Indexation and inflation

Increases in the Consumer Price Index trigger boosts in wages and other incomes. This process institutionalizes the income-price spiral.

Disintermediation again?

With interest rates rising since the middle of last year, the possibility of disintermediation has become a matter of growing concern.

Prime rate update

A widely reported development in commercial bank lending over the past two years has been the extension of business credit at interest rates below prime.

Federal grants-in-aid— solvency for state and local governments

Since the Second World War, grants-in-aid have become so important that they are now a major factor in the financing of state and local governments.

Convenience and needs:

a post-audit survey

On average, Seventh District holding company applicants in the early 1970s made few firm commitments to change or expand services of the banks they acquired.
Release of the Consumer Price Index (CPI) by the Bureau of Labor Statistics (BLS) usually makes front page news. Newspaper reports often include commentaries by public officials, business executives, labor leaders, and economists. Significant changes in the index sometimes seem to influence trading in common stocks and foreign exchange. The attention given these reports is well deserved. The CPI provides the best monthly information available on the trend of price inflation, viewed by most Americans as the nation’s foremost problem.

This article examines the evolution of the Consumer Price Index, the record of inflation that it traces, and the steady expansion of its influence on economic developments. Understanding the American economy requires familiarity with certain basic statistical barometers. Of these, the CPI has become one of the most important.

The significance of changes in the CPI is not confined to the measurement of inflation. Increasingly, the data have become part of the inflationary process itself. Increases in the index trigger proportional boosts in wages and other payments received by large segments of the public—automatically for millions of people, indirectly for millions more. Ties between past inflation measured by the CPI and future increases in income have institutionalized the wage-price spiral, or more properly, the income-price spiral.

The dismal record

In 1977 the CPI averaged 181.5, compared with 100 in the base year 1967. That was 6.5 percent higher than in 1976. Since 1965, when the first signs of serious inflation since the 1940s began showing up, the CPI has increased 92 percent—an average of 5.6 percent a year. Prices of food and fuel have more than doubled.

In 1949, when the economy was approaching normality after World War II, the CPI was 72 percent higher than in 1939. For the next 16 years, despite the Korean War, the record does not look bad in retrospect. Although there was often complaint about inflation, the average rise in the CPI was less than 2 percent a year. By today’s standards, it was a Golden Age.

A long glance back shows the ravages of inflation. In early 1978 the CPI passed 188. This was more than twice the average in 1962, 2.6 times the average of 1949, and 4.5 times the average in 1939. Put another way, the dollar has lost half of its purchasing power in 15 years, 62 percent in 28 years, and 78 percent in 38 years. Movements of the gross national product (GNP) implicit deflator, a broader measure of price change than the CPI, have been similar.

Six percent inflation is now commonly seen as a likely prospect for the next several years. Assuming inflation at that rate, average prices will double in 12 years. If inflation reaches 7 percent, they will double in ten years. And there is no reason to think 6 or 7 percent is maximum. Almost every other country (West Germany being a notable exception) has had a faster rate of inflation. The rate of rise in the United Kingdom has been 13 percent in recent years. In Brazil it has been over 20 percent. (At that rate the price level doubles in four years.) Various countries, including Germany and France, have had “hyper inflation” at various times in this century, the purchasing power of their monetary units being virtually destroyed in the space of a few years, causing social and economic up-
The CPI and the GNP deflator have traced similar paths

![Graph showing consumer price index and GNP implicit price deflator](image)

...heavals and requiring drastic actions, including withdrawal and reissue of the existing currency.

During hyper inflations of the past, policy-makers were often unaware that the process was accelerating so rapidly until it was too late to avert major damage. The United States has, in the CPI, an adequate warning system, signaling the need for countermeasures. The index also provides a means of estimating changes in real, as opposed to nominal, wages and salaries. The index, in fact, was developed 60 years ago to serve that very purpose.

**From Wilson to Carter**

Today's CPI traces to the first World War. The urgent need for wartime shipping then had drawn many workers to the shipyards, mostly on the East Coast. These workers soon found the purchasing power of wages they had thought bountiful being eroded by sharply rising prices. To help mediate demands for a "fair wage scale," the Bureau of Labor Statistics began in 1917 to survey buying patterns in 32 cities, gathering data on price trends for 145 commodities typically bought by wage earners. In 1919 the BLS began to publish "cost-of-living" indexes semiannually for these industrial centers.

Prices continued to rise rapidly after the war until the 1920-21 recession. And the BLS continued to monitor price changes. Starting in February 1921, it began publishing a National Consumer Price Index semiannually. This index was in roughly the same form as the present index. The relative importance (weight) assigned to each item was derived from expenditure surveys for 1917-19. These years were also the base period, average prices paid in that period being equal to 100.

Periodic revisions of the CPI have been required to improve coverage and methods. In each revision some goods and services have been dropped from the sample and others have been added. Different weights have also been assigned to take account of changes in the proportion of income spent on different groups of items. In both cases the changes come from new surveys of consumer spending patterns. Publication of the index was quarterly in the 1930s, becoming monthly in 1940. Major revisions were made in 1940, 1953, 1964, and, most recently, in February 1978. The base period has been moved up successively to 1935-39, 1947-49, 1957-59, and finally, 1967, the base retained in the current revision.

Selection of a base period is purely a matter of convenience. Percentage changes over time are not affected by the choice of a base period. Any user of the index can set any year as the base by dividing the entire series by the value for the year he selects, which will be 100 in his newly derived series. The current base 1967 is used for many statistical series, as for example, the Federal Reserve's Index of Industrial Production. A later period will, no doubt, be used sometime in the future. Then, all series will be converted to the new base.

While changing the base period does not change comparisons over time, changes in weights can have a significant effect. The most striking change has been the weight assigned to food (including restaurant meals and alcoholic beverages). The weight assigned to food has declined in successive revisions from...
over 35 percent in 1940 to 20 percent in 1978 (19 percent for the new index for all urban consumers). During that time the weight assigned to transportation has risen from 8 percent to 20 percent. In 1940 housing was weighted slightly less than food. Now it is 40 percent, roughly twice as much as food. The current weights were derived from surveys of consumer spending in 1972-73. Because purchases of houses and autos were strong then, housing and transportation may be slightly overweighted, but probably not enough to affect changes in the index significantly.

Changes over the years in the particular goods and services priced and changes in the weights for various types of purchases reflect the increasing prosperity of American consumers. More home ownership, larger homes and apartments, more cars, recreational equipment, foreign travel, restaurant meals, and better health care—all these indicate greater affluence. Wage earners today often buy luxuries only the well-to-do could afford 20 or 30 years ago. Wage earners typically buy luxuries that were not even on the market then.

**Whose cost-of-living?**

In February the BLS published the latest revision of the CPI. Two new indexes were launched, the old index being continued temporarily. The unrevised CPI for Urban Wage Earners and Clerical Workers will be published through June so contracts using the index to escalate wages and other payments can be changed over.

Issued for the first time is a revised index, like the old index, covering *Urban Wage Earners and Clerical Workers* but with a different selection of items and new weights. Revision of the index has been long heralded. Some labor contracts had provided for an automatic switchover as soon as the new index was available. Spending patterns of about 40 percent of all consumers are reflected in both the old and the new wage earner index.

Also available now is a completely new index for *All Urban Consumers*. Reflecting spending patterns of about 80 percent of the consumers, this index covers—in addition to wage earners—the self-employed and professionals, the retired, the unemployed, and the "poor." It does not include rural workers, members of the armed services, and people in institutions. Coverage includes groups with incomes that average both higher and lower than those of wage earners and clerical workers.

Some users of the CPI had proposed dropping the wage earner index in favor of an index with broader coverage that would presumably be more useful as a measure of general inflation. Labor unions objected, however, fearing that a broader index, being less representative of the spending patterns of their members, would not fully reflect price changes of the things they buy. The BLS does not expect much difference in the three CPIs, at least in the short run.

The broader the coverage of a price index the less the index represents the prices paid by any particular group. None of the three CPIs could possibly represent any individual consumer. They include, for example, data for both rents and home ownership. They include prices of new houses and current mortgage rates, data that affect only a small fraction of households each month. They include prices of both new and used cars, children's apparel, liquor, and other products many people never buy. On the other hand, all households buy one or more items that are not included. And finally, the weighting of major groupings may be far off the mark for particular households or even groups of households.

When first published at the time of the first World War, the CPI was called the "cost-of-living" index. Nearly everybody calls it that today. Purists object to the term for several reasons. The index covers a fixed "market basket" of goods. That consumers tend to buy more of particular items when prices of these items fall and less when prices rise is not taken into account. Also, basic weights are unchanged between revisions, even though new products are introduced constantly and consumer preferences constantly change.

*Federal Reserve Bank of Chicago*
Nor does the CPI cover taxes, tuitions, and other consumer outlays.

Regardless of these arguments, however, the public still refers to the “cost-of-living index” and to “cost-of-living adjustments” (COLA) in wages and other payments. Faulting the practice is futile. It may also be illogical. Cost-of-living is an abstraction that could be narrowed to the food, clothing, and shelter needed to sustain life. In an age when the popular concept of necessities may include private cars, color TV sets, air conditioners, liquor, and prepared meals—in an age such as this, food, clothing, and the shelter necessary for life account for only a small part of consumer outlays.

COLA, income, and spending

The labor contract negotiated in 1948 between General Motors and the United Automobile Workers called for automatic increases in compensation tied to increases in the CPI. This was the first major wage settlement to include such a clause. Automatic increases in wages tied to consumer prices have since become increasingly common.

According to the BLS, 8.5 million union workers are now covered by automatic cost-of-living adjustments. Not all of their contracts provide for a full or “uncapped” COLA. Since the 1960s Congress has applied COLA to Social Security benefits and other payments.

Relative importance of major groups in the Consumer Price Index in December 1977

<table>
<thead>
<tr>
<th>Wage earners and clerical</th>
<th>All urban consumers</th>
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<tr>
<td>Unrevised</td>
<td>Revised</td>
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<tr>
<td>Food and beverages</td>
<td>26.2</td>
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<tr>
<td>Food at home</td>
<td>18.8</td>
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<tr>
<td>Housing</td>
<td>35.5</td>
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<tr>
<td>Apparel</td>
<td>9.0</td>
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<tr>
<td>Transportation</td>
<td>13.3</td>
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<tr>
<td>Other</td>
<td>16.0</td>
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<td>Total</td>
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Currently, payments to over 30 million Social Security recipients, 2.5 million federal civilian and military retirees and their survivors, and 20 million food stamp recipients are escalated. And that does not include programs for lunches and breakfasts for 25 million children. For all practical purposes, federal salaries are also tied to the CPI. Last year, for example, 7.05 percent pay increases went to government workers, not counting increases for longevity and promotions.

In addition to wage contracts, a growing but undetermined number of rental, royalty, and child support contracts are escalated automatically by the CPI. Often such contracts, as for example those covering minerals, have nothing to do with costs of living. The index is merely a convenient measure of inflation.

Federal health, welfare, and job training programs are affected by the CPI. The “poverty threshold” and “low income” mentioned in legislation are calculated by deflating reported nominal incomes with the CPI.

The total number of people with incomes that are periodically adjusted for increases in the CPI is far more than those included in these enumerated groups. Most union contracts without COLAs are negotiated with expected increases in the CPI in mind. And to discourage organization drives, employers of nonunion workers often pattern their compensation programs to at least equal compensation in union contracts. Finally, in the interest of fairness or simply to keep up with the market, many employers, even those unconcerned with unions, consult the CPI in setting wage and salary scales. For nonunion workers COLA adjustments are likely to be annual, rather than quarterly as with many union workers.

Escalation of incomes on the basis of increases in the CPI tends to perpetuate inflation by expanding demand without necessarily increasing the supply of goods and services. Increases in income on this basis, moreover, come after price increases made possible by previously existing levels of purchasing power.

A potentially insidious aspect of COLA
clauses arises from the CPI having fixed weights. If a worker is protected by an un­capped COLA, there is no need for him to ad­just consumption of any item in the market basket, no matter how fast the price of that item increases. Most households do, in fact, cut back on purchases of items that suddenly seem too high. But theoretically, a worker covered by a full COLA would not need to conserve on gasoline, home heating fuel, coffee, or any item for which prices had risen sharply. Where a household does cut its purchases of such items, a full COLA provides additional income that can be used for other purposes.

Problems of indexation

Adjustments of wage payments based on movements of the CPI are usually supported on grounds of fairness. It is also sometimes argued that a guarantee that real income will be maintained staves off demands for ever larger specified increases arising from ex­aggerated expectations of future inflation. But this argument is not borne out by the record.

Labor contracts in recent years typically have called for larger increases in wages than the rise in prices shown by the CPI. Last year, when the CPI averaged 6.5 percent higher than in 1976, the average first-year wage in­crease in major labor contracts was 7.9 per­cent. Wage increases in the second and third years under these contracts will depend partly on changes in the CPI. Increases in total com­pensation in major labor contracts, including pensions and other benefits, averaged 9.5 percent last year. Because wages account for 75 to 80 percent of total compensation, it is clear that non-wage benefits increased faster than wages, and much faster than the CPI. So­called fringe benefits are income by any reasonable definition, even though they are not usually taxed. The coal settlement reach­ed in March was even more generous than the average with an estimated gain in total compensation of 39 percent in three years. That is 12 percent a year compounded.

Average increases in compensation for all workers have not been far behind those for workers covered by major contracts. Total hourly compensation for the entire nonfarm private economy, including employer con­tributions for social insurance, averaged 8.7 percent in 1977.

Half the workers received below average increases in compensation. For many, gains were very small, and some suffered declines. If everybody's income had been indexed, as has been proposed, groups that have lagged would have received increases closer to the average. This would have meant even more upward pressure on prices because most of the increased income would have been spent.

Demand and supply

A widely held view today is that all con­sumers, employed or not, are entitled to stable or rising real incomes. This view is em­bodied in arrangements through which in­come payments are escalated automatically according to changes in the CPI. With raw materials readily available and adequate resources of facilities and workers (including skilled workers) the supply of goods and ser­vices can be expanded, within limits, as
money income rises. But broad trends of recent decades place increasingly severe restraints on the economy’s ability to increase real per capita income. With supplies limited, increases in compensation fuel further increases in prices.

The nation’s total output is measured by the gross national product adjusted for price changes. Real GNP is expected to rise 4 to 4.5 percent in 1978. But not all of real GNP is available for distribution to consumers. Part of the total represents depreciation of the existing stock of capital goods. Another part, rapidly growing, represents outlays mandated by government to improve health and safety, reduce pollution, and rehabilitate depressed areas. These outlays may improve the environment, but they do not directly satisfy consumer wants.

Almost all kinds of raw materials are increasingly hard to come by, which makes them more expensive. The richest mineral deposits, for example, are exhausted. Severe restrictions have been imposed on the development of new sources and, to an extent, on the operation of existing sources. Costs of providing additional energy—whether as natural gas, oil, coal, or electric power—are rising at an alarming rate that has been only partially reflected in consumer prices.

The clearest evidence of the limitations on American affluence shows up in the dependence on foreign oil. Imports supply over 40 percent of the domestic demand. A sharp reduction in oil imports, whether from foreign or domestic policy actions, would require a severe cutback in energy use—and, therefore, real growth.

Restrains on increasing supplies are evident in slower gains in productivity—output per hour per worker. Gains in productivity can offset increases in compensation, and, therefore, hold down increases in costs. If not offset by gains in productivity, increases in labor compensation are translated into higher costs of production and passed on in higher selling prices. Productivity gains have not only slowed in recent years, but have become erratic.

From 1947 to 1966, productivity increased an average of 3.3 percent a year. Since 1966 the average has been less than 2 percent, with declines some years. Preliminary estimates show productivity in the nonfarm private economy rose 2.1 percent last year. With compensation up 8.7 percent, unit labor costs rose about 6.5 percent, as much as the CPI. Prospects are that partly because of the severe winter, productivity will rise less than 2 percent this year.

The reasons for the slowing in productivity gains are complex. Problems in obtaining raw materials, government regulations, and restraints on managerial prerogatives in hiring and firing all play a part. Productivity in underground coal mining has declined sharply in recent years.

An increasing proportion of the population receives income commonly escalated by the CPI without contributing to the supply of goods and services. A growing share is also employed by government or in private industries with output difficult to measure in real terms.

In 1950 Social Security rolls numbered 3.5 million. In 1960 the number was still only 15 million. Last year it was 33 million. And by the end of this year, it may be 35 million. Only about half the people receiving Social Security benefits are retirees. The rest were disabled (a rapidly growing class) and welfare recipients of various types.

The number of Social Security recipients now equals 38 percent of the number of people working. That compares with 23 percent in 1960 and 4 percent in 1950. In ten years the ratio will probably exceed 50 percent.

Nonfarm payroll employment averaged 82.1 million in 1977. Of these workers less than 30 percent were in goods-producing industries—manufacturing, mining, and construction. Over 70 percent were in service-producing industries. The goods-services ratio in 1960 was 38:62. In 1950 it was 41:59. In general, productivity has not increased as fast in the service-producing industries as in the goods-producing industries.

Government employment has also grown rapidly, accounting for 19 percent of
payroll employment last year, up from 15 percent in 1960, and 13 percent in 1950. Being intangible, output of government workers is hard to measure. Standards are often less rigorous than in profit-oriented businesses. And government activities, however important, do not satisfy the wants priced in the CPI.

Restraint essential

Indexation of incomes has greatly reduced the number of households living on fixed incomes with living standards that would decline sharply with inflation. But the inability of some groups in the past to follow the income-price spiral tended to dampen price increases. Such groups, moreover, exerted political pressure to hold down increases in the purchasing power of other groups. There are still many people whose incomes do not keep up with inflation, but they are not effectively represented politically.

Indexing has appeal to most people as a means of softening the inequities of inflation. But without countermeasures it helps to perpetuate inflation, introducing new inequities. Indexing incomes can have bizarre consequences. Federal pensions were tied to the CPI in 1969. And noting the lag between increases in prices and pensions, Congress added another 1 percent a year. Such are the effects of compound interest that by the time corrective legislation was enacted in 1976, the CPI was 52 percent higher than in 1969, and federal pensions were up 72 percent!

Other nations have also had problems with indexing. As part of an emergency anti-inflation program in France in 1958, Premier de Gaulle banned a variety of indexing arrangements that had contributed to the inflation spiral.

Americans are generally aware today that nominal income and spending power can be increased indefinitely through fiscal deficits and expanded credit. But they are also becoming aware that the ability to increase goods and services is limited by the availability of raw materials and by physical and mental efforts. Slowing inflation requires that reasonable limitations be placed on income growth while efforts are made to encourage increases in production.
Disintermediation again?

Eleanor Erdevig

With interest rates rising since the middle of last year, the possibility of disintermediation has become a matter of growing concern. Disintermediation—the flow of savings out of depository institutions into market instruments—comes mainly from interest rates in money and capital markets rising higher than banks and thrift institutions can pay on time and savings deposits of comparable maturities.

Disintermediation affected savings and loan associations (S&Ls), particularly in 1969 and again in 1973 and 1974, reducing the availability of mortgage loans and curtailing the sale of housing. Large banks were also affected. But because they could draw on money markets for funds, the higher cost of funds was the main effect on them. Having to pay market rates themselves, they were less profitable.

Prospects for disintermediation

Though savings inflows to depository institutions have slowed over the past year—and there is no reason to expect the flow to pick up—effects are not apt to be as serious as four years ago. For one thing, rates are not expected to reach the levels of 1974. Corporate and household liquidity is higher, and the economy is not overheated. For another, with ceilings on rates they can pay on time deposits of six years or more and on government savings deposits up since the end of 1974, banks and thrift institutions like S&Ls are in a better position to compete for savings. In the event of further upward pressure on market interest rates, ceilings might be raised again. Furthermore, fewer deposits are likely to be pulled out of these institutions than four years ago. More are now in time deposits. And being subject to interest penalty if withdrawn before maturity, time deposits do not flow out of depository institutions as fast as savings deposits. But even among savings accounts, growth of long-term individual retirement accounts authorized by the Employee Retirement Income Security Act of 1974 has increased the proportion of savings that are not likely to be withdrawn when interest rates rise.

Savers, however, have become more sensitive to differences in interest rates. Individuals, for example, absorb more Treasury offerings as rates rise. Also, new vehicles enable the small investors to participate more directly in the money and capital markets. Net sales of shares in money market funds increase, for example, when market rates rise above those paid on savings accounts. And municipal bond funds provide tax-exempt interest for investors in the higher income tax brackets.

Situation in the district

Here, then, is the situation in the Seventh Federal Reserve District since market rates began rising a year ago.

- There has been no net outflow in consumer-type savings at banks and S&Ls.
- The increase in passbook savings at member banks slackened to 8 percent last year, compared with an increase of 20 percent the year before.
- Savings flows to banks weakened before flows to S&Ls, the difference probably being due to the lower ceiling rates allowed at banks.
Business passbook savings at large banks began declining in the second quarter last year, when rates on large CDs moved above the ceiling rate on passbook accounts.

Savings flows to S&Ls weakened noticeably in the fourth quarter as the market yield on three-month Treasury bills moved above 6 percent.

Savings flows to S&Ls dropped sharply in January, when Treasury yields moved up 27 to 37 basis points over December levels.

Purchases of shares in money market funds have increased sharply since the end of the year.

Purchases by individuals of Treasury note offerings have not increased markedly when average yields are below 8 percent.

**Market interest rates**

Treasury yield curves provide a useful indicator of the interest rates available to investors on alternative market instruments. Rates paid on Treasury securities can be compared with interest rates allowed on time deposits of comparable maturities.

Not only do interest rates rise and fall over the interest rate cycle, but the shape of the yield curve changes. At the low point in the cycle, the yield curve usually slopes sharply upward. During recovery, short-term interest rates increase faster than long-term rates. The yield curve generally flattens, and may even become negative with short-term rates exceeding long-term rates.

Given the ceiling on interest rates banks and thrift institutions can pay on time and savings deposits of specified maturities, rates on market instruments have to rise more to become competitive with rates on longer-term time certificates. The result is what might be called *fractional disintermediation*, meaning that when the maximum interest rate that can be paid on a specific maturity of time deposit at a depository institution is lower than the interest rates on market instruments of comparable maturity, savings deposits of that maturity become vulnerable to disintermediation.

**Disintermediation in 1973-74**

Of depository institutions in the Seventh District, large banks and S&Ls were affected most by the sharp rise in market rates in 1973 and 1974. In the 12 months ending October 1974, consumer-type savings deposits at member banks in the district rose only 2 percent. But at 30 percent of the banks with total deposits of $100 million or more, there was a decline in this type of savings. More than two-thirds of the increase in total time and savings deposits at the big banks was in large certificates of deposit (CDs), which are exempt from rate ceilings. Over the same period, insured S&Ls in the five states of the district saw a net gain of 6 percent in savings accounts. All the increase, however, was in accounts paying more than the regular passbook rate, which rose 14 percent. The amount outstanding in regular passbook accounts declined 2 percent.

Despite the overall increase from October to October, S&Ls in most areas had substantial net outflows for several months. In almost all areas, the decline was in passbook savings, with the biggest and most prolonged outflow occurring in large metropolitan areas. Associations in the Chicago and Detroit...
areas were particularly hard hit.

The big decline in savings deposits at S&Ls came in the third quarter of 1974. August showed the largest net outflow of any month in the period. The Treasury yield curve, having turned negative, was well above the ceiling rates on S&L savings and time deposits of all maturities.

**Flows weaken early at banks**

About mid-1977, as Treasury bill rates moved above the effective maximum rate of 5.20 percent that banks can pay on passbook accounts, savings flows into these accounts owned by households began to weaken at banks in the district. During the first half of the year, the amount outstanding at banks rose at an annual rate of 12 percent. In the second half, the increase was only 4 percent.

The weakening was more pronounced at the larger banks. At banks with deposits of less than $100 million, household savings in passbook accounts were up at annual rates of 15 percent in the first half and 7 percent in the second. At banks with deposits of $500 million or more, these savings were up at an annual rate of 12 percent in the first half but declined at a rate of 3 percent in the second half.

Weakness in the flow of business savings into passbook accounts became evident at the large banks in the second quarter of 1977. The total amount outstanding at banks with deposits of $500 million or more began declining as rates on large negotiable CDs rose above the 5 percent passbook ceiling rate in May. At banks of less than $100 million, where more of the business regular savings accounts are probably less than the $100,000 required to buy a negotiable CD, which is exempt from ceilings, the amount outstanding increased all year. But the gains were slower in the second half.

The large weekly reporting banks in the district showed a decline in small time deposits (those less than $100,000) starting with the third quarter. Although market interest rates had begun to rise, the early outflow primarily reflected the maturity of four-year so-called “wild card” certificates issued during a four-month period in 1973 when ceiling rates were suspended. Interest-sensitive money that had come into banks for the higher rate in 1973 left in 1977 for the higher rate available at S&Ls. The decline in small time deposits continued through the end of the year as market interest rates rose. Holdings of large CDs at the weekly reporting banks rose rapidly in the last half of the year, moving up from the low reached in the second quarter as banks replaced declining savings and small time deposits with funds from money market sources.

Smaller banks in the district are less able to substitute money market funds for slower growing savings and small time deposits. Total time and savings deposits owned by individuals, partnerships, and corporations at district banks with deposits of less than $100 million rose at annual rates of 14 percent in the first half and 8 percent in the second half. Being less able to turn to money markets for funds, banks of this size are probably affected more seriously by rising interest rates than large banks, especially if they have already had a substantial expansion of loans.

**Strength in time deposits at S&Ls**

Savings flows to S&Ls did not begin to slow noticeably until the three-month Treasury bill rate rose above 6 percent in the fourth quarter of 1977. Until then, effective ceiling rates were competitive enough with market interest rates, and S&Ls benefited from July to October from inflows from wild card certificates maturing at banks.

Since July 1973 S&Ls have been allowed to offer higher rates on time certificates of four years or more. For that reason, more of their savings inflows have been into higher rate time deposits, which are subject to penalty if withdrawn before maturity.

According to Federal Home Loan Bank Board (FHLBB) estimates, in June 1973 about half of the savings deposits at S&Ls nationwide were in accounts earning more than the regular passbook rate, and more than three-fourths of these deposits were in certificates with maturities of two years or more, which
made them eligible for the maximum rate of 6 percent. From mid-1973 through the end of 1977, total savings deposits at insured S&Ls increased 76 percent. Three-fourths of the increase, however, was in time deposits paying more than the regular savings rate. As a result, 62 percent of the total savings at S&Ls are now in time deposits subject to penalty if withdrawn before maturity.

The latest FHLBB semiannual survey of S&L account structure shows that last September more of the time deposits were in longer maturity accounts than before. Of the time certificates of less than $100,000, 67 percent paid over 6.75 percent interest and, therefore, had original maturities of four years or more. Of all small time certificates, 56 percent were not due to mature for at least a year.

The higher ceiling rates since 1973 and the larger proportion of longer-term time deposits have reduced the vulnerability of S&Ls to disintermediation. Recent experience suggests, however, that savings inflows continue to decline as market rates move above the maximum rates allowed on additional maturities of time deposits. Savings gains at S&Ls dropped sharply in January 1978, when Treasury yields rose 27 to 37 basis points above December yields and rates on Treasury securities moved above the ceilings S&Ls are allowed to pay for maturities of less than four years. The amount outstanding in regular passbook accounts declined, and all the gain was in deposits earning more than the regular rate.

Where the money goes

Individuals have tended increasingly in recent years to invest in money and capital markets when interest rates rise. They have become more aware of the higher rates available on alternative investments. And new vehicles have been developed to encourage savers to invest directly in the markets.

In the past, purchases of newly offered Treasury notes and bonds by individuals increased substantially when the average yield approached 8 percent. The preference at higher rates has been for seven- or ten-year notes. From August 1976 through the end of last year, the highest average yield on a Treasury note offering was 7.69 percent, and individual purchases of Treasury securities did not increase much. More recently, higher rates have generated additional individual participation.

When short-term interest rates rise, the purchase of shares in money market mutual funds provides an attractive alternative to savings at depository institutions. These funds expanded rapidly in 1974, increasing about $360 million a month during the second half of that year and the first quarter of the next. The rate investors earned depended on the rates on the assets of the funds, primarily CDs, Treasury bills, bankers' acceptances, and commercial paper. Recently, as rates on these short-term instruments have risen, total assets of money market funds have again begun to strengthen. According to a survey by the Investment Company Institute, assets of money market funds on March 10, 1978 were up a total of $1.27 billion since the first of the year. That was an increase of 15 percent.

Assets of municipal bond funds have also grown rapidly, spurred mainly by the pass-through of tax exempt interest authorized by the Tax Reform Act of 1976. Although a record $45 billion in new issues was offered to the public in 1977, rates have risen much less than other long-term rates. Assets of municipal bond funds, nevertheless, increased $1.7 billion last year, and they increased another $250 million in January 1978.
Prime rate update
Randall C. Merris

A widely reported development in commercial bank lending over the past two years has been the extension of business credit at interest rates below prime. If these “super-prime” loans become widespread, they could signal structural, or long-range, changes in bank lending and the concept of the prime rate itself.

Since it originated in 1933, the modern prime rate has come to serve three major functions for banks:1

- It is the interest rate applicable to a bank’s most creditworthy customers.
- It is a base rate to which are tied, formally or informally, the higher interest rates on nonprime bank loans.
- It is an index rate for floating-rate bank loans—contracts that allow interest charges to vary up and down with market rates over the durations of the loans.

Bank borrowers have found their own meanings for the prime rate, and intentionally or otherwise, banks have fostered these ideas:

- Qualifying for the prime is a symbol of business success and a sign of a healthy enterprise.
- Qualifying for the prime in some cases is a reward to a customer of longstanding for allowing one bank to handle all his banking needs.

In short, the prime rate is expected to serve several functions—a lot to ask of a single interest rate.

Banks have tried to adopt lending practices over time that would allow the prime rate to perform its multiple tasks. But difficulties with the concept of a prime rate have been accumulating since the early 1960s. Borrowers in the prime category have become increasingly heterogeneous, and the idea of a “most creditworthy customer” has been broadened to the limit. The floating-rate function of the prime was once fairly minor. But with the increased variability of interest rates since the early 1960s, that has become one of the most important functions. At least half of the dollar volume of business lending at many large banks is now made under floating-rate provisions. The growth of long-term bank lending has contributed vitally to the importance of this prime function. New long-term lending at many banks has been predominantly at floating rates.

Recent lending experience

Conflicts between the functions of the prime rate have arisen several times in recent years. But the problems became especially severe in 1976 and 1977, when demand for business loans was slack at large money-center banks.2 During that time banks saw the demand for loans from business in general and prime-rate borrowers in particular fail to respond to declining loan rates. Many large banks, however, were able to identify submarkets of prime-rate customers that might borrow more if bank rates were lowered.

Under these circumstances, banks were faced with a dilemma. If they lowered the prime rate, most loan customers would not borrow more. The primary effect would be simply to reduce total loan revenue. If they did not lower the rate, a large amount of loan business would be lost from submarkets that were responsive to lower rates. To complicate the problem further, there was a conflict with the function served by the prime in floating-rate contracts. If the prime was lowered,
Floating-rate business lending is predominant at many large banks...

Percent of dollar amount of new short-term business loans at floating rates: 48 large banks

<table>
<thead>
<tr>
<th>Loan size category (in thousands)</th>
<th>$1-24</th>
<th>$25-49</th>
<th>$50-99</th>
<th>$100-499</th>
<th>$500-999</th>
<th>$1,000 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7-12</td>
<td>66.5</td>
<td>42.0</td>
<td>55.3</td>
<td>56.7</td>
<td>63.5</td>
<td>72.4</td>
</tr>
<tr>
<td>May 2-7</td>
<td>63.7</td>
<td>43.6</td>
<td>49.8</td>
<td>53.8</td>
<td>54.0</td>
<td>60.3</td>
</tr>
<tr>
<td>August 1-6</td>
<td>61.6</td>
<td>44.4</td>
<td>53.6</td>
<td>55.1</td>
<td>61.1</td>
<td>66.9</td>
</tr>
<tr>
<td>November 7-12</td>
<td>71.5</td>
<td>38.5</td>
<td>48.8</td>
<td>61.4</td>
<td>67.6</td>
<td>77.2</td>
</tr>
</tbody>
</table>

banks stood to forfeit revenue from all loans already on the books at rates tied to the prime.

One way to entice borrowers that were receptive to lower loan rates was to relax other loan terms. Some banks allowed these borrowers to "double count" compensating balances. The same noninterest deposit balances were used both to compensate the bank for a credit extension and to reimburse the bank for the nonloan services it provided business customers.

The most obvious method was to lend at special rates below prime to the subcategories of borrowers that seemed receptive to lower rates. But banks moved quietly and reluctantly in this direction. Below-prime rates for some customers could lead to disgruntled prime-rate borrowers. They could lead also to reactions from other banks, either in the form of a general reduction in loan rates or charges of unsound banking practices. But even if below-prime pricing might not have been a good strategy for these reasons, it was good economics under the circumstances.

Basic price theory can be used to show how a firm can maximize profits in a situation in which one segment of a market is fairly unresponsive to a lower price (in this case, interest rate) and another is fairly responsive. Demand in the first submarket is termed relatively price inelastic, and demand in the second submarket is said to be relatively price elastic. The solution is to separate demands in the two submarkets and establish different prices for each. The submarket with the relatively elastic demand, then, receives a lower price than the other submarket and a lower price and a larger volume of sales (here, loans) than would be the case if both submarkets were treated together to establish a common price.

Theory also is useful in identifying the submarket with the most elastic demand. It is the customers with the most or best substitutes for the product or service. Prime-rate borrowers with the best alternative sources of funds were identified as corporations that issue commercial paper and multinational companies with access to the Eurocurrency credit markets. These are often the same companies.

Commercial paper is unsecured debt issued by large corporations either directly or through dealers and sold to large-volume investors. Eurocurrency credits are overseas bank loans extended and repayable in currencies other than the currency of the lending bank. Both the commercial paper and the Eurocurrency markets have grown dramatically since the early 1960s, measured in terms of either the volume of credit or

... especially for long-term business lending

Percent of dollar amount of new term loans at floating rates: 48 large banks

<table>
<thead>
<tr>
<th>Loan size category (in thousands)</th>
<th>$1-99</th>
<th>$100-499</th>
<th>$500-999</th>
<th>$1,000 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7-12</td>
<td>74.6</td>
<td>76.7</td>
<td>84.0</td>
<td>74.8</td>
</tr>
<tr>
<td>May 2-7</td>
<td>66.9</td>
<td>76.4</td>
<td>67.2</td>
<td>65.9</td>
</tr>
<tr>
<td>August 1-6</td>
<td>81.3</td>
<td>76.2</td>
<td>67.5</td>
<td>84.5</td>
</tr>
<tr>
<td>November 7-12</td>
<td>69.0</td>
<td>80.7</td>
<td>80.0</td>
<td>64.2</td>
</tr>
</tbody>
</table>

SOURCE: Survey of Terms of Bank Lending, Board of Governors of the Federal Reserve System. Included are commercial and industrial loans other than construction and land development loans. Short-term loans have original maturities of less than one year, and term loans have maturities of one year or more.

Federal Reserve Bank of Chicago
the number of participants.

By not letting the prime rate fall as fast as the three-to-four month commercial paper rate, bankers allowed the prime-paper rate spread to increase to over 1 percentage point in early 1975 and to \( \frac{3}{2} \) percentage points by early 1976. The spread has narrowed again since last summer. But through the first quarter of 1978, it was still about \( \frac{1}{4} \) percentage points. And as a result, competitive pressures for below-prime lending to issuers of commercial paper have persisted.

**Special rates**

Since last November, two large money center banks have offered new lending programs to approved lists of corporations that issue commercial paper. Loans under these programs allow corporations to postpone new issues of paper in anticipation of lower paper rates or when the market for a particular maturity is weak. Under one program, loans are granted in maturities up to ten days. Under the other, maturities go up to 29 days.

Under both programs, loan rates are based on the incremental cost of funds to the lending bank and are kept competitive with commercial paper rates. Loans under one program have fixed-rate interest charges. Under the other, floating-rate charges are revised daily. The first rate quotations for one of these programs last November were a little over \( \frac{3}{4} \) percentage point above the three-to-four month commercial paper rate and nearly 1 percentage point below the \( \frac{7}{4} \) percent prime rate in effect at the time.

In March 1978, another large bank announced it had initiated a program several months earlier to provide credit to multinational corporations at special rates and in maturities competitive with commercial paper. This newest program is in contrast to plans at the other two banks, which are aimed only at corporate financing for less than a month before commercial paper sales. By offering maturities on loans from a day to 180 days or longer, the program of this third bank provides a direct substitute to commercial paper for short-term corporate financing.

All three banks have emphasized that they do not consider their new lending programs as temporary measures dependent only on current money-market conditions. Since these plans were announced, some other large commercial banks have disclosed informally that they are also making special efforts to attract commercial paper issuers as borrowers. Included in these efforts are special lending rates.

One factor determining whether banks with special lending programs expand them and whether other banks formally announce such programs will be the spread between the prime rate and the commercial paper rate. If banks narrow the spread soon, the need for the special lending programs could disappear for a while. But because the basic conflicts between the functions of the prime rate are endemic to modern banking, the problems of 1976 and 1977 are apt to reappear.
Federal grants-in-aid—solvency for state and local governments

Morton B. Millenson

Grants-in-aid from the federal government to state and local governments date from the nation's earliest days. Being sporadic, however, grants did not amount to much in budgets at any level of government until the Great Depression.

Until the 1930s most grants were for highways and schools. And although large sums went to the states for relief during the Depression, with the coming of the Second World War and the enormous increase in defense spending, the importance of the grants again faded.

Since the war, however, grants-in-aid have become so important that they are now a major factor in the financing of government at all levels. In fiscal 1950 grants-in-aid made up just 5 percent of federal outlays and about 10 percent of state and local government expenditures. In 1977 they accounted for 17 percent of the federal budget and over 26 percent of state and local government budgets. And this growth is expected to continue.

General revenue sharing

Almost all grants-in-aid until 1972 were categorical grants that earmarked funds for very specific uses, leaving receiving jurisdictions little or no discretion in how the money could be spent. But with the introduction of general revenue sharing, states and

| Distribution of federal grants-in-aid by function |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Natural resources and environment | 2    | 2    | 2    | 5    | 6    | 6    | 7    |
| Agriculture                      | 6    | 3    | 1    | 1    | 1    | —    | —    |
| Transportation                   | 36   | 27   | 15   | 14   | 12   | 12   | 12   |
| Community and regional development | 3    | 6    | 10   | 6    | 7    | 8    | 7    |
| Education, training, employment, and social services | 8    | 25   | 26   | 24   | 23   | 26   | 26   |
| Health                           | 5    | 10   | 17   | 18   | 18   | 16   | 17   |
| Income security                  | 38   | 25   | 26   | 18   | 18   | 17   | 17   |
| General purpose fiscal assistance | 2    | 2    | 1    | 12   | 14   | 12   | 11   |
| All other                        | 1    | —    | 1    | 2    | 2    | 2    | 2    |
| Total                            | 100  | 100  | 100  | 100  | 100  | 100  | 100  |

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<thead>
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</thead>
<tbody>
<tr>
<td>1977</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>—</td>
</tr>
<tr>
<td>1978e</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>—</td>
</tr>
<tr>
<td>1979e</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>—</td>
</tr>
</tbody>
</table>

* e estimate.
— less than 0.5 percent.

SOURCE: Office of Management and Budget.
municipalities began receiving fairly large sums that could be used for almost any purpose, even to cut taxes.

In its original form, the revenue sharing program had more restrictions than when it was renewed in 1976. The biggest change has been that funds can now be used to cover a local government’s share for other grants available only on a matching-fund basis. This means grant programs can now be financed entirely with federal funds.

As a result, general revenue sharing has become synonymous in the minds of many people with federal funding of state and local governments. Actually, it accounted for less than a tenth of the federal aid to state and local governments last year. And it is due to be even a little less this year and next. It does seem, however, to have amounted to a permanent increase in federal payments to local governments, rather than a replacement for other types of grants.

It seems significant that the introduction of general revenue sharing in 1972 coincided with the end of an uninterrupted string of deficits in the operating accounts of state and local governments that (measured on the National Income Accounts basis) went back to 1948. There were deficits again during the 1974-75 recession, but substantial surpluses were recorded in 1976 and 1977, and surpluses seem likely in 1978. A few states with particularly large surpluses have cut taxes. And other states are considering reductions. Easing the tax burden in these states suggests a belief that responsibility for raising revenue has permanently shifted from state and local governments to the federal government.

State and local leaders seek more federal funding in the form of general revenue sharing. It gives them flexibility in fitting spending to their own views of local needs. While they have not gotten the increases they asked for, they have gotten more flexibility in some other programs. Most funds are still available only for narrowly defined uses, but there has been some loosening up. Funds that could be used, for example, only for streets and highways can now be used for mass transit.

**How the grants are used**

Every year for the past ten years, about a third of all grants-in-aid have been

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**Grants-in-aid programs exceeding $2 billion during fiscal 1977**

<table>
<thead>
<tr>
<th>Function and program</th>
<th>Department</th>
<th>Outlay (billion dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural resources and environment</td>
<td>Environmental Protection</td>
<td>3.53</td>
</tr>
<tr>
<td>Sewage treatment plant construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal aid highways (Trust fund)</td>
<td>Transportation</td>
<td>5.80</td>
</tr>
<tr>
<td>Community and regional development</td>
<td>Housing and Urban Development</td>
<td>2.09</td>
</tr>
<tr>
<td>Community development block grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education, training, employment, and social service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary and secondary education</td>
<td>Health, Education and Welfare</td>
<td>2.34</td>
</tr>
<tr>
<td>Social services</td>
<td>Health, Education and Welfare</td>
<td>2.53</td>
</tr>
<tr>
<td>Employment and training assistance</td>
<td>Labor</td>
<td>2.94</td>
</tr>
<tr>
<td>Temporary employment assistance</td>
<td>Labor</td>
<td>2.34</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>Health, Education and Welfare</td>
<td>9.88</td>
</tr>
<tr>
<td>Income security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child nutrition and milk programs</td>
<td>Agriculture</td>
<td>2.78</td>
</tr>
<tr>
<td>Public assistance-maintenance</td>
<td>Health, Education and Welfare</td>
<td>6.35</td>
</tr>
<tr>
<td>General purpose fiscal assistance</td>
<td>Treasury</td>
<td>6.76</td>
</tr>
<tr>
<td>General revenue sharing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Office of Management and Budget.
under programs for payments to be made to individuals through state and local agencies. Most have been programs calling for state or local governments to match federal funds with money of their own. But some call for local governments to furnish only administrative services.

These payments to individuals fall under a number of the functional areas into which federal expenditures were divided by the Congressional Budget Act of 1974. And as a result, the magnitude of total spending is not apparent when the grants are broken out by function.

In the early 1960s, transportation and income security were by far the most important functions. Together, they accounted for almost three-fourths of the funds granted. They are still important, but the distribution of funds has changed drastically since then.

The biggest function today—education, training, and social services—is itself the aggregation of a large number of programs that together cost $15.8 billion in fiscal 1977. Among these programs are four that cost the government over $2 billion: elementary and secondary education, social services, employment and training assistance, and temporary employment assistance. None of these programs or any of the others costing over $2 billion in 1977 are budgeted at lower levels in 1978 or 1979.

How Seventh District states fare

Together the five states of the Seventh Federal Reserve District received $9.42 billion in fiscal 1977. That was about 14 percent of the $67 billion distributed to the 50 states and the District of Columbia. As these five states had a little over 15 percent of the population, their combined per capita allotment ($283) was below the national average of $314.

The national figure is somewhat distorted by the very high per capita payments to the District of Columbia ($1,365) and Alaska ($938). Vermont had the next highest payment relative to population ($461). All other states received payments between the amounts for Vermont and Indiana ($205).

Illinois received $3.2 billion, the fourth largest payment to the 51 governments. Its per capita payment ($284), however, was about average for the five states of the district.

Reasons for the spread in the per capita distribution of grants-in-aid between the five states are hard to pinpoint. It is particularly hard to see why Indiana received proportionately the least of any state.

The two areas where Indiana seems particularly low for its population are in grants for highways and urban mass transit. But these two areas do not in themselves account for the big difference between Indiana and the other four district states. Since many programs are voluntary and require matching funds, the difference could be that Indiana and its constituent local governments simply chose not to participate on the same scale as other states in the district.

### Grants-in-aid to district states

<table>
<thead>
<tr>
<th>State</th>
<th>1977 population1 (thousands)</th>
<th>Rank</th>
<th>1977 grants received (million dollars)</th>
<th>Rank</th>
<th>1977 grants received per capita (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>11,245</td>
<td>5</td>
<td>3,202</td>
<td>4</td>
<td>285</td>
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<tr>
<td>Indiana</td>
<td>5,330</td>
<td>12</td>
<td>1,095</td>
<td>22</td>
<td>205</td>
</tr>
<tr>
<td>Iowa</td>
<td>2,879</td>
<td>25</td>
<td>714</td>
<td>31</td>
<td>248</td>
</tr>
<tr>
<td>Michigan</td>
<td>9,129</td>
<td>7</td>
<td>2,915</td>
<td>5</td>
<td>319</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>4,651</td>
<td>16</td>
<td>1,493</td>
<td>12</td>
<td>321</td>
</tr>
<tr>
<td>Total five states</td>
<td>33,234</td>
<td>—</td>
<td>9,419</td>
<td>—</td>
<td>283</td>
</tr>
<tr>
<td>Total U.S.</td>
<td>216,332</td>
<td>—</td>
<td>67,0832</td>
<td>—</td>
<td>310</td>
</tr>
</tbody>
</table>

1 Provisional estimates, 50 states and District of Columbia, July 1, 1977.
2 Excludes grants to Puerto Rico, Virgin Islands, American Samoa, Guam, and Trust Territory of the Pacific.

Convenience and needs: a post-audit survey

David R. Allardice

Review of bank holding company applications submitted in the Seventh Federal Reserve District during the first half of the 1970s shows that, on average, holding companies made few firm commitments to change or expand services of the banks they acquired. It appears, however, that where changes were proposed, the holding companies carried through with the proposals. Compliance with proposed changes tended to benefit the banking public by leading to longer banking hours and improved bank facilities.

These findings were the result of a survey conducted in an effort to determine the kind of changes in bank services usually proposed in bank holding company applications and the extent to which holding companies lived up to the proposals.

Convenience and needs criteria

In considering bank holding company applications, whether to form the company itself or for the company to acquire a subsidiary bank, the Federal Reserve considers the effect on competition, the financial and managerial resources of the applicant and prospects for its success, and the convenience and needs of the public.

Crucial to the decision is whether approval of the application will have anti-competitive effects. The Bank Holding Company Act, however, allows slightly adverse competitive effects to be outweighed by considerations of convenience and needs. Though the act does not define what is meant by “convenience and needs,” a review of orders issued by the Federal Reserve, both approving or denying applications, provides some insight into what types of changes bear on convenience and needs.

Generally, any change that increases the number of banking services, improves the quality of service, or expands the geographic scope of banking operations can be viewed as promoting the convenience and needs of the banking community. The public also benefits from changes that cut the cost of bank operations, to the extent, at least, that the cost reduction is passed on to the public in the form of lower charges for bank services and loans or higher rates of return on deposits.

These orders show the Federal Reserve has given particular attention to the introduction of new services not available in a banking market. Saturday banking hours, overdraft checking, accounts receivable financing, and trust and credit card services—all have been cited as services contributing to the convenience and needs of the public.

To help in its determination of whether an application should be approved, the Federal Reserve asks applicants to describe the changes they expect to make and the new services they plan to offer. Though holding company responses vary from “no change” to detailed discussion of the services to be offered, the answers are usually taken by the Federal Reserve as consistent with approval of the application. Except in rare instances, as for example, where the bank to be acquired is floundering, consideration of convenience and needs is seldom given the same weight as adverse competitive effects.

Little effort has been made to show the extent to which holding companies have lived up to their commitments to meet the convenience and needs of the public. Part of the problem is that without measures that can be

NOTE: A more detailed presentation of the findings reported in this article may be found in Convenience and Needs Considerations: A Post-Audit Survey, by David R. Allardice, Staff Memorandum No. 78-2, Federal Reserve Bank of Chicago.
statistically quantified, there is little way to judge how well companies have met their commitments. But if some companies have done well in providing new services, a moderate policy shift that put more emphasis on convenience and needs might be warranted. On the other hand, if some companies have not done well, further acquisitions might be denied where the competitive effects are slightly adverse, unless the company is willing to enter a binding agreement to provide additional services.

Few commitments to change

To see how well plans for meeting convenience and needs had been translated into public benefits, 44 of the bank holding company applications approved in the Seventh Federal Reserve District from 1971 through 1976 were selected for review. These applications were filed by 24 holding companies for the acquisition of banks in Iowa, Michigan, and Wisconsin—the three states of the district that allow multibank holding companies. Though most of the acquisitions were by multibank holding companies, some of the cases reviewed involved one-bank holding companies.

For purposes of analysis, plans and intentions stipulated in the applications were broken down into seven main areas. These were plans involving demand deposit accounts, time and savings accounts, loan interest rates and maturities, loan and investment portfolios, physical facilities, banking hours, and any new or expanded services. On the whole, holding company statements of planned alterations in these seven areas were often ambiguous, firm commitments to change being the exception rather than the rule.

Often vague and nearly always lacking in detail, all applications, nevertheless, showed plans for at least one improvement in service. Over two-thirds of the companies said they would either expand trust services or initiate trust services at the bank for the first time. Also frequently mentioned—often to be provided through nonbank subsidiaries—were computer services, credit cards, training for bank employees, and audit services.

In areas where specific responses are required, the survey showed applicants often responded “no change.” About 70 percent of the applications indicated the companies did not intend to change loan rates or maturities at the acquired bank. In nearly that many...
Comparison of planned changes to actual changes

<table>
<thead>
<tr>
<th></th>
<th>Planned changes</th>
<th>Actual changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No change</td>
<td>Some alteration mentioned</td>
</tr>
<tr>
<td>Demand deposits</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>Time and savings deposits</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Loan rates and maturities</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Portfolio alteration</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>Physical facilities</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>Banking hours</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>New expanded services</td>
<td>7</td>
<td>93</td>
</tr>
</tbody>
</table>

n.a. Not applicable due to nature of question or type of response.

cases, there was no commitment to change the hours the banks would be open. In over half the cases, there was no firm commitment to change pricing or service policies for either demand accounts or time and savings accounts.

Most commitments fulfilled

The survey showed most holding companies had complied with their commitments. In almost all instances where companies had planned at least one improvement in services, some change had been made. In some instances, the change was not the one described in the application. An applicant might, for example, have planned international banking services but instead provided leasing services. In some cases, companies made more changes than originally planned. In a fourth of the cases, for example, more changes in physical facilities were made than planned at the time of the application.

While applicants tended generally to comply with their commitments, there were exceptions. In 18 percent of the acquisitions, for example, the change in demand deposit services fell short of the plans stated in the application. If a company said, for example, overdraft checking would be provided and it was not, it was concluded that less service had been provided than planned. In 16 percent of the acquisitions, the company did not make the change it said it would in loan rates and maturities. There was about the same proportion of failures to make the changes planned in loan or investment portfolios.

These instances of non-compliance raise questions of whether holding companies were inclined to promise more than they could deliver, whether they were intentionally misleading in their statements, and whether there were other factors that prevented them from carrying out their plans.

The survey provided some answers to these questions. Given the low percentage of non-compliance and the number of instances where acquired banks provided more services than planned, it is hard to conclude that there was any systematic effort on the part of companies to be misleading in their statements. It is also hard to figure that the companies committed themselves to more than they could deliver. This conclusion is based, in part, on the fact that as most of the companies surveyed rank among the larger banking organizations in their states, they have the financial and managerial resources to provide most modern banking services.

In response to the survey, however, several companies cited external factors as reasons for their delay in making proposed changes in banking services. These external factors include, for example, higher operating and construction costs, which were cited by some companies as being partially responsible for delays in expansion projects. Others cited internal factors, such as changes in the management structure of the acquired bank that led to postponements in changes in services. Consideration of these factors, along with a review of the cases themselves, lead to the conclusion that the reasons for not complying are often the applicant company’s inaccurate appraisal of market conditions and inadequate attention to details of the changes they propose, special problems of the acquired banks, or some combination of the two.
Reasons for making changes

As part of the survey, companies were asked what factors they considered most important in the initiation of changes in services and operations at the banks they acquired.

Operating policies of the holding companies themselves were listed most often as the main reason for changes. Next in importance was customer demand for new and improved banking services, followed by competitive pressures from other banks in the local market and management policies of the acquired bank.

Companies did not consider competitive pressure from commercial banks outside the immediate area very important in stimulating change in the bank's services and operations. Nor did they consider competition from other financial institutions, such as savings and loan associations, outside the area important in influencing changes.

Much attention has been given in recent years to technological changes in banking, such as the introduction of automated teller machines. Surprisingly, the companies did not consider technological changes alone as significant factors in bringing about changes in services and operations of acquired banks.

Influence of holding companies

Though data show the holding companies committed themselves to few changes in the services and operations of the banks they acquired, the data must be interpreted with care.

A reply of "no change," for example, could indicate the acquired bank was already meeting the convenience and needs of the community when it was acquired. If it was already offering free or low-cost checking accounts, if it was already offering open longer than other banks, if it was already in a modern building, or if it was already paying ceiling rates on time and savings accounts—clearly there would have been little opportunity for a measurable improvement in the situation.

Also, a "no change" reply could indicate that in the early stages of preparing the application the holding company was not familiar enough with the operations of the bank or its competitive situation to commit itself to major changes in the bank's operations. Tentative support for this proposition can be found in applications stipulating that changes would be considered upon approval of the application and after the company had studied the needs of the bank.

In addition, a reply of no change could reflect the lack of flexibility banks have in changing some of their rates and services. Asked whether the acquired bank would increase the rates paid on time and savings deposits, for example, applicants often answered, "no change—except as permitted by regulation." This answer implies the bank was already paying the highest rates allowed.

Despite the gap between the improvements in services that were planned and the improvements that were finally made, in almost every instance, at least some change was made—though the changes made were not always the changes mentioned in the application. The study showed applicants had problems complying with commitments they made in three areas: changes relating to service charges on demand deposit accounts, in the composition of the loan and investment portfolios, and in loan rates and maturity terms. These are three areas that applicants should probably give close attention in the future.

The study further showed that holding companies will probably modify the physical facilities of the acquired bank. If the hours of operation are changed, they are apt to be longer. And if ceilings permit, interest rates paid on time and savings deposits can be expected to rise rather than fall.

Where companies did not comply, the failures were more often errors of omission than commission. The study indicates a need for more accurate appraisals of market conditions and closer attention to detail in the types of changes planned for acquired banks and the banking needs of the communities they serve.