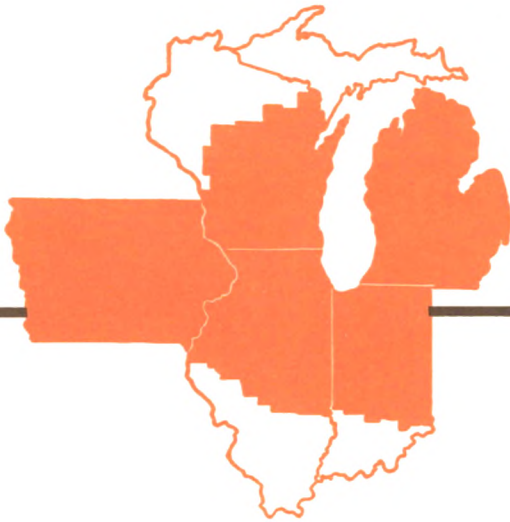


Business Conditions

April 1972



Contents

The trend of business	2
Growing time deposits— at what cost to the small bank?	8

THE Trend OF BUSINESS

Accumulating evidence indicates that the rise in general business activity that began in 1971 gathered momentum in the first quarter of 1972. Moreover, prospects are favorable that the uptrend will continue, at least through the remainder of the year. Most Midwest centers have shared in the national improvement, especially those that concentrate on the production of equipment, both for consumers and producers.

During the period of underutilization of resources in 1970 and 1971—the longest such period since before World War II—consumers and businesses accumulated backlogs of deferred needs and wants. Rising incomes and profits, general availability of credit, and improving confidence now are helping to translate demand into current sales. The general improvement in the business climate, in large part, reflects the cumulative impact of stimulatory monetary and fiscal policy actions taken over a period of more than two years.

Increases in employment, output, sales, and new orders in recent months have been broadly based. Revisions in data typically have shown larger gains than preliminary estimates—a common phenomena in a recovery, and a reversal of the typical experience of 1970 and 1971. Moreover, many businessmen and lenders have noted an improvement of market psychology or “tone.”

2 At the turn of the year, many analysts sug-

gested that a restoration of confidence was required for a strong uptrend in 1972. Now it appears the missing ingredient has been supplied. Optimism as to business developments has been tempered, however, by growing fears that inflationary pressures are being rekindled.

Residential construction activity, which ran far ahead of the general economy in 1971, moved to new highs, seasonally adjusted, in early 1972. Consumer purchases of autos and household durables, which strengthened substantially in the final third of last year, have continued at high levels in early 1972. Now strength in these consumer sectors is being reinforced by a pickup in business investment.

Increases in orders for producer equipment and in contracts for nonresidential building tend to support a government survey released in mid-March that projected a rise of 11 percent in plant and equipment spending in 1972. Investment in business inventories also promises to be a stimulating force in the months ahead. Inventories, overall, are at a low level relative to sales, and additional inventories at the manufacturing and trade levels probably will be needed to handle efficiently any further expansion in activity.

Employment and unemployment

The overriding criterion for judging the

performance of any economy is the effectiveness with which it uses its human resources. The unemployment rate is one measure of labor use. Others are labor force participation rates, turnover rates, average workweeks, and the quality of the match of jobs and skills.

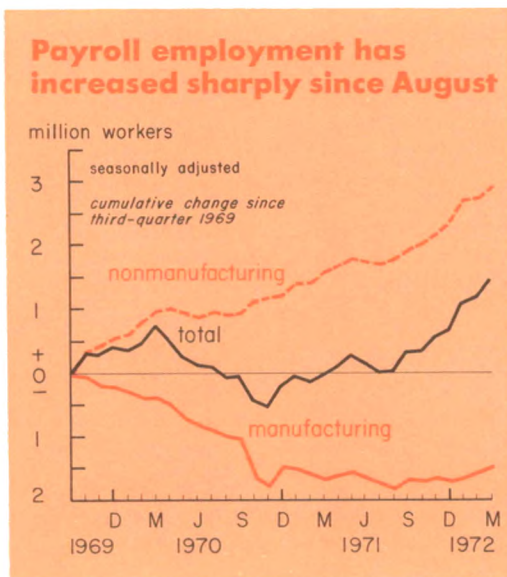
For almost two years, the U. S. labor force has been underutilized by any reasonable standard. Throughout 1971, the overall unemployment rate averaged 5.9 percent (far above what policymakers consider desirable). Moreover, the proportion of people of working age in the labor force was slightly lower in 1971 than in either of the two previous years, and average workweeks in nonagricultural occupations were shorter. Hiring rates were down in 1971 and layoffs were up. Finally, many workers were forced to take jobs which did not fully utilize their training and experience.

Since last summer, the labor picture has been clouded by such factors as the coal and

dock strikes and the liquidation of steel inventories accumulated as strike hedges, but the underlying situation definitely has improved. From August to March, non-farm payroll employment increased 1.4 million—3.5 percent on a seasonally adjusted annual rate basis. In the previous six months, employment had increased only 140,000. The unemployment rate remained at the 6 percent level through December, before declining in January and February. Average workweeks have increased moderately in recent months, layoffs have declined, and new hires have increased.

There has been no significant rise in estimates of job vacancies. Nevertheless, there are reports of increased demand for skilled workers and supervisory personnel, and college placement officers note a stronger market for graduates—at least those with technical training.

The gradual improvement in the labor market has been reflected in improvements in the classifications assigned to major labor markets by the Department of Labor. Last September, 64 of 150 major labor markets were estimated to have a “substantial labor surplus”—6 percent or more unemployment. In March, 55 were in this category. The improvement was especially marked in the Seventh District, where the number of centers in the substantial labor surplus group dropped from 13 (of 24) in September to only six in March. The centers removed from the 6 percent or more unemployment group in this period were South Bend, Terre Haute, Flint, Kalamazoo, Saginaw, Rockford, and the Davenport-Rock Island-Moline area. On the other hand, no major Seventh District centers are estimated to have “low unemployment” (less than 3 percent), while ten centers elsewhere in the nation are so classified.



Output and backlogs

Total manufacturing production, measured by the Federal Reserve index, rose almost continuously from August 1971 through March 1972. Total production was artificially depressed last August by sharp cutbacks in steel output following the negotiation of a new labor contract, but the steady rise in the index (which measures physical volume) is impressive, nonetheless. Manufacturing output was up 3.5 percent from the year-earlier level in March. However, it was still 4.0 percent below the peak reached in September 1969.

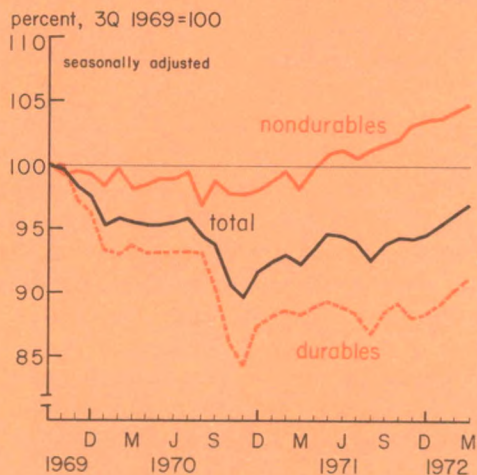
Output of durable goods manufacturing industries has increased about as rapidly as total manufacturing output since last August. But durable goods output in March was only slightly above a year earlier

and was still 10 percent below the 1969 peak. Nondurable goods output, on the other hand, has been above the 1969 peak since the second quarter of 1971 and has increased substantially since then. In March 1972, nondurable goods output was 5.0 percent above the 1969 peak. Although favorable in comparison with durables, this growth rate for nondurable goods output is far below the long-term trend. In the ten-year period ending in 1969, nondurable goods output rose more than 5 percent annually, and durable goods output rose almost 6 percent annually.

The record of manufacturing activity since 1969 is much less favorable than that of the general economy. The total volume of goods and services produced in the first quarter of 1972 (gross national product adjusted for higher prices) was almost 5 percent larger than in the third quarter of 1969, the cyclical high preceding the recession. A number of factors help account for the poor performance of manufacturing as compared with total economic activity. These factors include the growth of imports relative to exports; the continued rapid increase in state and local government spending, largely for wages and salaries; the slow rate of inventory accumulation; and the sharp declines in output of business and defense equipment, which affected manufacturing output more, proportionately, than total activity.

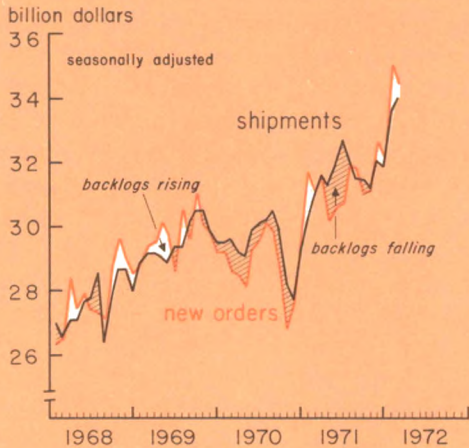
Increases in orders to manufacturers suggest the recent rise in manufacturing output will continue. In February, manufacturers' new orders exceeded shipments for the fifth straight month. Unfilled orders, therefore, have been increasing. Because shipments of nondurable goods, such as chemicals and paper products, move closely with new orders, order backlogs of these firms are rela-

Manufacturing output in sustained rise; but durables still well below 1969 peak



Note: FRB indexes of manufacturing output.

Manufacturers' orders for durable goods exceeded shipments since September



tively small. Changes in order backlogs, therefore, mainly reflect developments in the durable goods industries. Virtually all major durable goods industries, including iron and steel, machinery and equipment, and household furnishings, have reported increases in order backlogs in recent months.

Most industries continue to have substantial unused capacity. But some industries, such as those producing materials for residential construction, motor trucks, and electrical apparatus, have been operating at effective capacity ceilings for several months. Promised delivery times on new orders for a variety of products, including steel, furniture, and equipment components, have lengthened. This phenomenon is usually apparent when a vigorous business upswing is underway. A trend toward longer lead times usually feeds on itself. This is because inventory investment is stimulated when deliveries take longer. The adequacy

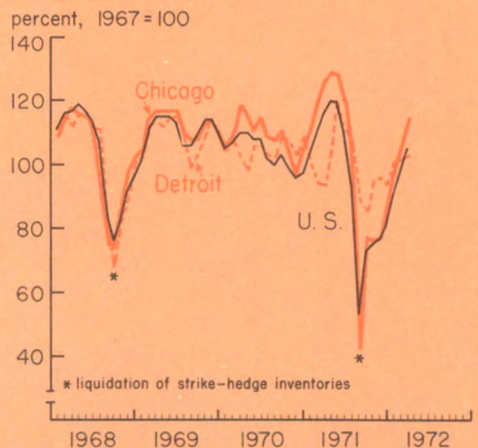
of a firm's inventory of purchased materials and components is closely related to the time required to obtain additional supplies.

Steel in rebound

In early April, U. S. mills were turning out raw steel at an annual rate of more than 140 million tons, up from a 100 million ton rate at the start of the year. In the South Chicago-Gary area, which produces almost one-fourth of the nation's steel, the rise in output in this period has been more rapid than in the rest of the nation.

In 1971, the nation produced 120 million tons of raw steel, the smallest amount since 1963. (The record was 141 million tons in 1969.) Imports accounted for 17 percent of domestic steel usage last year, compared to only 7 percent in 1963. Moreover, domestic production of steel last year was concentrated in the seven months prior to the dead-

Steel output has doubled since August 1971 low



Note: Indexes of output of raw steel derived from AISI data.

line for a new management-labor contract on August 1. From January through July, output was at an annual rate of more than 140 million tons. In the August-December period, output was at a rate of only 92 million tons as inventories accumulated against a strike possibility were liquidated.

Manufacturers' holdings of steel rose from 9.6 million tons in January 1971 to 15.9 million in July. By January 1972, these holdings had dropped back to 9.9 million tons. Steel orders have improved month by month this year on a broad front, and average delivery times have lengthened by about a week. Some steel analysts believe that the liquidation of inventories was carried too far by some users, and these customers are now seeking to rebuild their holdings.

Industry sources now anticipate that U. S. steel output will exceed 135 million tons in 1972, mainly because of increased usage. Although imports continue at a high level, their proportion of domestic requirements is likely to decline this year—partly because of quotas negotiated with foreign producers, but also because of the reduced price differential resulting from recent international currency realignments.

Cars and trucks strong

More than 10.2 million passenger cars were delivered to U. S. customers in 1971, including almost 1.6 million imports from Europe and Japan. Sales of "domestic" cars included about 450,000 net imports from Canada because of the auto trade pact with that country.

With a strong finish in March, first-quarter auto sales were at a seasonally adjusted annual rate somewhat in excess of the total for 1971. Auto sales were at a record level by a wide margin in 1971, with the carry-over of sales from the General Motors

strike in late 1970, the August-November price freeze, and the repeal of the excise tax all playing a role. Nevertheless, many analysts expect auto sales to set another record this year, totaling 10.5 million or more.

Inventories of domestic-type cars at almost 1.8 million were relatively heavy at the end of March, but apparently not excessive. Auto producers have made numerous shifts in production schedules in recent months to keep inventories in good balance. Production in the United States is scheduled at 2.42 million in the second quarter, the highest level for the period since 1968, when imports from Canada and overseas were much less than they are now.

While the auto sales picture has been favorable, the truck market has been booming. In the first quarter of 1972, 634,000 trucks were produced—up 23 percent from last year when a first-quarter record was set.

Demand for all weights of trucks has been excellent in recent months, but demand for heavy trucks has been especially strong. Production of heavy trucks has been limited by the capacity to produce such vital components as engines and axles. Shortages of components were intensified in March and early April by a strike that closed a major manufacturer of heavy duty truck engines.

Capital expenditures expanding

On the basis of a comprehensive survey of business plans, the Department of Commerce estimated in March that business firms would spend \$90 billion on new plant and equipment in 1972. This projection, which includes only capital outlays for facilities in the United States, indicates a rise of 10.5 percent this year from 1971, compared to a gain of only 2 percent last year. Business firms have been raising their sights on

capital outlays for several months. A survey of capital spending plans by foreign affiliates of U. S. corporations, on the other hand, indicates a rise of only 7 percent for 1972—the smallest gain in recent years. In contrast to domestic plans, intentions to spend on plant and equipment abroad have been scaled down in the past year.

All major classes of business expect to increase capital spending in the United States in 1972, whereas in 1971 manufacturers, railroads, and airlines reduced spending. Manufacturers are expected to increase capital spending 9 percent in 1972, following a 6 percent decline last year (despite rising prices). Plans of durable goods producers, except for steel, are generally stronger than plans of nondurable goods producers. Large gains are expected for electric utilities and telephone companies, following the pattern of recent years.

Production of business equipment, as measured by the FRB index, was up 4 percent in February from the low point reached last May. But it was 11 percent *below* the record high of 1969. The situation is mixed by type of product, but the increase in total order backlogs for business equipment indicates a further rise in production in the months ahead.

By far the most vigorous elements in the equipment sector are highway trucks and trailers. Farm and construction machinery sales have been relatively strong in the first quarter, and orders for ships were sharply higher early in 1972. Even the hard hit machine tools industry has reported large gains in orders, although from a very low base last year. Expenditures for pollution control equipment continue to rise sharply and are accounting for a growing share of total capital outlays. In general, the emphasis on capital outlays in 1972, as in 1971,

is on programs that will turn out better products more efficiently rather than on expansions of capacity.

Reaching the goals

With a good first quarter under its belt, the economy has made a long stride toward the better state of health widely predicted at the start of the year. A \$100 billion increase in total spending for 1972, and a gain of 5 or 6 percent in real output, the strongest rise since 1966, now appear as realizable objectives. A solid gain in employment and a further decline in unemployment should accompany these developments.

The very fact of the success of monetary and fiscal policies in revitalizing the economy, however, carries with it concern that price inflation may accelerate again. Narrowing margins of unused resources, lengthening lead times, rising capital expenditures, and a higher rate of inventory investment—even the hoped for improvement in the international balance of trade—all carry inflationary connotations. The fact that the Pay Board was reconstituted in late March as a semi-public (rather than a tripartite) body because of the withdrawal of four labor leaders raised questions concerning the future of the price-wage stabilization program. In recent months, prices of steel and most nonferrous metals have strengthened, a development that often precedes price increases for finished and semi-finished products.

A renewal of inflationary pressures could hamper the business recovery. Similarly, strikes in major industries and unsettling developments on the international scene could alter favorable forecasts. Because of the broad base of the current uptrend in activity, however, the possibility of a general slowdown appears remote.

Growing time deposits— at what cost to the small bank?

FACT: Time deposits at all Federal Reserve member banks with total deposits of less than \$50 million grew at an annual rate of 10 percent between 1966 and 1970.

FACT: Demand deposits at these member banks grew at a 4 percent annual rate during the same five-year period.

The growth of time deposits over the five-year period 1966-70 continued the remarkable upsurge in these deposits started in the early Fifties. For years, demand deposits constituted the major source of bank funds. In 1966, however, total time deposits at the typical Seventh District member bank exceeded total demand deposits for the first time in 30 years, and by 1970 time deposits constituted 57 percent of total deposits at district member banks. The extraordinary growth of time deposits relative to demand deposits, together with changes in the mix of time instruments and the sharp rise in interest rates paid on time and savings deposits, led to the emergence of interest on time deposits as the largest single expense of commercial banks.

Among the many questions raised by the sharp increase in time deposit costs are the following: Have the increases in interest costs been offset by improved operating efficiency within the time deposit function? What effect has the change in the mix of time instruments had on total time deposit costs? Have time deposits remained profit-

able, in the sense that the gap between banks' portfolio income and the cost of time deposit funds continues to be positive?

In order to respond to these questions, it is necessary to determine which bank costs may reasonably be attributed to total time deposits and to the various time instruments that make up these deposits. The data used to make these measurements are provided by the Functional Cost Analysis Program sponsored by the Federal Reserve System.

The data

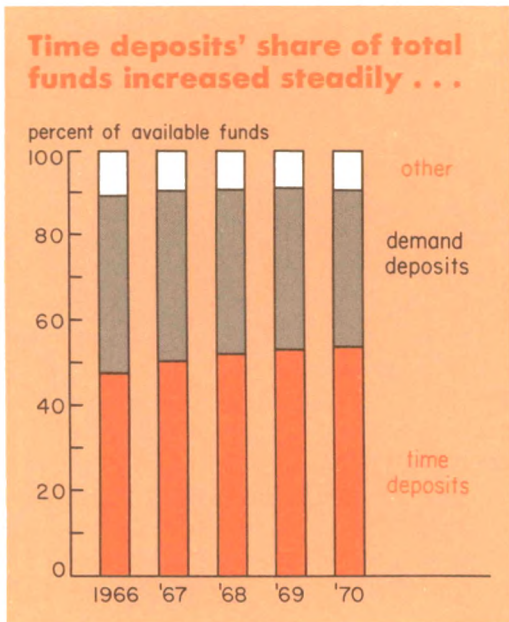
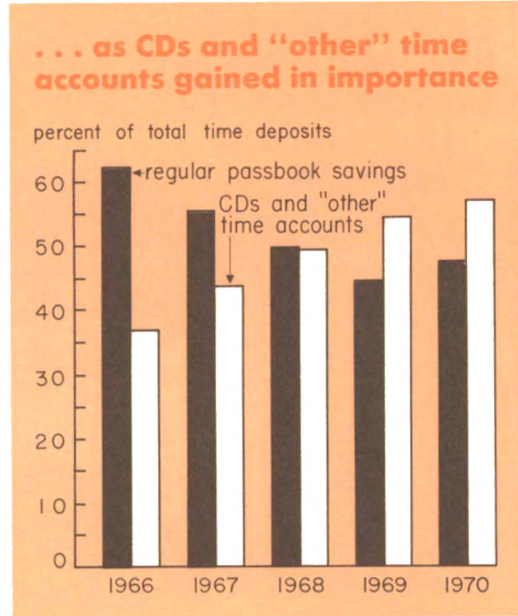
The Functional Cost Analysis (FCA) Program is a bank-oriented, standardized cost accounting system designed primarily for small banks lacking the personnel and resources to develop their own systems. The basic approach of FCA is to subdivide the bank for accounting purposes into a number of distinct "functions" and then to determine the level and composition of the costs and revenues associated with each function. An important by-product of the FCA Program is a wealth of detailed data on each of the important bank functions.

This article draws extensively on the FCA data collected for the time deposit function. An article on checking account costs, utilizing FCA data on the demand deposit function, appeared in the October 1971 issue of **Business Conditions**.

Eighty-three Seventh District member banks with five-year deposit averages of less than \$50 million participated in the FCA program of the Federal Reserve Bank of Chicago continuously from 1966 to 1970. All cost data used in this discussion are based on the experiences of these 83 banks. Although these banks do not constitute a random sample, in most respects their time deposit data are representative of national trends among banks in this size range. These 83 banks posted average annual growth rates of 11 percent for time deposits and 4 percent for demand deposits, about the same as growth rates for all similar size member banks in the nation.

Why time deposits grew

Prior to considering the effects of time deposit growth on bank profits, it is worthwhile to review some of the explanations for



the rapid growth in time deposits generally. Some of the reasons given here may appear to be applicable only to larger commercial banks. But given the spillover effects of correspondent banking ties, multibank holding company affiliations, branch banking, and the mobility of time depositors, the same factors contributed indirectly to the rapid time deposit growth of small banks.

Commercial banks have been prohibited from paying interest on demand deposits since 1933. This factor took on new importance during the decade of the Sixties when the "opportunity costs," or foregone earnings, of holding additional dollars in checking accounts reached the point where many firms were unwilling to hold any demand deposits in excess of working balances. Rising interest rates led business firms to purchase open market instruments providing them not only with minimal or

near-zero risk and a high degree of liquidity, but also an attractive rate of return.

Throughout the 1960s, but particularly during the five-year period under consideration, banks were constrained in competing for time deposits by interest rate ceilings imposed by the Fed under Regulation Q. As market rates rose above the ceilings, banks lost funds to open market instruments in a process that has come to be called "disintermediation."¹

Banks also faced severe competition for funds from other financial institutions, i.e., life insurance companies, credit unions, investment companies, pension funds, mutual savings banks (MSBs), and savings and loan associations (S&Ls). Nonbank competitors offering savings instruments that are especially close substitutes for commercial bank time deposits are MSB and S&Ls, of which only S&Ls are of significant importance in the Seventh District.²

¹Most severely affected were those large money market banks borrowing highly interest-sensitive funds through the issuance of certificates of deposit (CDs) in denominations of \$100,000 and over. The banks under consideration in this article were too small to attract many deposits of this size. In October 1970, CDs and time open accounts in denominations of \$100,000 and over constituted, on average, only 5.6 percent of the total dollar volume of CDs and time open accounts of the 83 FCA banks. According to the Survey of Time and Savings Deposits at the close of business on October 31, 1970, CDs and time open accounts in denominations of \$100,000 and over as a proportion of total CDs and time open accounts were 25 or more percent for three banks, 20-25 percent for three banks, 10-20 percent for six banks, and 0-10 percent for 46 banks. The remaining 25 banks had no time deposits in denominations of \$100,000 or more. Nevertheless, even these banks came under increasing restraint as interest rates rose to the highest levels in decades, as occurred in 1966 and 1969.

²Since there are only a handful of MSBs in the Seventh District, none of which compares in size with the larger institutions on the East Coast, MSB data are not included in this discussion.

During the 1960s, savings grew absolutely at both commercial banks and savings and loan associations. Only since 1964, however, have commercial banks been successful in increasing their share of the total. One important explanation for the more rapid growth of savings at commercial banks has been the narrowing of the spread between average yields on time and savings accounts at commercial banks and S&Ls. The narrowing of the spread in average yields reflects primarily a change in the mix of commercial bank time deposits rather than a narrowing of spreads on similar types of accounts at banks and S&Ls. Increases in yields on existing types of accounts were largely precluded by interest rate regulation, which was extended to S&Ls in 1966, and which has been applied in such a manner as to minimize the disruptive effects of rising interest rates on mortgage lending institutions and, hence, the housing market.

Increasingly profitable investment opportunities, the prohibition of interest payments on demand deposits, the ceilings on time deposit interest, and competition from nonbank institutions all motivated banks to develop alternative methods of attracting and retaining the public's funds. The strong demand for bank credit that marked the decade of the Sixties further intensified banks' efforts in this direction. By making broader use of certificates of deposit and other time instruments (such as time open accounts, golden passbook accounts, etc.), and by liberalizing terms on various time accounts, it was possible for banks to increase the interest paid to the saver. An important result was the gradual displacement over the decade of the Sixties of regular passbook savings as the dominant component of commercial bank time deposits.

Banks moved aggressively on several

other fronts. They lifted or eliminated ceilings on account size and extended the days of "grace" for deposits made after the beginning of the interest period and withdrawals made before the end. They began to compute interest on a short-period basis—even daily—and waived penalty charges on excessive withdrawals. Banks also went from passive acceptance of time deposits to active solicitation of firms to establish time accounts—certainly a conspicuous change from their traditional posture. These and other changes enabled commercial banks to compete effectively for the public's funds. In the process, banks themselves became parties to the extraordinary growth in time deposits in recent years.

On the whole, time deposits contributed an increasing proportion of bank funds for holding in reserve and for making loans and investments in each year between 1966 and 1970. In 1970, time deposits supplied more

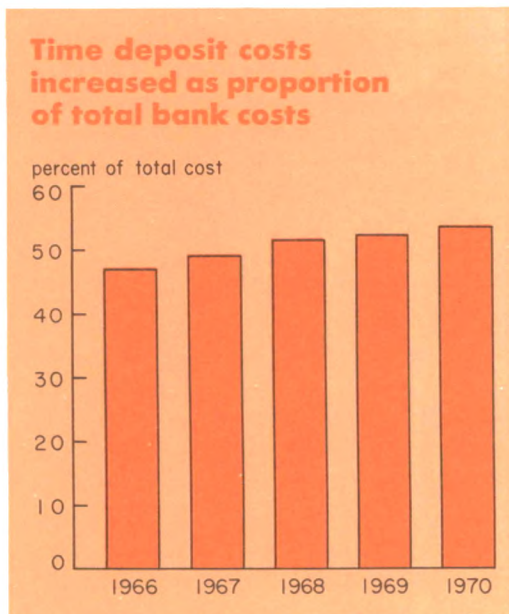
than 57 percent of funds available for investment in bank portfolios for the 83 Seventh District FCA banks, as compared to 53 percent in 1966.

Higher costs appear

Associated with the rapid increase in time deposits has been an increase in the relative importance of time deposit costs. Total costs generated by time deposits comprised 54 percent of total bank costs in 1970, compared to 47 percent in 1966.

The primary cost associated with time deposits is the interest paid, accounting for approximately 90 percent of total time deposit costs over the period. Interest rates on all time instruments rose an average of 1.3 percentage points, or about one-third, during the five-year period 1966-70. Non-interest costs increased at about the same rate, so that the percentage of total time deposit costs accounted for by interest paid remained virtually constant. Thus, increased operating efficiency did not prove to be a significant offset to rising interest costs.

Noninterest costs associated with time deposits may be divided into those, like interest costs, which are required to attract deposits, and those which are required to process accounts. Costs incurred to attract time deposits include advertising and publicity, and some portion of net occupancy costs. Advertising and publicity costs per dollar of deposit showed their greatest gains between 1968 and 1970, but increased, on average, about 14 percent per year. Net occupancy costs, which consist of rent or depreciation, taxes, and maintenance on bank premises less rental income, nearly doubled per dollar of deposits between 1966 and 1970. Most of the increased occupancy costs associated with time deposits resulted from efforts to improve the accessibility of time



Composition of noninterest costs

	1966	1967	1968	1969	1970
	(percent)				
Labor costs	49	50	48	42	42
Capital costs	6	8	8	11	12
Material costs	7	7	8	7	7
Publicity and advertising	12	11	12	14	15
Net occupancy	7	7	7	9	9
Other*	19	17	17	17	15
Total	100	100	100	100	100

*Includes legal and investment fees, FDIC and other insurance, directors' fees, outside exams and audits, travel, memberships and dues, donations, and gifts.

deposit services to bank customers. These improvements include the addition of space and facilities or, where state law permits, the building of additional branches.

Processing costs per dollar of time deposits rose slightly over the period for the 83 FCA banks under discussion. These costs arise from opening the account, recording deposits and withdrawals, posting interest, and closing the account. These "production line" activities generate the need for tellers, bookkeepers, and supervisory personnel.

Almost half of the total noninterest costs associated with time deposits are labor costs. However, because of the smaller amount of activity generated by time deposits compared to demand deposits, the number of employees required to handle time deposits is only a fraction of the number needed to administer the demand deposit function. In 1970, for example, roughly 10 percent of total bank personnel were involved in the time deposit function, compared with approximately 50 percent in the demand deposit function.

During the five years 1966-70, labor costs held rather constant per dollar of time deposits, as increases in both the price of labor

services and the average deposit balance reflected the inflationary tendencies prevalent during the period. Annual labor costs per account increased from \$2.66 to \$3.70 over the five-year period.

Reflecting primarily the adoption of new technology, capital costs increased threefold per dollar of time deposits, and nearly fourfold per time account. Each year from 1966 to 1970, capital costs comprised a growing proportion of total noninterest costs, although their most rapid gains came between 1968 and 1970. Much of the increase in capital costs was due to the computerization of time deposit accounting during the period. In 1966, only five of the 83 FCA banks had computerized the time deposit service. By 1970, the number had risen to 63.

Measuring efficiency

Although cost per account and cost per dollar of time deposits are of interest, they are not the best measures of efficiency. A better measure is one that relates time deposit costs to the total activity generated by such accounts. In a very real sense this activity—the processing of deposits and withdrawals, the opening and closing of accounts, and the posting of interest—can be considered the "output" produced by the time deposit function of the bank.

To overcome the lack of homogeneity of these different activities, the volume of each type of activity must be weighted by some measure of its relative value to the depositor and cost to the bank. In an unregulated, fully competitive banking system characterized by perfect knowledge, the appropriate weights would be the "prices" of the various activities. These charges could then be used to weight the units of various types of activity to obtain an overall dollars-and-

cents measure of the “output” of the time deposit function. Lacking an explicit market valuation of the various types of activity, weights reflecting the relative handling costs per item relative to the cost of handling a deposit have been used. For regular savings accounts and CDs and “other” time accounts, they are as follows:

<u>Activity</u>	<u>Weight</u>
Deposits	1.00
Withdrawals	1.10
Accounts opened	3.10
Accounts closed	2.35
Interest posting (regular savings only)	2.25

To arrive at the total “units of activity” generated by each bank’s time deposit function, the products obtained by multiplying the quantity of each activity by its corresponding weight are summed. The result is the total number of weight units or “units of activity” for the time deposit function.

Costs per unit of activity

Labor cost per unit of activity increased only 5.5 percent—actually, a decline in terms of constant dollars—over the five-year period 1966-70, while capital costs per unit of activity increased threefold. The great difference in these increases—which cannot be accounted for by differences in the rate at which the prices of the two categories of productive agents advanced—indicates that a major substitution of capital for labor took place during the period.

Since activity per account was fairly constant over the five-year period, while average account size increased \$300, costs per unit of activity reflect more fully than cost per dollar of deposit the increases in prices of productive services used in servicing time deposits. Increases in nominal average de-

posit balances during the period resulted largely from attempts by depositors to keep pace with inflation, although growth in real income also played a role. It is not surprising that time deposit activity per account, which depends primarily on transaction behavior and is, therefore, largely independent of price level changes, showed little tendency to increase. Also tending to hold down activity was the greater emphasis on certificates of deposit and “other” time accounts, which normally carry fixed maturities and/or a notification period for withdrawal and, consequently, require less servicing. It is this combination of higher balances and lower activity that suggests the possibility that the higher interest costs attributable to the switch from passbook savings to CDs and “other” time accounts may have been offset to some degree by lower operational costs—i.e., labor, capital, material, etc.

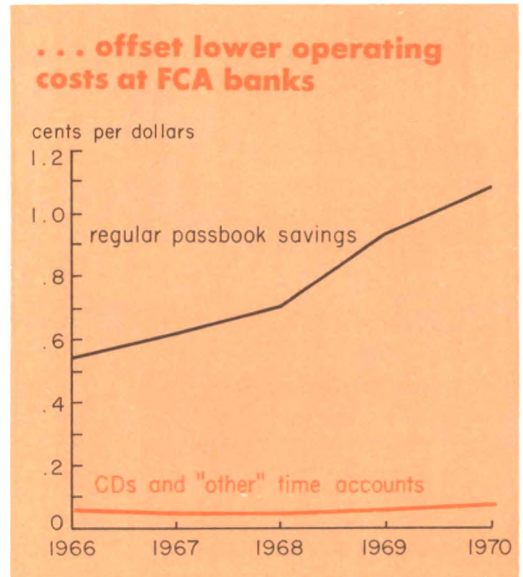
Change in the mix

Because the change in composition of time deposits at commercial banks was largely responsible for the increase in average interest costs, an initial impression may be that it costs more to raise an additional dollar through the issuance of a CD or golden passbook account than by inducing depositors to add to their regular savings accounts. Previous studies indicate, however, that some savings accounts—in particular, those characterized by small balances, high activity, and short life—contribute little or nothing to profit and, in fact, may be maintained at a loss. CDs and “other” time accounts, on the other hand, are characterized by large balances and little activity per account. This suggests that CDs and “other” time accounts should have lower operational costs than regular savings accounts.

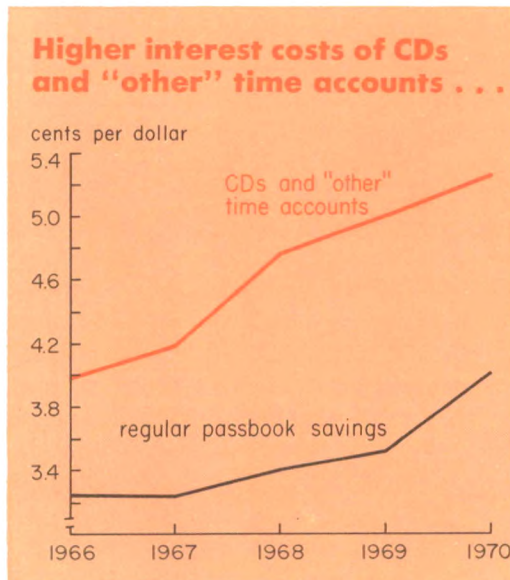
The experience of the 83 small banks shows that while regular savings accounts and CDs and "other" time accounts have all grown absolutely over the five-year period 1966-70, their relative shares of total time deposits have nearly reversed themselves. In 1966, for example, 62 percent of the total time deposits of the 83 banks was in regular savings accounts and 37 percent was in CDs and "other" time accounts. By 1970, the share of total time deposits accounted for by regular savings accounts had declined to 42 percent, while that of CDs and "other" time accounts had risen to 57 percent.

The effects on costs

The extent to which the increased interest costs associated with CDs and "other" time accounts were offset by lower operational costs due to larger average balances, reduced activity per account, and advancing technology, varied greatly for the 83 FCA banks over the five-year period.



In 1970, the average annual interest cost of CDs and "other" time accounts was 5.2 cents per dollar and the average interest cost of regular savings accounts was 4.0 cents per dollar, a difference of 1.2 cents per dollar. On the other hand, the operating costs of CDs and "other" time accounts were .07 cents per dollar, while the operating costs of regular passbook savings accounts were 1.09 cents per dollar. In each case, these costs were estimated by allocating total time deposit costs according to the total weight units of activity for each type of account. The total cost of CDs and "other" time accounts was 5.27 cents per dollar, and the total cost of regular passbook savings accounts was 5.09 cents per dollar. The difference of .18 cents per dollar is rather negligible, and it would appear that the higher interest cost of CDs and "other" time accounts is largely offset by lower actual operating costs and larger average balances. The measured total cost per



dollar for CDs and "other" time accounts was not significantly greater than for regular passbook savings accounts during any of the other four years.

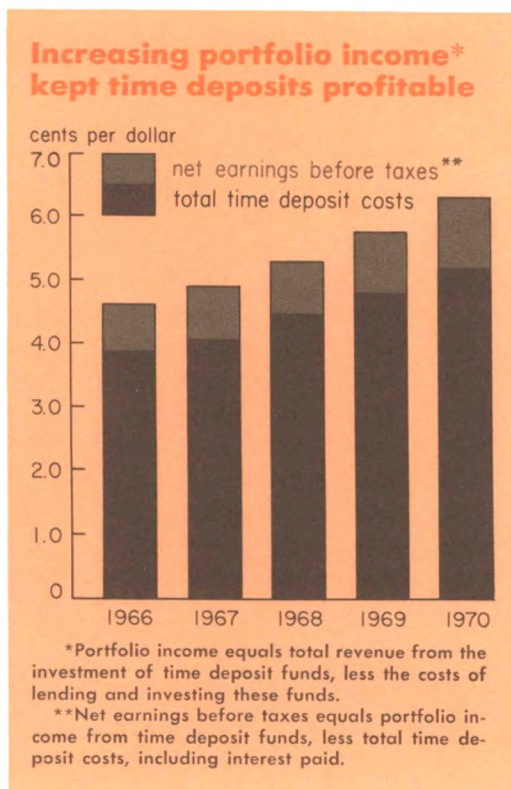
Profitability

There are two other questions that must be resolved before one can judge the relative profitability of regular savings and CDs and "other" time accounts, or the extent to which the higher interest costs associated with CDs and "other" time deposits are offset by lower operating costs. One question concerns the cost differences in the physical facilities required to service the two

types of time deposit accounts. The sale of CDs requires merely a desk, plus a minimal amount of personnel and bookkeeping services to handle the opening, transferring, and closing of accounts, and recording of interest. In contrast, regular savings accounts require not only a desk and personnel to open the account, but also tellers, bookkeepers, additional prime floor space, etc., to handle subsequent deposits, interest postings, and withdrawals. It seems reasonably clear that more physical capital is needed to service regular passbook savings accounts than CDs and "other" time accounts, though such a distinction is not made in the FCA data. If adequate recognition were given to this imputed differential in the cost of capital, the gap between the costs of the two types of time deposits would narrow. Of course, given the existence of regulatory ceilings on the interest payable on passbook savings, it may be reasonable for banks to promote the higher cost CDs and "other" time deposits even if they are, in fact, more expensive.

The second question concerns possible differences in portfolio strategy associated with the mix of time deposit accounts. It is generally acknowledged that the portfolio policy followed by a given bank depends not only on regulatory constraints, attitudes toward risk, market opportunities, and forecasts of future events, but also on the structure of the bank's liabilities. Previous studies have shown that regular savings accounts are less volatile sources of funds than demand deposits. Hence, a deposit structure heavily weighted toward regular savings requires less liquidity in the asset portfolio.

Certificates of deposit tend to be somewhat more volatile than regular savings accounts as sources of funds. They are a particularly unreliable source of funds when



interest rates on such time instruments approach regulatory ceilings while other market interest rates are soaring upwards. A liability structure characterized by a large proportion of demand deposits and CDs dictates a shorter-term asset structure than would be required if liabilities were more heavily weighted toward regular passbook savings accounts. The difficulty of measuring the influence of liability structure on banks' portfolios precludes any definite conclusion as to which type of time accounts is most profitable.³

Conclusion

Following the general rise in interest

³To judge whether bankers have acted wisely in their asset and liability policies, it is necessary to look at the marginal, or additional, revenue received from that portion of an additional dollar of deposits invested in the portfolio, and the marginal, or extra, cost incurred by the bank in attracting that additional dollar. When the extra cost exceeds the extra revenue, each additional time deposit dollar obtained will lower total bank profits. Although average revenue exceeded average cost for all earning assets and deposit liabilities taken together during the period, it cannot be determined with certainty from the data at hand whether the banks' emphasis on CDs and "other" time deposits was justified in terms of profitability.

rates, yields on earning assets for the 83 FCA small banks increased over the five-year period 1966-70. These higher yields on earning assets furnished the driving force which caused banks to promote time deposits. The higher yields also provided the incentive to promote the higher interest-bearing CDs and "other" time accounts, which displaced regular passbook savings accounts as the primary source of time deposit funds.

Although CDs and "other" time accounts required higher interest payments than regular passbook savings accounts, these interest costs were offset to a considerable degree by the lower operating costs of CDs. If differences in required physical capital were considered, the remaining gap in total cost between the two types of deposits would probably disappear. But even if banks did not pursue optimal strategies with respect to the composition of their time deposit liabilities, perhaps because of the constraining effects of Regulation Q, it is nonetheless clear that, overall, over the period 1966-70 the returns on the 83 FCA banks' portfolios increased sufficiently rapidly to remain above the rising costs of time deposits.

BUSINESS CONDITIONS is published monthly by the Federal Reserve Bank of Chicago. George W. Cloos was primarily responsible for the article "The trend of business" and David E. Updegraff for "Growing time deposits—at what cost to the small bank?"

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