supply and demand forces. In most instances such adjustments are simply confirmation of changes in the credit environment already in process, and it is these forces that will continue to shape rate trends in the months ahead.

When the prime rate was boosted last December, following an increase in the Federal

BUSINESS CONDITIONS is published monthly by the Federal Reserve Bank of Chicago. Dorothy M. Nichols, George W. Cloos and George G. Kaufman were primarily responsible for the article, "Trends in Banking and Finance," and Charlotte H. Scott for "Savings Developments Since the December Rate Change."

Subscriptions to **Business Conditions** are available to the public without charge. For information concerning bulk mailings, address inquiries to the Federal Reserve Bank of Chicago, Chicago, Illinois 60690.

Rates have advanced strongly

	High 1959-60	September 24, 1965	December 3, 1965	February 25, 1966	March 18,1966
			(per cent)		
Federal Reserve discount rate	4.00	4.00	4.00	4.50	4.50
Federal funds	4.00	4.12	4.13	4.63	4.58
Stock exchange call loans	5.50	4.75	4.75	5.25	5.50
3-month Treasury bills	4.59	3.94	4.12	4.66	4.64
3-month bankers acceptances	4.88	4.25	4.25	4.88	5.00
3-month prime CDs[1]	—	4.35	4.50	4.88	5.30
3-6 month finance paper	5.13	4.25	4.38	4.88	5.13
6-month CDs[1]	—	4.48	4.55	5.13	5.60
6-month Treasury bills	5.07	4.10	4.26	4.87	4.82
Prime bank loans	5.00	4.50	4.50	5.00	5.50
Federal Land Bank bonds[2]	5.15	4.39	4.60	5.12	5.06
3-5 year Treasuries	5.00	4.24	4.50	5.04	4.93
Long-term Treasuries	4.42	4.25	4.36	4.66	4.63
AAA corporate bonds[3]	4.61	4.52	4.60	4.82	4.94
BAA corporate bonds[3]	5.36	4.91	4.98	5.16	5.34
AAA state and local[3]	3.65	3.31	3.37	3.62	3.56
BAA state and local[3]	4.46	3.65	3.74	4.08	4.13
25-year FHA mortgages	6.24	5.46	5.51	5.72	n.a.
Conventional mortgages	6.30	5.80	5.90	6.05	n.a.

n.a. Not available.
[1]Secondary market rate, Salomon Brothers and Hutzler.
[2]Yield on representative issues maturing within 24 to 30 months.
[3]Moody's Investors Service.
Note: Figures are weekly averages of market rates where available.

Reserve discount rate, a gradual but steady rise in market interest rates was already under way (see table). In the two previous months, yields had risen by as much as 25 basis points on intermediate Treasury issues and a lesser extent on other credit instruments. In the month following the discount rate change, the rise in short-term rates accelerated sharply and then leveled off. Long-term rates responded more slowly, but in February yields on both U. S. Governments and state-local issues rose more than in any month since 1959. On the whole, in the three-month period following the discount rate change, market yields rose by amounts ranging from about 15 basis points on conventional residential mortgages to more than 60 points on several short-term money market instruments. In the two weeks following the March advance in the prime rate, some yields leveled off or declined but others continued to move higher.

To money and securities markets grown accustomed to relatively stable prices and yields over the preceding five years, these recent rate adjustments may have appeared somewhat startling. Rate changes of this magnitude are by no means unusual, however, when compared with the swings in yields that accompanied cyclical swings in business activity and credit demand in the Fifties. To those who regard interest rates as an indication of monetary restraint, the amount of the increase is perhaps less significant than the fact that in all sectors of the market, except mortgages and lower-grade bonds, rates on most types of obligations have moved above the earlier postwar peaks reached in late 1959.

Supply large—demand larger

Interest rates, like other prices, reflect the interaction of demand and supply forces. They serve to equate the volume of borrow-

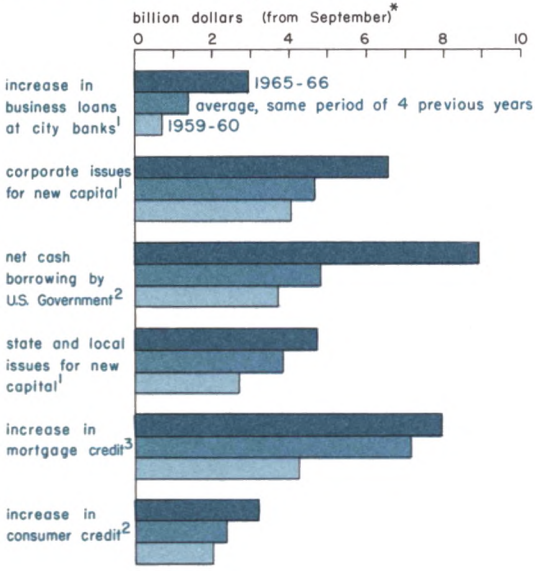
ing to the amount of lendable funds. High rates may accompany either a large or small flow of credit, depending on the supply of funds available for lending in the overall setting of strong credit demands. As the chart shows, borrowing in the fourth quarter of 1965 and the early months of 1966—the period in which rates moved up to historic highs—was larger for all major sectors of the credit market than the average growth during comparable months of the past four years and much greater than in 1959-60.

Much of the above-normal credit growth was in the business sector. Borrowing by governmental units also has been unusually large. Although the U. S. Government normally borrows in the fall to cover its seasonal deficit, net cash borrowing was much greater in the final quarter of 1965 and in January than in the same period of other recent years.

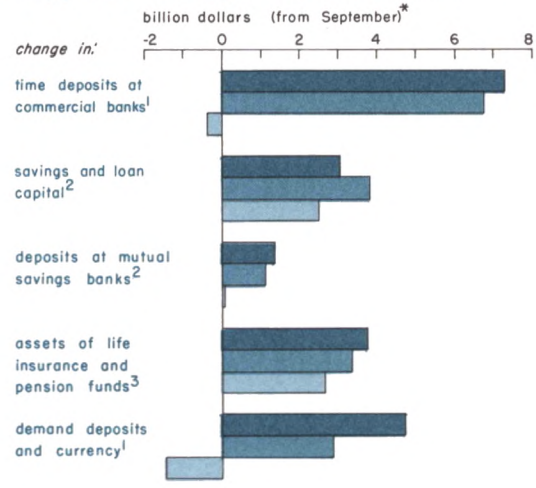
All credit, of course, must be supplied from some source. The major suppliers of funds to the credit markets are financial intermediaries—commercial banks, savings and loan associations, savings banks, life insurance companies and pension funds. The total flow of funds through these institutions depends largely on current savings but is also influenced by the supply of reserves made available by the Federal Reserve System. While funds flowing into these intermediaries (except for savings and loan inflows) have been greater since last September than the average for earlier years, they have not matched the overall increase in credit. This has left a larger residual to be supplied by other investors—largely individuals and businesses, who can be induced to hold more financial assets only by providing higher rates of return.

The large growth in both time and demand deposits of commercial banks in recent

Borrowing has exceeded usual amounts by more . . .



. . . than the growth in funds supplied through intermediaries



*Figures are from end of September through latest available date noted for each set of bars: [1]February; [2]January; [3]December.

months is in striking contrast to the contractions which occurred in earlier periods of high interest rates. It reflects, in part, their more effective competition for funds, mainly through issuance of negotiable certificates of deposit. Such certificates are held mainly by corporations and state and local governments so that the banks are now placing funds which these groups invested directly during earlier periods. In addition, bank reserves have been provided in sufficient quantity to permit a substantial expansion in money supply.

Slower credit growth ahead?

The foregoing indicates that businesses, governmental units and consumers have been able to obtain large amounts of credit, albeit at rising costs as mounting demands for labor and materials exerted increasing pressure on productive capacity. Under these conditions, further rapid expansion in credit probably would result in inflationary price increases.

Available evidence indicates that demands for credit are likely to remain strong. The heavy forward calendar of new security issues attests to businesses' needs for funds to finance the large amount of planned capital expenditures. While the projected Federal cash deficit is relatively small, sales of assets or participation certificates by the Federal National Mortgage Association, the Commodity Credit Corporation and the Export-Import Bank absorb funds from the market. Moreover, there is considerable uncertainty about the potential volume of Government expenditures for both domestic programs and foreign commitments. Given current projections on employment and personal income, there is little reason to expect any significant reduction in credit demands of consumers or states and municipalities.

Credit expansion, moreover, is likely to slow down this year because of a reduction in funds supplied. Inflows to banks will be affected by the reduced liquidity of corporations. The higher interest rates may induce larger savings by other investors, but it seems unlikely that these will be sufficient to provide funds to serve all credit demands. Banks, however, by offering savings certificates, may increase their share of total savings funds.

Furthermore, monetary policy may provide greater restraint on credit availability. With full employment, a repetition of the 1965 record 10 per cent growth in bank credit probably would be inconsistent with economic stability unless restrictive fiscal measures were to be undertaken. This does not suggest any cutback in the amount of money or credit outstanding but rather slower growth of money and credit than the rapid rates in recent years.

There is evidence that this slowing is already under way. Bank credit rose at a seasonally adjusted annual rate of less than 1 per cent in February—down very sharply from the December and January experience. Despite reports of continued strong demands, loan expansion at the weekly reporting banks in the six weeks ended in mid-March was much below the unusually large gain in the corresponding period of 1965 although still moderately above other recent years.

These supply-demand developments in the credit markets have resulted in increased upward pressure on interest rates. Whether and how much rates will rise further depends mainly on three factors. First is the degree to which the rate increases to date include the effects of expectations. Expected future supply-demand forces undoubtedly have been discounted in advance to some extent by the market. Second is the responsiveness of both savers and borrowers to higher rate levels. The effects of the higher rates on business borrowers is not readily determined; how-

ever, a number of planned municipal issues have been cancelled or deferred and past experience indicates that mortgage financing is quite sensitive to interest rates and credit availability. Finally, there is the role to be played by nonprice credit rationing. Rates are insulated from the effects of shifts of demand by a variety of means of curtailing credit to some borrowers who would willingly pay higher rates to obtain accommodation.

Corporations turn to borrowed funds

Corporations always rely heavily upon funds from internal sources, principally retained earnings and depreciation reserves. But in extended periods of business expansion, rising expenditures for buildings, equipment, inventories, receivables and other assets force corporations to supplement internally generated funds increasingly with outside borrowings, especially bond issues and bank loans.

Retained earnings, a rise in tax liability and depreciation provided nonfinancial corporations with 59 billion dollars in 1965, about 18 per cent above the record total of the previous year. These sources accounted for two-thirds of all funds raised by such corporations last year. This ratio was down from 73 per cent in 1964 but was only slightly less than the postwar average.

Nonfinancial corporations issued 13.4 billion dollars of securities in 1965. Because of retirements and sinking fund purchases, however, net funds acquired through the capital markets amounted to only 6.1 billion dollars. This total had been exceeded in four postwar years—1952, 1957, 1958 and 1961.

The most noteworthy business financial development last year was the rise in commercial bank loans. The net increase in bank loans to nonfinancial corporations, exclusive of mortgages, was 9.7 billion dollars. This was nearly triple the rise of 1964 and much larger than the increase in any previous postwar year.

Bank loans had been readily available to credit worthy business borrowers throughout the expansion of the past five years until recent months. Late in 1965 some banks indicated that they were beginning to ration credit, turning down some loans that would have been made earlier.

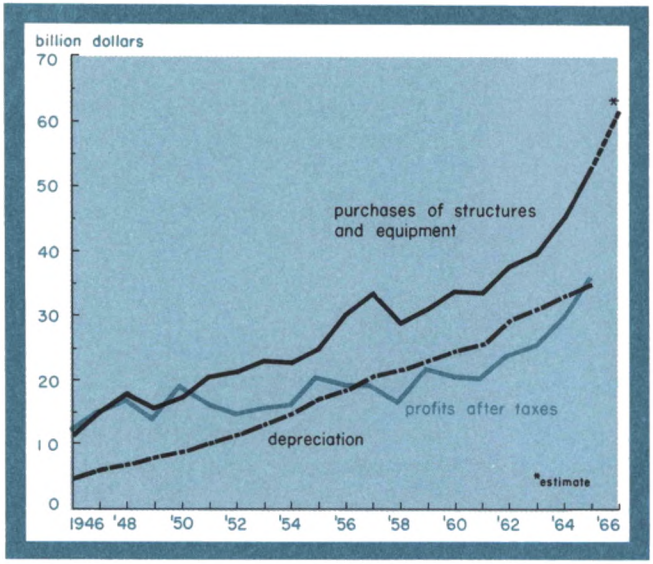
Business corporations, especially those that do not borrow regularly, look upon their commercial bank lines of credit as an indispensable means of obtaining short-term funds when cash may be depleted temporarily by tax payments, rising capital expenditures, inventories or receivables. When financial needs appear to be permanent or of long duration, security issues often are sold and the proceeds used to repay bank loans. When needs for cash diminish in a recession or in a seasonal business decline, many firms are able to repay bank loans.

In several postwar years, there was negligible expansion in business loans at banks, and in recession years—such as 1949, 1954 and 1958—an appreciable repayment occurred. In 1958, for example, business loans declined 700 million dollars although total corporate sources of funds amounted to more than 42 billion dollars. Clearly, bank loans comprise an all-important balancing item in the corporate sources and uses of funds framework.

Capital expenditures still rising

By far the most important single use of

Corporate profit surge
stimulates capital outlay expansion



funds for corporations is investment in fixed assets—largely plant and equipment. Last year outlays for these purposes, including corporate investment in residential structures, reached 53 billion dollars and accounted for almost two-thirds of total needs for funds.

Corporate plant and equipment expenditures have been rising each year since 1961. Last year's increase was 18 per cent. A Government survey released in March projects a 16 per cent rise in these outlays in 1966 for all businesses, corporate and noncorporate.

Order backlogs of virtually all producers of capital goods have risen sharply in the past two years. Reports of shortages of skilled manpower and certain materials and components have become more frequent in recent months, and promised delivery times on new orders have continued to lengthen. For these reasons, some capital expenditure programs may not be completed in 1966 because of delays in deliveries of equipment and materials. On the other hand, rising prices may tend to increase the dollar volume of these outlays.

Barring a reversal of buoyant business expectations, higher interest rates have a limited effect on capital expenditure programs of manufacturing businesses that often hope to earn 15 to 20 per cent annually on new plant and equipment. Such projects are not likely to be judged unprofitable merely because of a rise in interest rates, even if appreciable.

Earnings expectations on most new utility projects are more moderate than in manufacturing. Nevertheless, utility systems must press forward with expansion programs to be capable of handling expected peak loads. If earnings are eroded by higher interest rates, regulatory bodies usually are prepared to grant requests for increases in charges for their services.

Interest costs are of great significance for construction of residential and commercial buildings. Annual revenues of such projects typically are only about 10 per cent of investment value, and interest costs comprise a large share of total operating costs.

Inventories and receivables

Corporations increased their inventories by 7.5 billion dollars in 1965, more than in any year since 1956. Total business inventories may rise somewhat less this year, mainly because holdings of steel are not likely to rise.

At the end of January, total business inventories relative to current sales were slightly lower than a year earlier, when the ratio was well below the level of any similar period

Sources and uses of funds—nonfinancial corporations

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
SOURCES					(billion dollars)						
Total	55.4	49.9	43.5	42.4	56.0	47.2	54.5	60.8	64.1	68.2	88.1
Internal	35.1	29.6	29.8	27.4	37.7	32.0	37.3	42.0	46.6	49.8	58.5
Undistributed profits	13.9	13.2	11.8	8.3	12.6	10.0	10.2	12.4	13.8	16.7	22.0
Depreciation	17.0	18.4	20.3	21.4	22.9	24.2	25.4	29.2	31.0	32.9	34.9
Profits tax liability	4.2	— 2.0	— 2.3	— 2.3	2.2	— 2.2	1.7	0.4	1.8	0.2	1.6
Security issues, net	4.7	5.9	8.7	7.8	5.2	5.1	7.1	5.2	3.6	5.4	6.1
Stocks	1.9	2.3	2.4	2.1	2.2	1.6	2.5	0.6	— 0.3	1.4	0.2
Bonds	2.8	3.6	6.3	5.7	3.0	3.5	4.6	4.6	3.9	4.0	5.9
Loans outstanding**	4.1	5.2	2.2	0.7	4.7	3.0	2.0	6.0	6.7	8.1	14.6
Mortgages	0.7	0.4	0.3	1.2	1.2	0.7	1.7	2.9	3.4	3.4	3.5
Bank loans	3.4	4.8	1.2	— 0.7	3.1	1.3	*	2.4	2.8	3.4	9.7
Other loans	*	*	0.7	0.2	0.4	1.0	0.3	0.7	0.5	1.3	1.4
Trade debt outstanding**	8.5	5.3	0.4	4.4	4.6	3.2	6.7	3.8	5.3	2.4	5.7
Other liabilities**	3.0	3.9	2.4	2.1	3.8	3.9	1.4	3.8	1.9	2.5	3.2
USES											
Total	52.1	47.5	42.2	40.8	52.6	42.5	52.2	55.7	61.0	64.8	83.6
Purchases of physical assets	31.3	37.7	35.4	26.8	35.5	36.5	35.0	41.7	44.0	49.9	60.4
Plant and equipment	24.0	29.7	32.6	27.5	29.2	32.5	31.1	34.3	35.7	41.3	49.1
Residential structures	0.7	0.4	0.7	1.5	1.7	1.2	2.3	3.0	3.7	3.7	3.8
Change in inventories	6.6	7.6	2.1	— 2.2	4.6	2.8	1.6	4.4	4.6	4.9	7.5
Liquid assets**	5.2	— 4.2	— 0.1	2.4	5.7	— 4.0	3.3	2.4	3.1	0.5	1.3
Demand deposits and currency	1.0	0.2	*	1.5	— 1.0	— 0.5	1.6	— 2.3	— 1.9	— 2.6	— 3.2
Time deposits	— 0.1	*	*	0.9	— 0.4	1.3	1.9	3.7	3.9	3.2	5.2
U.S. Governments	4.2	— 4.5	— 0.4	*	6.6	— 5.4	— 0.3	0.2	0.4	— 1.5	— 1.3
Commercial paper	0.1	0.1	0.3	*	0.5	0.6	0.1	0.8	0.7	1.4	0.6
Credit outstanding**	11.6	8.0	3.2	8.0	7.7	6.5	9.5	8.7	8.7	9.9	12.5
Consumer credit	0.7	0.4	0.2	0.5	0.8	0.2	0.1	0.9	0.7	1.0	1.2
Trade Credit	10.9	7.6	3.0	7.5	6.9	6.3	9.4	7.8	8.0	8.9	11.3
Other assets**	4.0	6.0	3.7	3.6	3.7	3.5	4.4	2.9	5.2	4.5	9.4
Discrepancy: sources less uses	3.3	2.4	1.3	1.6	3.4	4.7	2.3	5.1	3.1	3.4	4.5

*Less than 50 million dollars.
**Change during year.

since 1951, early in the Korean War. Inventories, therefore, can be expected to rise if activity expands further. In addition, many firms are attempting to increase inventories of materials and components that are in short supply or that may be less readily available in the future.

Corporations have needed a larger volume of funds to finance receivables than inventories in recent years. During 1965 corporate

receivables increased by 12.5 billion dollars, two-thirds more than the rise in inventories. Receivables had risen twice as much as inventories in the previous year.

Many corporations have a substantial volume of accounts payable that help supplement other sources of funds. Last year payables rose 5.7 billion dollars, almost as much as net funds obtained by security issues.

Most corporate trade debt is owed to other corporations. Total receivables less payables, therefore, provides a measure of the extent to which nonfinancial corporations extend credit to unincorporated businesses and consumers. Last year net receivables of these firms rose by 6.8 billion dollars, not much less than the increase in inventories. The previous year net receivables increased 7.5 billion dollars, much more than the increase in inventories.

Both receivables and payables tend to expand over the years along with the growth in total business volume. The uptrend in trade credit has been more stable than the growth of inventories. While inventories relative to sales have been reduced in the past decade through improved management techniques, faster transportation and more efficient warehouses, credit has been promoted as a means of boosting sales—even in recession years. Unquestionably, corporations will require substantial additional funds to finance net receivables in 1966.

Liquid assets—the corporate treasury

Since the mid-Fifties, corporate managements have become increasingly interested in their cash positions. Attractive yields on Treasury bills, commercial paper and more recently, negotiable time certificates of deposit (CDs) have made it highly advantageous to keep all surplus cash invested.

At the end of 1965, nonfinancial corporations held almost 68 billion dollars of liquid assets, including currency, demand deposits, time deposits, U. S. Government securities and commercial paper. Additional liquid investments not estimated separately were held in the form of loans to security dealers.

Currency and demand deposits combined (the usual definition of money) now account for 35 per cent of all corporate liquid assets. This proportion has been declining fairly steadily since the end of 1958 when it was more than 60 per cent. Since 1961 corporate cash has declined by an average of almost 2.5 billion dollars annually.

Part of the decline in corporate cash reflects the efforts of treasurers to invest idle balances promptly and also changes in operating methods—such as the use of drafts—that reduce cash needed for transactions. Doubtless, demand deposits would have been reduced even further but for the need to maintain compensating balances required by many banks as an indirect payment for financial services.

A sharp rise in corporate time deposits has accompanied the decline in demand deposits and currency. In the 1962-65 period when corporate cash declined substantially each year, time deposits rose almost 4 billion dollars per year. Negotiable CDs not only perform the "store of value" function of money but also earn a sizable return.

From 1959 to 1965 corporate time deposits rose steadily from 1.5 billion dollars to more than 20 billion. Time deposits now exceed Government securities held by corporations and are approaching the volume of demand deposits and currency. As corporate treasurers have favored time CDs, they have obtained higher yields on commercial paper. Holdings of the latter have increased gradually for more than a decade.

Total liquid assets increased less than 3

per cent during the past two years, while total business sales rose almost 16 per cent. Obviously, corporate liquidity has been squeezed. Many firms continue to hold large liquid assets awaiting improved investment opportunities within the business. But a larger number of businesses have restricted their liquid assets to amounts needed for tax reserves and other current purposes. The latter group of firms have turned increasingly to banks or capital markets to finance expansion of plant and equipment and working capital.

One of the most spectacular developments in corporate finance last year was a rise in "other assets" of over 9 billion dollars, double the total of any recent year. A substantial portion of this increase apparently was accounted for by foreign investments.

Supply and demand for funds

Capital outlays, inventories and receivables of nonfinancial corporations now are expected to increase almost as much during the current year as in 1965. If so, financial requirements can be expected to rise by an approximately equal proportion.

Corporations raised 88 billion dollars from all sources last year. If present expectations with regard to capital expenditure and inventory programs prove accurate, at least 100 billion dollars will be needed in 1966.

Internal sources of funds are likely to increase again this year mainly because of larger retained earnings and higher depreciation. Net funds obtained through security issues are expected by most capital market analysts to rise appreciably in 1966. Bank loans may be less readily available. Doubtless, liquidity positions of corporations will be under further pressure.

It is clear that the economy has been operating close to practical capacity for several months. Business firms have responded to this development by raising their sights on planned investments in plant and equipment and working capital. This has required and probably will continue to require greater dependence on borrowed funds.

The allocation of credit—price and nonprice rationing

In a free enterprise economy, prices are the predominant means of allocating or rationing goods and services. For prices to perform this task efficiently, they must be free to change in response to developments on either the supply or demand side of the market. Prices that are too high will cause sellers' inventories to accumulate, while prices that are too low will cause supplies to disappear before all would-be buyers are satisfied, unless sellers resort to some method of nonprice rationing.

Interest rates—the price of credit—are a primary means of allocating the available supply of credit among potential borrowers. As interest rates rise, some users of credit are priced out of the market, at least temporarily. These borrowers leave the market either because the higher rates make their uses of credit unprofitable or because their planned expenditures can be postponed readily, making it advantageous to wait for rates to decline.

Market prices are highly impersonal and encourage individual decision making on the basis of comparative efficiency and profitability. Buyers bid highest for what they want most urgently, and sellers find it profitable to attempt to accommodate their demands. Under a system of competitive prices, changes in market demand are quickly communicated

to suppliers through resulting shifts in relative prices. Sellers respond to these changes by stepping up or curtailing the supplies that they offer.

Notwithstanding the convincing case that may be made for the efficiency of flexible prices as a means of rationing goods and services—and of flexible interest rates for allocating credit—rationing devices of other sorts are widely used in every modern economy. Indeed, there probably has never been a society in which goods and services, or credit, were allocated for long by price alone.

Sellers may be reluctant to post price changes because of the obviousness of such moves. Changing the size of the package may be less likely to provoke quick retaliation by rival suppliers in the market. Moreover, the maintenance of established prices, even after underlying market conditions have changed, may have appeal to customers as a token of fair dealing, while changing prices—particularly increases—are widely regarded as somehow unethical or otherwise improper.

If in credit markets, interest rates are not free to do the job of equilibrating demands and supplies, other devices must be used for the purpose. Thus, changes in credit availability typically bring a response not only in interest rate movements but also in modifications that occur in the amounts of credit that lenders are prepared to supply, the sizes of compensating deposit balances that they call upon business borrowers to hold, the maximum terms for which loans will be made, standards of acceptable borrower credit worthiness and the like.

Loan rates complex

Certain of the side conditions surrounding any credit contract moreover may have a distinct bearing on the *effective* price at which the contract is executed. Thus, the observed or contract interest rate often represents only a part of the effective cost to the borrower. Foregone earnings on that portion of a compensating deposit balance that exceeds the amount necessary as a working balance constitute an additional part of the cost of credit to the borrower.

A significant degree of nonprice rationing is always present in banking. There are many individuals (and business firms) to whom banks are unwilling to lend at any interest rate, because of shortcomings of character, line of business or other characteristics. In addition there are marginal customers where it becomes a matter of judgment of the loan officer whether the risk is too great. More often than not, these decisions rest primarily on considerations of risk and only secondarily on the price the customer might be willing to pay for credit. Also, the maximum amount that will be loaned to a customer tends to be determined largely on bases other than interest rate although rate often will vary with the ratio of loan to collateral. Many loan decisions, therefore, are made largely in terms of either "yes" or "no"—not "at what price?"

Nonprice considerations become particularly important when credit demands increase more rapidly than the bank's ability to lend. The use of rationing other than by rate at these times is strengthened by state imposed ceilings on certain loan rates and a well-entrenched popular hostility toward high interest rates.

Banks may ration credit by favoring long-time customers at the expense of new customers, by raising compensating balance and collateral requirements, by shortening maturities or by generally scaling down all loan applications. Also banks may turn more attention to the "productivity" of the ventures to which the borrowed funds are to be put. Loans to finance construction and expansion

of plant and equipment are frequently considered more productive than loans to finance inventory accumulations, stock purchases or acquisitions of land or existing structures.

Within a framework of relatively inflexible interest rates, objective standards for measuring the productiveness of loans do not exist, and the evaluation of loan applications, therefore, frequently varies from bank to bank and possibly customer to customer. Loan requests approved at one bank may be rejected at another. Although most bankers tend to look favorably upon loans for plant expansion, not all expansion programs are equally meritorious at any given time. Likewise, some residential and commercial construction may merit high priority while some can and should be postponed. Also, certain inventory additions are necessary to facilitate essential production while others simply reflect desires to stockpile goods for purposes of speculation or inflation hedge.

Public policy

On rare occasions it has appeared necessary to impose direct controls on certain types of credit uses to secure the desired flow to high priority sectors. During both World War II and the Korean conflict, restrictions were placed on minimum downpayments and maximum periods of repayment for construction and consumer loans. Since 1934, restrictions have been applicable to the use of credit for the purchase of listed stocks since it is believed that large swings in this use of credit impart instability to the economy.

In addition to direct controls, voluntary credit controls to guide bankers in evaluating loan requests have been employed occasionally. For example, the current voluntary foreign credit restraint program was initiated about a year ago to help limit the flow of United States capital abroad. Again, during the Korean War, a National Voluntary Credit Restraint Committee, consisting of representatives from business, banking and the Government, was organized to prescribe national priorities for credit use.

Conditions that in the past have called forth greater reliance on nonprice rationing of credit may be emerging again. In part as a result of the enlarged military action in Vietnam, aggregate demand is threatening to exceed the available supply of goods and services, and prices have begun to rise faster in recent months. With the demand for credit rising rapidly, the Federal Reserve has undertaken to slow the overall growth somewhat. Resulting higher interest rates have priced some borrowers out of the market but not enough to enable bankers to accommodate all qualified borrowers or to serve all productive uses of credit. As a result, some public officials have urged bankers to review more carefully the uses to be made of their loans in order to assure that adequate flows of credit are maintained for essential uses.

For most banks, loans are at their highest levels relative to deposits in the postwar period and holdings of Treasury securities have been reduced to levels where appreciable further liquidation of these investments to obtain funds for lending is unlikely. Given the important credit needs of the economy, individual bankers may have to develop a more selective system of priorities if official interference with credit distribution is to remain minimal. In a period of economic boom, not all qualified borrowers and not all productive uses of credit can be accommodated.

Savings developments since the December rate change

Recent increases in commercial bank time deposit rates, following the liberalization of Regulation Q late in 1965, focused renewed attention on the structure and behavior of savings markets. This article summarizes some major developments in metropolitan areas of the Seventh Federal Reserve District.

The amendment of Regulation Q effective December 6 boosted the maximum permissible interest rate payable on time deposits other than passbook savings to 5.5 per cent from the previous 4.5 per cent for maturities of 90 days or more and 4 per cent for shorter maturities. The maximum rate for passbook savings was left unchanged at the 4 per cent rate in effect since January 1, 1962.

Before the ceiling adjustment

Between December 1960 and November 1965, savings deposits increased in all 51 urban areas of the Seventh District for which data are available.[1] The basic reasons, of course, were the climb in personal income associated with generally prosperous conditions and the interest rates offered by banks. Gains varied greatly—in 7 areas they were below 50 per cent, in 35 they were between 50 and 100 per cent and in 9 exceeded 100 per cent. The increase for all areas was 81 per cent.

Deposit growth patterns differed somewhat within the five states of the District. For the 8 areas in Indiana, the range in gains was from 52 to 85 per cent. Indiana banks, by state regulation, almost consistently have been subject to lower maximum rates on passbook savings than banks in the other District states. Currently the Indiana banks are subject to a 3.5 per cent ceiling on passbook savings, which compares with the limit of 4 per cent in the other District states. With the lower ceiling, bank rates on savings have been more nearly alike in Indiana than elsewhere in the District. No doubt this accounts in part for the narrower range as well as the relatively small amount of deposit gains.

In the other District states—Illinois, Iowa, Michigan and Wisconsin—the growth patterns were more varied. While 4 of the 7 District centers with the smallest deposit gains were in Iowa, that state also included 6 areas with sizable increases. Deposit growth was vigorous also in 6 of the 9 Illinois areas, 4 of the 13 Michigan areas and 1 of the 9 Wisconsin areas. While some migration of funds from smaller to larger communities may have occurred, partially reflecting population shifts, it nevertheless appears that size of city is not an important factor explaining differentials in savings deposit increases in the December 1960-November 1965 period.

More often than not, growth of savings deposits in the 51 centers was related directly to rates of interest paid on passbook accounts. In the 3 areas where savings deposits rose less than 35 per cent, the banks had maintained comparatively low rates for some time. In 11 of the 18 areas with unusually large

[1] *Savings deposits* as used in this article include individuals' savings in both passbook accounts and time certificates of deposit. Individuals' holdings of "time deposits, open account" are not included.

deposit gains, the rate paid on passbook accounts was 4 per cent, twice as high as in the lowest rate centers.

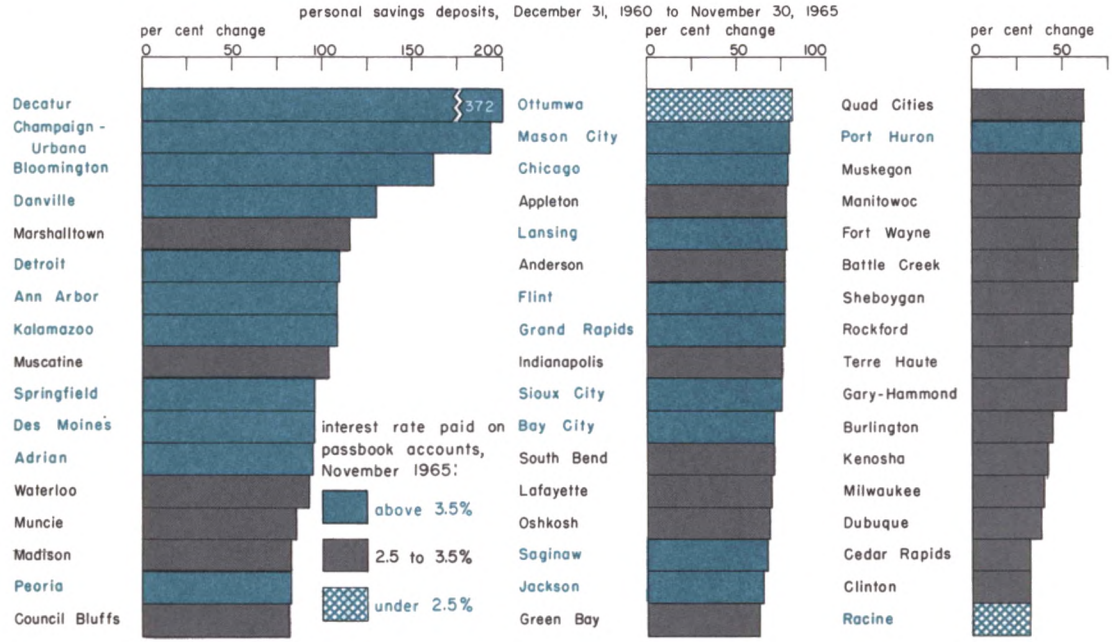
In some areas slow growth of savings deposits at commercial banks was offset by rapid gains at savings and loan associations, so that savings in the two forms combined grew as rapidly in these communities as elsewhere. A comparison of the relative increases in savings at commercial banks and at savings and loan associations in individual communities between December 1960 and November 1965 indicates that among 26 areas with *below* average deposit growth, savings and loan growth was greater than growth at banks in 18 areas and less in 8. Yet, only 4 of the 25 areas with *above* average savings deposits gains had larger increases at savings and loans than at banks, while in 21 of these areas savings growth at associations was below that at banks.

Purchases of U. S. savings bonds were another factor making for differences among communities in savings deposit growth. In contrast to the general rise in rates paid at commercial banks during the five-year period, the return on savings bonds remained unchanged. Bond purchases in both 1964 and 1965 were smaller than in 1960 in all but 11 of the 51 urban communities—7 of the 11 had savings deposit growth below the average of all areas. Moreover, in 5 of these areas the maximum rate paid by banks on savings was 3.5 per cent or less and thus below the rate on U. S. savings bonds.

Large vs. small banks

The share of total savings deposits in Chi-

Rapid growth of savings deposits has been associated with relatively high interest rates



cago held by the three largest banks rose sharply between 1960 and 1962, in part as a result of a merger involving one of the banks. During the succeeding three years, the proportion continued to increase but less rapidly. In Detroit, the three large banks' share remained virtually unchanged between 1962 and 1965; in Milwaukee it declined. For the 25 areas having five or more banks each, the market share of the three largest banks between December 1960 and November 1965 increased in 8 areas, held steady in 5 and declined in 12. Shifts of savings deposits within local markets during the period, therefore, were more often away from than toward the larger banks.

Late 1965 and since

In November 1965 a number of Milwaukee banks announced rate increases on both passbook savings and time certificates issued to individuals to become effective December 1. This was before the change in Regulation Q was announced, and the new rates of the banks were still within the earlier ceilings.

Earlier during the second half of 1965, there had been a trickle of announcements of rate increases in other areas, generally by banks seeking to step up time deposit inflow to accommodate rising loan demand.

After the December 6 rate ceiling change, rate increases were more numerous. About 12 per cent of the District's urban banks, including those in Milwaukee, paid higher rates for personal CDs beginning in December. By the end of January, the proportion of banks with higher rates on these accounts had risen to 35 per cent.

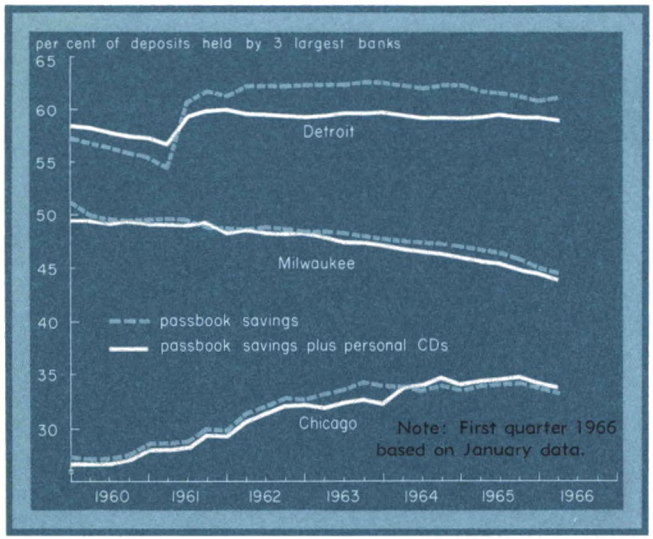
Although rate ceilings on passbook deposits as prescribed in Regulation Q remained unchanged at 4 per cent, the number of banks raising rates on these accounts also picked up. In all, 10 per cent of the urban banks boosted rates on passbook accounts between the end of November and the end of January. All the increases were to 4 per cent (except in Indiana). Nearly three-fourths of the banks in District metropolitan areas in January were paying the maximum rates permitted for such accounts.

The banks posting higher rates on CDs and time deposits other than passbook accounts after the ceiling was raised to 5.5 per cent were located mainly in a few areas. Almost two-thirds of the increases took place in Chicago, Milwaukee, Detroit, Madison and Green Bay. Since rates paid by branch banks usually are uniform at all offices, rate increases on CDs quickly became widespread in Michigan, which has branch banking. Banks in Iowa, with few exceptions, did not raise rates until February when it had become clear that time deposit interest above 4 per cent was within the state's legal limit. Even then the number was small. In Illinois also, very few urban banks outside Chicago reported rate increases on personal CDs.

Generally, the greater the concentration of an area's savings deposits at the largest bank, the more likely that all banks within the market area both raised rates and offered the same rate on personal CDs. A third of the banks in Chicago and Detroit reported rate increases on personal CDs in the December-January period; over two-thirds in Milwaukee. Several areas having 10 or fewer banks had uniform increases to the same rate level by all the local banks. In many of these centers during the past five years, banks usually have offered identical rates. A reason frequently advanced by banks initiating rate increases is that this enables them to compete more effectively with other savings institutions in their areas.

The top rate on personal CDs at most of the District's urban banks was 4.5 per cent in

Savings market shares of big banks in the District steady or down since 1963



January; only 13 banks paid more than 4.5 per cent, with two at 5 per cent. Rates paid on CDs in some areas were similar, but differences appeared among banks in such nonrate factors as the minimum deposit size required to earn the top rate, maturity-rate combinations, amount of interest foregone upon early redemption and method used in computing and paying interest.

The largest gains in savings flows during the December-January period, compared with the same months a year earlier, were in areas where passbook as well as CD rates were increased. There was no large or consistent difference between areas increasing rates on CDs only and areas that made no rate increases. Growth in individuals' holdings of passbook accounts and CDs combined slackened in two-thirds of the areas that raised CD rates, about the same proportion as for areas in which rates remained unchanged.

The immediate impact of the higher personal CD interest rates was to cause shifts of existing deposits within the banks from passbook to CDs. The failure of the higher CD rates to produce an immediate substantial influx of new deposits should have been expected. Past experience indicates that such rate hikes have only a gradual effect on deposit growth. Higher rates on passbook accounts, on the other hand, are usually accompanied by an immediate increase in inflow, which tends to taper off in ensuing months.

In line with earlier experience, areas having the larger gains in savings deposits during the December 1965-January 1966 period had smaller increases in savings and loan shares. In these communities the banks' share of the combined total of savings deposits and share accounts increased. On the whole, such gains were modest. Competitive flows between the two kinds of financial institutions probably were limited by the Federal Reserve Board's action retaining the 4 per cent maximum permissible rate on passbook accounts. The volume of savings and loan shares outstanding continued to grow in almost all areas.

Much of the evidence, based upon developments in the District, indicates that local sources have continued to supply banks with the bulk of their time funds from individuals. Shifts of funds have occurred for interest rate reasons but mainly within banks and between banks and other savings institutions within relatively small areas. Markets for savings deposits thus appear to be clearly segmented and essentially local in character.