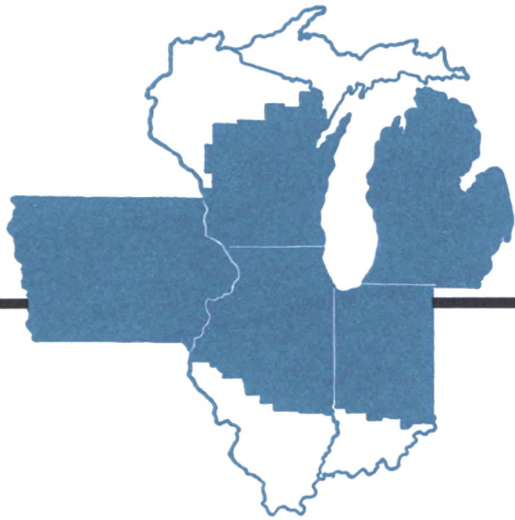
A review by the **Federal Reserve Bank of Chicago**

Business Conditions



1968 December

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A larger role for commercial paper

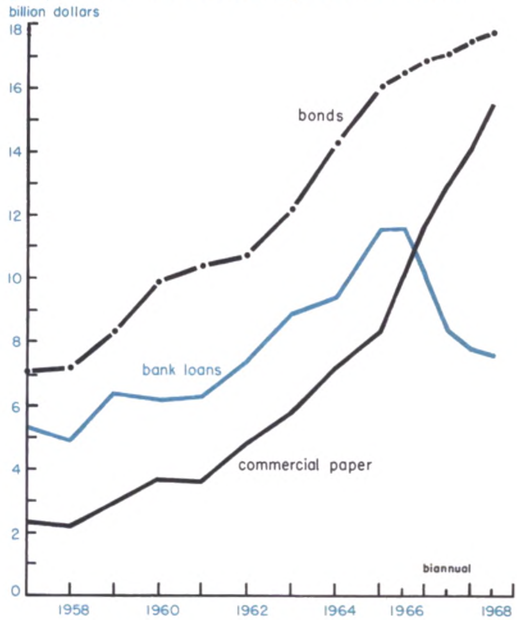
The rapid growth of commercial paper—unsecured short-term notes issued by large corporations—has been one of the notable financial developments of the 1960s. More than $20 billion in commercial paper was outstanding at the end of September, twice the amount outstanding two years before. During those two years, loans of large commercial banks to businesses and financial institutions rose 13 percent to almost $80 billion.

About four-fifths of all commercial paper is issued by finance companies, including sales finance companies that specialize in financing purchases of such durable goods as automobiles, commercial finance companies that lend to business firms for working capital, and consumer finance companies (small loan companies). Some of the major sales finance companies are "captives"—wholly owned subsidiaries of large manufacturers.

Ten years ago, bank loans to finance companies were more than twice the volume of the outstanding paper of these companies. Their paper is now more than twice their bank borrowings. The move toward greater reliance on commercial paper has accelerated in the past two years, with a decline in finance companies' borrowing from banks and a sharp increase in their paper outstanding.

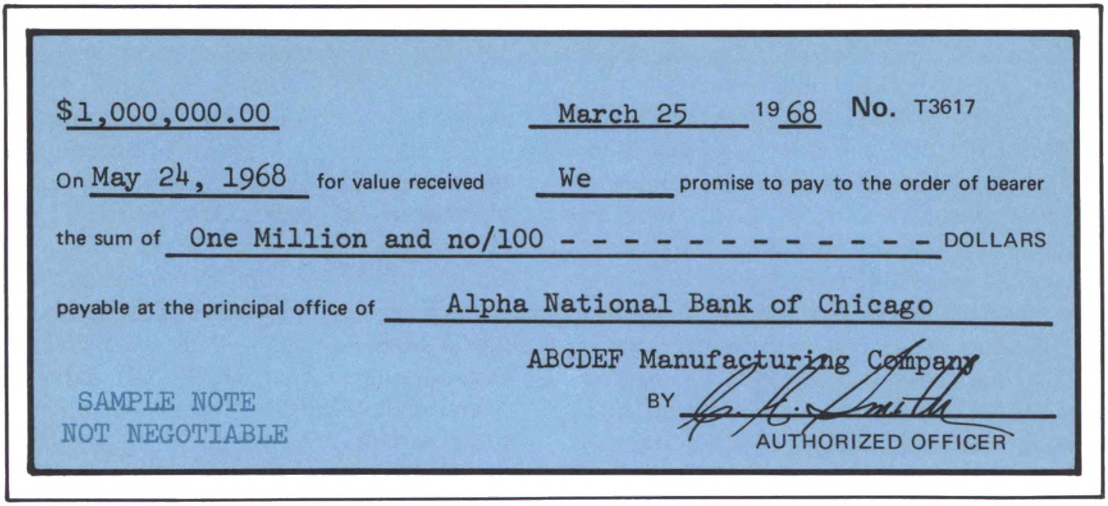
Important as the shift of finance companies from bank loans to commercial paper has been, an even more striking development has been the emergence of issuers that had not raised funds in the paper market before. Seasonal borrowers, such as food processors, tanners, grain dealers, textile producers, wholesalers and retailers, have long sold commercial paper to provide for peak needs for funds. Now steel and oil companies, railroads, and other types of companies are turning to commercial paper to reduce interest costs and provide an additional source of funds. Most spectacular has been the move to commercial paper by public utilities—gas,

Finance companies have increased use of commercial paper while reducing bank loans



Note: Data include mortgage bankers.
SOURCE: **Flow of Funds**, Board of Governors of the Federal Reserve System.

A typical form of commercial paper note



$1,000,000.00 March 25 1968 No. T3617

On May 24, 1968 for value received We promise to pay to the order of bearer

the sum of One Million and no/100 - - - - - - - - - - - - - - DOLLARS

payable at the principal office of Alpha National Bank of Chicago

ABCDEF Manufacturing Company

BY [signature] AUTHORIZED OFFICER

SAMPLE NOTE
NOT NEGOTIABLE

electric, and telephone companies, including in recent months some of the operating subsidiaries of the Bell System. Where no utility sold commerical paper a few years ago, 36 were issuers at the end of last year and about 90 in October.

Commercial paper issued by corporations other than finance companies, usually called industrial paper, is still only about $4 billion, somewhat more than 4 percent of the amount of commercial bank loans to commercial and industrial firms. But until 1966, outstanding industrial paper had never exceeded $1.5 billion. With more companies exploring this channel for raising funds, the volume of industrial paper could rise substantially further.

Evolution of commercial paper

Commercial paper consists of short-term promissory notes of businesses, usually with maturities of less than 270 days. These notes are sold to corporations, banks, pension funds, individuals, and other investors. In bearer form, the notes are sold in even amounts, usually at a discount. Yields are usually quoted in eighths of 1 percent, but quotes are increasingly in multiples of five basis points—that is, .05 percent.

The commercial paper market today is restricted mainly to large, well-known companies with excellent credit ratings. This market does not have a close counterpart in other countries, except in Canada, where most of the paper is issued by subsidiaries of companies headquartered in the United States and usually guaranteed by the parent company.

Commercial paper has been used in the United States for more than 150 years. In the early 19th century, many transactions involved the issuance of short-term notes, often with secondary endorsers. In the latter part of the century, commercial paper houses came into being, specializing in the placement of notes. Dealers, then as now, investigated the credit worthiness of the issuers whose paper they handled but did not endorse the notes. In most cases, notes were purchased outright from issuers, but dealers sometimes acted as brokers.

Commercial paper proved a sound investment for most investors in the panic of 1907. Its use was further encouraged with establishment of the Federal Reserve System in 1914, because the notes were regarded as suitable secondary reserves for member banks and usually met the eligibility requirements for rediscounting. Before 1914 and until the late 1940s, most outstanding paper was held by banks.

The use of commercial paper reached a peak in 1920—$1.3 billion (some of it secured) and about 4,400 issuers. The volume of borrowing and number of issuers declined after that. Ready access to capital markets in the 1920s reduced the needs of some companies for short-term funds, and depressed economic conditions in the 1930s curtailed total financial requirements. Paper outstanding averaged only about $100 million in 1933. The largest sales finance companies began selling commercial paper directly to investors during those years. Smaller finance companies and industrial companies continued to use dealers.

Although the volume of commerical paper rose with recovery of the economy from the depth of the depression of the early 1930s, there were still less than 800 issuers at the time of Pearl Harbor. Outstandings were less than $1 billion, and of that more than half was paper placed directly by the three largest sales finance companies. The number of issuers declined during World War II as requirements for outside financing were reduced.

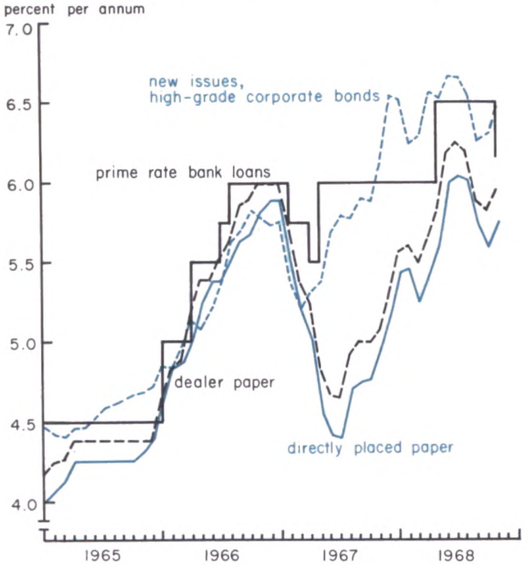
The number of issuers has fluctuated since 1945, averaging about 350 and not exceeding 450 until this year. Total outstandings have increased almost every year, although dealer paper and directly placed paper have often moved in opposite directions, partly reflecting the relative strength of demand for credit to finance auto purchases. Both types of paper, but especially dealer placed industrial paper, have increased substantially since 1965. Some companies turned to commercial paper for the first time during the credit squeeze of 1966, when bank loans were not adequate to accommodate all their needs.

Advantages to issuers

Commercial paper is sold primarily to reduce borrowing costs. Interest costs are almost always appreciably less on commercial paper than on bank loans, and because of the stickiness of bank loan rates, the difference tends to increase during times of reduced credit demand overall. Commercial paper rates, in close touch with market forces, move with rates on Treasury bills and other short-term money market instruments. The effective rate on commercial paper recently has been a half to three-fourths of a percent less than on bank loans to prime business borrowers. One bank president cited this difference as a major reason for his bank's lowering its rate on prime business loans in September.

Interest costs on commercial paper and bank loans are difficult to compare with precision. Paper is typically sold on a discount basis, while simple interest is usually charged on bank loans. Compensating balances ranging up to 20 percent or more are commonly expected or required on bank loans, substantially raising the effective interest cost. But the stringency of the enforcement of these provisions in loan agreements, the amount of balance required in any case for transactions purposes, and the payment to the bank for other services through maintenance of the same compensating balance are all subject to judgment and vary from case to

Commercial paper rates
are lower than rates on corporate bonds or bank loans



Note: Averages of daily figures.
SOURCE: Board of Governors of the Federal Reserve System.

case. Another complication is compensating balances on unused bank lines of credit supporting commercial paper.

The cost of selling commercial paper also must be considered. For most prime risks, dealers' commissions have been reduced in recent years to an eighth of 1 percent on a per-annum basis. But smaller borrowers may pay a fourth to a half percent. Information on the cost of placing paper directly is not published.

Companies also use the paper market to provide an alternative source of funds. For some companies, this is a matter of convenience and a bargaining aid. For large finance companies, it is a practical necessity. General Motors Acceptance Corporation is by far the largest issuer of commercial paper. Its short-term borrowings—bank loans and commercial paper—total about $3 billion. The combined lending limit, to a single borrower, of all banks in the nation with deposits of $100 million or more (the 341 weekly reporting banks) amounts to less than $2.2 billion.

A third reason for selling commercial paper is prestige and publicity. To be a commercial paper issuer is usually tantamount to being "well and favorably known," a quality that may ease the path to other types of financing.

Finally, there is the advantage of flexibility, especially in comparison with long-term financing. Commercial paper can be sold in specific amounts and the maturities required. This advantage is tempered, however, by the need to cater to investors' preferences.

There are several disadvantages to selling commercial paper. It may be hard to find enough buyers, particularly at year-end when corporations "window dress" their financial statements. Large banks may encourage finance companies to increase their loans at year-end to increase bad debt reserves, and investors may want to show bank deposits rather than securities in their financial statements. (Some dealers are prepared to hold issuers' paper in their portfolios during such periods.) Second, the market is impersonal, and outstanding paper must be paid at maturity, unlike bank loans which often are renewed. Also, unlike bank loans, paper cannot be paid at the discretion of the issuer *before* maturity. Third, an issuer's overall financial wellbeing may be impaired if excessive use of paper undermines its bank relationships.

Advantages to investors

Investors buy commercial paper because the yield is somewhat higher than on other money market instruments. Compared with three-month Treasury bills, the spread in favor of commercial paper is usually at least 30 basis points. For a short time last year, it was as much as one full percentage point. In recent months, the spread has been about 80 basis points on dealer paper and about 60 points on directly placed paper.

There is a smaller—but still significant—difference in favor of commercial paper when commercial paper yields and average returns on bankers' acceptances and negotiable certificates of deposit are quoted on an equivalent basis. Commercial paper also competes for investors' funds with short-term governments other than bills, issues of government agencies, Public Housing Authority notes, and short-term municipal issues.

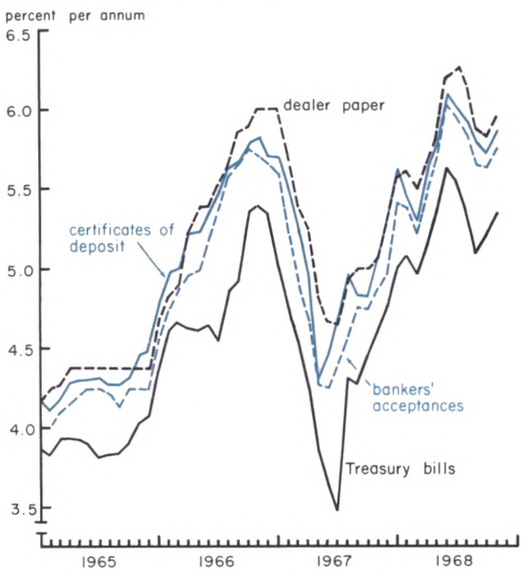
A second advantage to purchasers is the excellent safety record of commercial paper. Holders have lost money on only one small issue since 1936. The lack of losses on commercial paper reflects the excellent credit ratings of companies issuing such paper. Credit checks are made by the credit departments of commercial paper houses, major banks handling paper as agents, and by the Commercial Paper Division of the National Credit Office, a subsidiary of Dun & Bradstreet.

The National Credit Office rates potential paper issuers as *prime, desirable,* or *satisfactory,* and supplies credit information to clients. About 70 percent of the paper outstanding is rated prime by the NCO, and most all the remaining 30 percent is rated desirable. Companies that will not publicize essential financial data are not rated. Since the difference between prime and desirable is mainly a matter of size, some investors prefer to hold paper of smaller companies (secondary names) whose notes yield 25 to 50 basis points more than notes of the largest companies.

Some of the smaller issuers have withdrawn from the market in recent years, partly because of the increased number of large companies issuing paper. Some issuers have been eliminated by mergers or acquisitions. To a great extent, commercial paper is sold to corporations and institutional investors that buy blocks of $100,000 or more. Such investments might be a substantial part of a small issue and amount virtually to a direct loan. Moreover, executives operating these cash positions are often authorized to buy only prime paper, perhaps only from an approved list.

Although commercial paper is unsecured in the usual sense of claims on specific collateral, it is supported by unused lines of credit at commercial banks. For many borrowers,

Yields on commercial paper exceed that on other money market instruments



Note: Averages of daily figures.
SOURCE: Federal Reserve Bulletin and Salomon Brothers & Hutzler.

this coverage is expected to be maintained at 100 percent, preferably with lines based on firm, written commitments. But individual cases vary substantially, and there has been a trend toward smaller coverage. If necessary, unused lines can be activated to pay commercial paper on maturity.

Investors also buy commercial paper because it can be obtained in large amounts and in the maturities desired. Dealers constantly inform issuers of the needs of the market. For directly placed paper, the notes are commonly tailored to individual investor requests in amounts and maturities. The tendency in recent years has been to shorten maturities. Somes notes are for as few as three days.

A unique example of the flexibility of directly placed commercial paper is the widespread use of "master notes" by trust departments of banks. In effect, these are one-day obligations that are constantly renewed with adjustments of amounts outstanding and rates of interest, usually the rate on six-month paper. By assigning various trust funds a portion of the total amount of a note for a given number of days, master notes can be used to keep relatively small funds fully invested.

The need of direct placers to offer a continuous supply of notes to investors at the going rate of interest may sometimes provide more funds than are wanted. This is an advantage for investors but can be a disadvantage for direct placers. Surplus funds are reinvested temporarily, perhaps in the notes of other issuers.

A principal disadvantage of commercial paper for investors is the lack of a secondary market, such as there are for most other money market instruments. Commercial paper cannot be used as an instrument of money managers to "play the yield curve" through sales before maturity. Purchases of commercial paper typically hold the notes to redemption, and maturities are selected to mesh with prospective cash needs.

The lack of a secondary market in the usual sense is partly compensated for by the willingness of direct placers to redeem paper, when asked, before maturity, at prices that adjust for the shorter period of investment, and may impose a penalty as well. Similarly, commercial paper dealers may buy back notes of the issues they handle and try to resell the paper to other investors. Buy-back arrangements are usually based on mutual understandings rather than contracts and are sometimes honored reluctantly.

The commercial paper dealers

Some major commercial paper dealers have been in business for almost a century. Goldman, Sachs & Co., A. G. Becker & Co., and Salomon Brothers & Hutzler are old line firms with offices in New York, Chicago, and other financial centers. On the other hand, Lehman Commercial Paper, Inc. dates from 1963. Additional offices to provide more adequate national coverage are in the planning or organizing stage, especially on the West Coast and in the Southwest. These dealers also do underwriting and perform other financial services. Goldman, Sachs is the largest such firm, handling more than half of all dealer paper.

This year, First Boston Corporation—a large, diversified investment company—started commercial paper operations, and John Nuveen & Co. entered the field by acquiring Ashwell & Co. Other dealers, making a dozen or so in all, are mainly regional or specialized in their operations.

Dealers typically purchase paper outright from issuers and make payment in "good" money (usually federal funds) immediately available for transfer to any part of the country. They take the risk of market fluctuations that may occur before the paper is placed. Working through contacts with investors and large banks acting as agents for investors, dealers try to place the paper they purchase quickly.

Inventories of dealers account for about 10 percent of the outstanding dealer paper at any one time. Even so, their inventories are turned over every few days. These inventories are financed largely by one-day bank loans at a cost near the rate charged government security dealers and through repurchase agreements with corporations and other investors.

Until recent years, commercial paper dealers usually sent out daily offering sheets listing their holdings. Today, business is conducted largely by telephone. Most dealers do not sell to the general public but serve corporations, banks, and other institutional investors.

Dealer paper consists of notes in even denominations of at least $5,000 and ranging up to $100,000. The trend has been to larger minimum note sizes. The new utility notes are typically $50,000 or more. The smallest issue is about $1 million to $2 million, but much larger issues account increasingly for the bulk of the volume. Today, even a $10 million issue is considered small. Maturities of dealer paper typically range from 30 to 270 days for notes of finance companies and 30 to 180 days for notes of industrial companies.

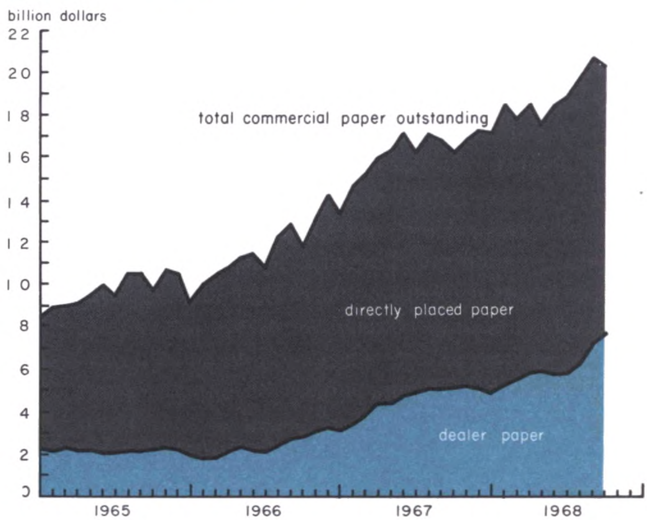
Of some 450 companies currently issuing paper through dealers, about 100 are finance companies, 250 are industrials (mostly manufacturers, processors, and merchandisers), and 90 are utilities. The rest are in a variety of fields. Until last year, finance companies accounted for about half the volume of dealer paper, but that share dropped to less than 40 percent this year. Dealers constantly seek out potential issuers and explain the advantages of using their services.

The direct placers

Issuers that use dealers typically have smaller outstandings than direct placers and may not want to issue paper continuously. Large issues and a commitment to provide a steady supply of paper throughout the year are prerequisites for establishment of the sales organization needed for direct sales.

All the direct sellers are finance companies. General Motors Acceptance Corporation began selling its own paper in 1920. Commer-

Dealer paper has increased faster than directly placed paper in recent years



SOURCE: Federal Reserve Bulletin.

cial Credit Company and C.I.T. Financial Corporation began in 1934. Associates Investment Company, General Electric Credit Corporation, International Harvester Credit Corporation, Sears Roebuck Acceptance Corporation, and other finance companies entered the field in the 1950s and 1960s. Today, there are more than 20 direct sellers. Ten years ago, there were nine.

Directly placed paper is sometimes called "finance company paper," even though it does not include the notes of finance companies handled by dealers—about 15 percent of the total finance company volume. Directly placed paper accounts for 70 percent of all commercial paper. This proportion has varied from 64 to 79 percent in the past decade.

For an effective operation, direct sale of commercial paper requires minimum outstandings of $100 million or more at all times. Denominations now start at $25,000, and the smallest notes of some direct placers are even larger. Maturities, determined by investors' preferences, range up to 270 days, but the average today is probably less than 30 days. (Bank certificates of deposit, which compete with commercial paper for investors' funds, cannot be issued for less than 30 days.) Like dealer paper, all transactions in directly placed paper, both payments and redemptions, are in immediately available funds.

Although direct placers have their own sales organization, much of their paper is placed through large banks acting as agents for investors. For that reason, the term "directly placed" is subject to some qualification.

The biggest direct placers have lines of credit with hundreds of banks, both to use when needed and to support paper outstanding. Most large issuers are always using some of these lines, particularly at larger banks. Lines at smaller banks are likely to be activated when financial requirements expand rapidly and are paid off when conditions ease. Smaller banks may lend to direct placers and hold paper of these companies simultaneously. The combined total, loans and paper, is subject to regulations governing banks' loan limits to one borrower.

Direct placers commonly use commercial paper for half to three-fourths of their short-term borrowings. For issuers of dealer paper, this proportion is usually not more than a fourth to a third, but it may be a half or more. Direct placers borrow from banks through "swing lines," using demand notes on which the amount outstanding rises or is paid down, depending on the volume of funds raised through sales of paper.

Commercial paper and the banks

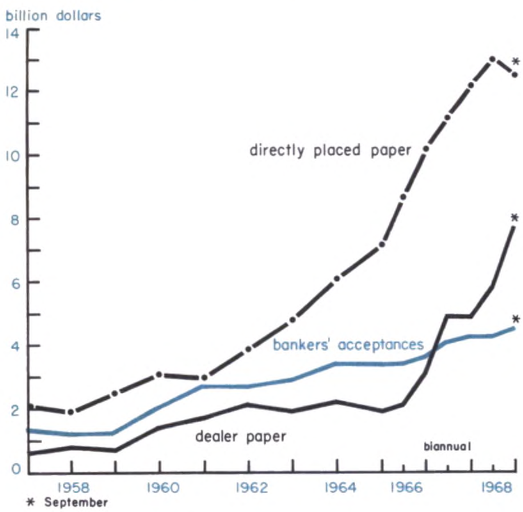
Commercial banks held most of the commercial paper outstanding until after World War II. Such investments provided smaller banks a unique means of lending surplus funds to a diversified group of large companies with excellent credit ratings. But since the early 1950s, business corporations have been the largest investors in paper. Nonfinancial corporations probably now hold more than 60 percent of the paper outstanding, and in recent years, insurance companies' pension funds, college endowment funds, other institutional investors, and individuals have purchased increasing amounts of paper.

Corporations and financial institutions, spurred by high yields on short-term funds (whether borrowed or invested), have made greater efforts to keep themselves fully invested. The favorable differential between commercial paper rates and other short-term investments has made paper attractive.

Large commercial banks rarely hold commercial paper in their portfolios any longer, and when they do, it is usually to accommodate customers that want to obtain cash to meet unforeseen circumstances. Although smaller banks still hold appreciable quantities of commercial paper, they probably now hold less than 20 percent of the total. These smaller banks, which once bought most of the paper, now have a wide variety of outlets for funds, including the federal funds market, which allows them to loan excess reserves to other banks on a day-to-day basis. Some of these banks buy paper at year-end to provide a basis for raising tax-free bad debt reserves.

Large banks in money market centers act as agents in the sale of about a third of the directly placed paper and a substantial portion of the dealer paper. Placements are with correspondent banks, corporations, pension funds, trust funds, and other customers.

Commercial paper outstanding has risen relative to bankers' acceptances



SOURCE: Federal Reserve Bulletin.

Banks ordinarily recommend the purchase of notes issued by customers to whom they have extended lines of credit, but they also arrange the purchase of other notes. For this service, they receive no commission. Usually the services provided by banks in connection with commercial paper are paid for indirectly through the maintenance of compensating balances, although fees are sometimes charged. These services include issuing and paying notes, transferring funds, and holding notes in safekeeping. For convenience in making sales and redemptions, most commercial paper remains in the physical possession of banks in money market centers.

Commercial banks hold an anomalous position with regard to commercial paper. The market could not operate as it does without the services of banks on the one hand and their supporting lines of credit on the other. Most bankers recognize the viability of the commercial paper market and agree it has an important continuing role in the financial structure. But there is some concern—expressed most forcibly by officials of the American Bankers Association—that commercial banks encourage their competition excessively.

Banks compete with commercial paper several ways. First, they help finance companies and other corporations raise funds through the sale of paper that might otherwise be obtained through bank loans. Second, sales finance companies and banks are competitors in making consumer instalment loans and arranging dealer inventory financing. Similarly, banks and commercial finance companies both engage in leasing and in financing receivables. And finally, banks sell certificates of deposit in direct competition with commercial paper.

Outstanding negotiable CDs and outstanding commercial paper both total just over $20 billion. In August 1966, before the credit squeeze, outstanding CDs totaled $18.6 billion and commercial paper totaled less than $13 billion.

Some highly rated businesses that issued paper for the first time in 1966 continued to use the market after bank credit became more available in 1967. Other companies that went through the credit stringency of 1966 without difficulty have since explored the paper market as an alternative, and cheaper, source of short-term funds.

Companies that previously relied exclusively on banks for short-term loans still issue little commercial paper, compared with their use of other sources of funds. But the way is open for them to use commercial paper much more.

Some bankers are convinced that competition from commercial paper requires that bank lending rates, including the prime rate, be adjusted more often in response to changing market conditions. It is also possible that the trend for banks to charge fees for services, instead of requiring compensating balances, will accelerate. This will allow borrowers to know their costs more precisely and use them as deductions for income-tax purposes.

Commercial paper dealers, well aware of their dependence on banks, are somewhat uneasy about the rapid growth of their market. Promotional literature of dealers emphasizes the need for paper issuers to maintain bank lines, the importance of banks as issuing and paying agents, and the view that these notes are intended to supplement, not supplant, bank credit.

"Proper" uses of commercial paper

Until the 1920s, commercial paper issues were widely thought to be "self-liquidating" loans eminently suitable for bank investment. Issuers were typically seasonal borrowers—building inventories at certain times of the year and liquidating them at other times. Although commercial paper notes were not identified with particular transactions, knowledge of the operations and credit worthiness of the issuers satisfied investors that proceeds were used to finance the production or movement of goods and that notes would be repaid from receipts of the sales of such goods.

With the rapid growth of sales finance companies in the 1920s, a different type of issuer offered commercial paper. Maturities of instalment debt contracts were usually longer than finance company notes, and there was no pronounced season in paydowns of outstanding instalment debt. Sales finance companies, therefore, were continuous short-term borrowers.

Finance company paper was years in becoming firmly established as a high-quality credit instrument. The delay was related, in part, to a prejudice against consumer instalment debt. Not until 1937 were the notes of sales finance companies accepted as eligible paper collateral for borrowings at Federal Reserve banks.

Major sales finance companies gradually established excellent ratings. They were well managed, maintained large bank lines, and had adequate senior capital. Most important, a steady flow of cash was available from repayments on instalment loans.

As with finance companies earlier, questions have been raised about the use of commercial paper by utilities. Some observers believe that utilities should use such notes only as interim financing until security issues are floated. But there is no obvious reason, based on credit evaluations, why well-financed utilities should not have short-term notes outstanding continuously. Like finance companies, utilities have a dependable, and fairly stable, inflow of cash.

Issues of notes sold to the public are exempt from SEC registration, provided maturities do not exceed nine months (and are not automatically rolled over) and the proceeds are to be used for "current transactions." For this reason, almost all commercial paper matures in 170 days or less. When there is any doubt about the use of funds for current transactions, issuers (or their commercial paper dealers) submit a description of the proposed issue to the SEC. Unless assurance is obtained that a company's paper is exempt from registration, it is not issued. Because of the need to adjust the terms of offerings to changing market conditions, the time required for registration would virtually rule out the use of commercial paper. For utilities, the SEC has agreed that the current transactions criterion is satisfied if issues are limited in a stated proportion to receivables, fuel supply, annual gross receipts, depreciation, or some combination of these amounts.

Most businesses have little trouble presenting a prima-facie case that short-term loans are for current transactions, partly because it is usually impossible to prove the contrary. Tying particular sources of corporate funds to particular working capital or fixed capital uses is almost always impossible. Comingling of funds resulting from diversifications or mergers makes segregation even more difficult.

Presumably, any company could sell commercial paper if it satisfied the market's standards of issue size and credit worthiness. Several important industries that have not issued paper before are said to be studying the market. These include airlines, holding companies, and conglomerates. Additional classes of issuers could swell the volume of commercial paper far above the peaks reached in recent months.

The new market and after

The commercial paper market has changed with its rapid growth since 1965. While the forms and techniques remain familiar, the volume of outstandings has increased dramatically as new issuers, new investors, and new dealers have entered the market. Meanwhile, issuers of long standing have relied more on this source of funds. Some new issuers may only be seeking interim financing while waiting for a downturn in long-term interest rates. But more likely, the new issuers will use the market even more extensively and additional issuers will also enter the market.

Analysis of the past distribution of holders and issuers of commercial paper and of changes in outstandings have only the limited usefulness of providing historical perspective in understanding the present market. Investors and issuers are re-examining seasonal patterns of the volume of paper and the relationship of yields on paper to yields on other money market instruments. Even the excellent repayment record of these notes in periods of credit stringency may have to be reappraised.

Continued growth of commercial paper may depend on the willingness of commercial banks to maintain the open lines of credit that have ensured the ability of issuers to meet repayment schedules. Possibly increased domination of the market by very large companies with continuous borrowing needs may reduce the emphasis formerly placed on available bank lines. Another break with the past could come with other classes of businesses joining finance companies as direct placers. Any change in current practices will be made in a highly competitive environment —the same environment in which commercial paper has begun to play its larger role.

Trends in the Midwest

Strong rise in personal income; Iowa sets fast pace

Personal income in states of the Seventh Federal Reserve District increased at an accelerated rate in the first half of 1968. If the rise continues, the gain for the year will be 7.9 percent, or half again more than last year. Over $10 billion will have been added to personal income in the five states of the district—Illinois, Indiana, Iowa, Michigan, and Wisconsin—pushing the total to over $115 billion. That will be more than 17 percent of the total personal income of the United States and more than the income of most nations.

Leading the surge in the first half were Iowa and Michigan, both with gains of 8.5 percent. Iowa had been the district's top income gainer in 1966, but it dropped to the bottom ranking in 1967 as a sharp dip in farm earnings offset increases in other categories. Michigan, too, was hard hit last year. As a result of strikes in the auto industry and slackened activity in steel, it posted the smallest nonfarm income gain in the country.

Slower growth trend

Despite its record gains, the Midwest continues to fall behind the increase for the nation. While the rate of income growth in states of the district moved up from 5.6 percent in 1967 to almost 8 percent in early 1968, income growth for the nation advanced from a rate of 7 percent in 1967 to 8.4 percent in 1968. The gain for the nation reflects the very strong rises in the South and the West, which have been leading the nation for the last decade. Personal income this year in the two regions combined is expected to increase 8.8 percent over 1967.

The slower income growth of states in the Seventh District, relative to the nation, has been apparent since the early 1950s. Although personal income in these five states has grown $55 billion in the last decade and tripled in the last two decades, the average annual rate of increase between 1948 and 1968 has been 5.6 percent, compared with 6 percent for the nation.

The forces influencing economic growth are complex and interrelated. Several affecting the growth of personal income in the Midwest can nevertheless be identified. Among the most important have been changes in technology and shifts in the composition of demand and the location of markets. Since wage and salary payments are a large part of personal income in district states, moderation in the growth of employment in the most important industries of the Midwest has a significant effect on total income. The rate of increase in manufacturing employment has slowed in recent years as technological advances have led to increased production without corresponding increases in the number of workers required. Also, with consumers spending more of their incomes on travel, recreation, education, and medical care, manufacturing has not grown as rapidly as the service industries.

Until the early 1950s, district states could capitalize on their sizable facilities for producing durable goods. But competition from other areas has become stronger since the Korean War. With a shift in defense production to missiles and electronic hardware, the milder climate in the South and Far West, and the resulting expansion of markets in those regions, employment in manufacturing in the Seventh District, and thus personal income in the district, grew less rapidly than in the nation.

Growth has also been slower in the other older, highly industrialized regions, such as New England and the Middle Atlantic states. In general, these regions, which derive large proportions of personal income from cyclical industries, have increased during periods of rapid expansion, approaching the national rate, but with sharper cyclical declines. Consequently, over longer periods, personal income has tended to increase less rapidly in those areas than in the nation as a whole.

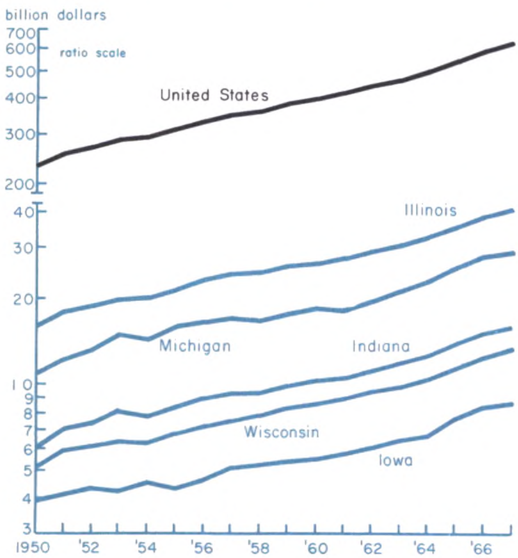
Population and productivity

Income increases as employment grows and production per worker advances. Much of the growth in personal income attributed to the South and Far West can be traced to the faster population gains in these regions, and consequently the faster growing markets and labor forces. Between them, the South and the Far West have posted a 1968 rate of population growth half again as large as the five states of the Seventh District—1.3 percent compared with 0.9 percent. The populations of New England and the Middle Atlantic states have increased at a rate only slightly less than that of the Seventh District.

While their populations have ballooned, the South and Far West have been accumulating capital even faster. As a result of the productivity gains in these areas, per-capita income increased 7.6 percent this year, compared with about 7 percent in the Midwest and the industrial East.

Of the district states, Iowa has benefited most from increased productivity. This, coupled with a net loss in population, will boost per-capita income in Iowa about 8.5 percent this year. Wisconsin will follow with about a 7.3-percent increase.

District gain in personal income lags behind that for the nation



High per-capita income

Personal income has not increased as fast in the Midwest as in some other areas because this is already a highly developed and capital-intensive region. Nevertheless, in terms of actual per-capita income, the Midwest still stacks up very well. States of the Seventh District will probably post a per-capita income of $3,638 this year, compared with $3,374 for the nation. Illinois and Michigan, the most capital-intensive states in the district, will run well ahead with per-capita incomes of $3,985 and $3,598, respectively.

The older industrial states generally have higher per-capita incomes. The New England and Middle Atlantic states have an overall per-capita income of $3,805. The South, while one of the fastest growing regions, has a per-capita income of only $2,614. The major exception is the Far West, with its highly capital-intensive aircraft industry, where per-capita income reaches $3,859.

Twelve of the top 20 SMSAs in per-capita income also are in the top 20 income gainers

SMSAs	1966 per-capita income (dollars)	SMSAs	Increase in per-capita income, 1959-66 (percent)
Chicago	3,982	Champaign-Urbana	58
Cedar Rapids	3,875	Bloomington-Normal	51
Des Moines	3,824	Decatur	50
Waterloo	3,729	Lafayette-W. Lafayette	50
Detroit	3,695	Fort Wayne	49
Rockford	3,685	Sioux City	49
Milwaukee	3,591	Terre Haute	49
Ann Arbor	3,562	Detroit	47
Decatur	3,513	Muncie	47
Indianapolis	3,487	Mukegon-Muskegon Hts.	47
Fort Wayne	3,471	Rockford	46
Quad Cities	3,461	Cedar Rapids	45
Peoria	3,459	Springfield	45
Flint	3,348	Bay City	45
Champaign-Urbana	3,337	Ann Arbor	43
Sioux City	3,327	Jackson	43
Racine	3,322	Dubuque	43
Springfield	3,320	Indianapolis	42
Anderson	3,211	Flint	42
Lafayette-W. Lafayette	3,201	Saginaw	42

Urban-rural perspective

The comparison of the increases in personal income in urban and rural areas provides another dimension to growth in the Seventh District. There are 36 standard metropolitan statistical areas in the district—more than a seventh of the SMSAs in the country.

Although statistics are still not available for 1967 and 1968, some useful inferences can be drawn from trends through 1966. Personal income has not grown as rapidly in metropolitan areas as in nonmetropolitan areas. Nationwide, total personal income between 1957 and 1966 increased at an average annual rate of 6.3 percent in nonmetropolitan areas and 6.1 percent in metropolitan areas. Similarly, per-capita incomes also grew at rates favoring the nonmetropolitan areas—6 percent in nonmetropolitan areas and 5 percent in metropolitan areas.

The difference is explained in part by manufacturers tending to locate outside metropolitan areas, though in most cases near metropolitan markets. Over that decade, manufacturing payrolls grew 7.1 percent in nonmetropolitan areas, compared with 5.6 percent in metropolitan areas. Trade and service payrolls rose faster in metropolitan than in nonmetropolitan areas, but only slightly.

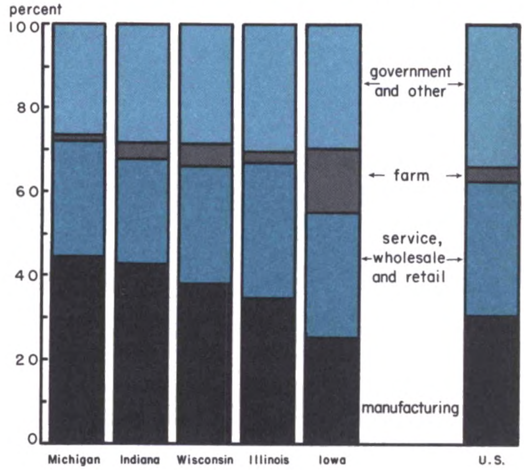
Income in urban areas of the district has grown apace with these developments. Between 1959 and 1966, total personal income in the district's metropolitan areas grew at the average annual rate of 6.3 percent—exactly the same as the national average for metropolitan areas. At 5.8 percent, the average rate of growth in per-capita income was greater than the national trend.

The fastest rises in total personal income in the district metropolitan areas were in Ann Arbor, Michigan, and Champaign-Urbana, Illinois—average annual gains of 8.6 and 8.2 percent, respectively. It is significant that both are cities with large universities. In both cases, the service sector associated with the operation of the university grew faster than the area as a whole. Yet, in both cases, manufacturing played a role uncommon for metropolitan areas. Manufacturing payrolls grew 10.8 percent a year in Ann Arbor and 9.7 percent in Champaign-Urbana, which was not only faster than growth overall but faster than growth in the university sector.

Madison, Wisconsin, is another area including a large university that has had rapid income growth. With an average annual rise of 6.8 percent, personal income has increased more in Madison than in any other metropolitan area in Wisconsin. But without the added impetus of unusually active manufacturing, it has not matched the records of Ann Arbor and Champaign-Urbana. Manufacturing payrolls in the area increased 7.2 percent a year, well above the national average but far short of the gains in the two other areas.

The district has a large proportion of metropolitan areas with high incomes. Of

Manufacturing accounts for more than 40 percent of income in Indiana and Michigan



the 25 with the highest per-capita incomes, eight are located in the district—Chicago and Rockford, Illinois; Ann Arbor and Detroit, Michigan; Milwaukee, Wisconsin; and Cedar Rapids, Des Moines, and Waterloo, Iowa. With three of its five SMSAs ranking among the top 25, Iowa has a greater concentration of high per-capita income SMSAs than any other state in the nation.

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The **1968 Economic Fact Book,** an updated edition of a similar volume published in 1966, contains information on financial, business, and agricultural activity in the five states of the Seventh District. Single copies can be obtained by writing to the bank.

Business Conditions

a review by the Federal Reserve Bank of Chicago

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