## COMMERCIAL PAPER

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Commercial paper is a short-term unsecured promissory note that is generally sold by large corporations on a discount basis to institutional investors and to other corporations. Since commercial paper is unsecured and bears only the name of the issuer, the market has generally been dominated by large corporations with the highest credit ratings. In recent years commercial paper has attracted much attention because of its rapid growth and its use as an alternative to short-term bank loans. The number of firms issuing commercial paper rose from slightly over 300 in 1965 to about 1,000 in 1980. Moreover, the outstanding volume of commercial paper increased at an annual rate of 12.4 percent during the 1970s to a level of \$123 billion in June 1980. This article describes the commercial paper market, focusing primarily on the 1970s, the period of greatest change and growth.

Market Characteristics The principal issuers of commercial paper include finance companies, nonfinancial companies, and bank holding companies. These issuers participate in the market for different reasons and in different ways. Finance companies raise funds on a more-or-less continuous basis in the commercial paper market to support their consumer and business lending. These commercial paper sales in part provide interim financing between issues of long-term debentures. Nonfinancial companies issue commercial paper at less frequent intervals than do finance companies. These firms issue paper to meet their funding requirements for short-term or seasonal expenditures such as inventories, payrolls, and tax liabilities. Bank holding companies use the commercial paper market to finance primarily bankingrelated activities such as leasing, mortgage banking, and consumer finance.

Denominations and Maturities Like other instruments of the money market, commercial paper is sold to raise large sums of money quickly and for short periods of time. Although sometimes issued in denominations as small as \$25,000 or \$50,000, most commercial paper offerings are in multiples of \$100,000. The average purchase size of commercial paper is about \$2 million. The average issuer has

\$120 million in outstanding commercial paper; some of the largest issuers individually have several billion dollars in outstanding paper.

Exemption from registration requirements with the Securities and Exchange Commission reduces the time and expense of readying an issue of commercial paper for sale. Almost all outstanding commercial paper meets the conditions for exemption, namely: (1) that it have an original maturity of no greater than 270 days and (2) that the proceeds be used to finance current transactions. The average maturity of outstanding commercial paper is under 30 days, with most paper falling within the 20- to 45-day range.

Placement Issuers place commercial paper with investors either directly using their own sales force or indirectly using commercial paper dealers. The method of placement depends primarily on the transaction costs of these alternatives. Dealers generally charge a one-eighth of one percent commission on face value for placing paper. Therefore, if a firm places \$100 million in commercial paper using the intermediary services of a dealer, commissions would cost \$125 thousand. There are six major commercial paper dealers.

Firms with an average amount of outstanding commercial paper of several hundred million dollars or more generally find it less costly to maintain a sales force and market their commercial paper directly. Almost all direct issuers are large finance companies. The short-term credit demands of nonfinancial companies are usually seasonal or cyclical in nature, which lessens the attractiveness of establishing a permanent commercial paper sales staff. Consequently, almost all nonfinancial companies, including large ones, rely on dealers to distribute their paper.

There is no active secondary market in commercial paper. Dealers and direct issuers may redeem commercial paper before maturity if an investor has an urgent demand for funds. However, dealers and direct issuers discourage this practice. Early redemptions of commercial paper rarely occur primarily because the average maturity of commercial paper is so short. One major commercial paper dealer estimates that only about two percent of their outstanding commercial paper is redeemed prior to maturity.

Table I

Quality Ratings The one thousand or so firms issuing paper obtain ratings from at least one of three services, and most obtain two ratings. The three rating companies that grade commercial paper borrowers are Moody's Investors Service, Standard & Poor's Corporation, and Fitch Investor Service. Table I shows the number of companies rated by Moody's, classified by industry. This table, covering 881 issuers, gives a good indication of the industry grouping of issuers. Moody's describes its ratings procedure as follows:

Moody's evaluates the salient features that affect a commercial paper issuer's financial and competitive position. Our appraisal includes, but is not limited to the review of factors such as: quality of management, industry strengths and risks, vulnerability to business cycles, competitive position, liquidity measurements, debt structure, operating trends, and access to capital markets. Differing weights are applied to these factors as deemed appropriate for individual situations.<sup>1</sup>

The other rating services use similar criteria in evaluating issuers. From highest to lowest quality, paper ratings run: P-1, P-2, P-3 for Moody's; A-1, A-2, A-3 for Standard & Poor's; and F-1, F-2, F-3 for Fitch. For all rating services as of mid-1980, the average distribution of outstanding commercial paper for the three quality gradations was about 75 percent for grade 1, 24 percent for grade 2, and 1 percent for grade 3. As will be discussed below, the difference in ratings can translate into considerable differences in rates, particularly during periods of financial stress.

The multifaceted rating system used by Moody's reflects the heterogeneous financial characteristics of commercial paper. Paper of different issuers, even with the same quality rating, is not readily substitutable. Consequently, commercial paper tends to be difficult to trade, and bid-asked spreads on paper of a particular grade and maturity run a wide  $\frac{1}{18}$  of a percentage point.

Backup Lines of Credit In most cases, issuers back their paper 100 percent with lines of credit from commercial banks. Even though its average maturity is very short, commercial paper still poses the risk than an issuer might not be able to pay off or roll over maturing paper. Consequently, issuers use a variety of backup lines as insurance against periods of financial stress or tight money. These credit lines are contractual agreements that are tailored to issu-

# INDUSTRY GROUPING OF COMMERCIAL PAPER ISSUERS RATED BY MOODY'S

November 3, 1980

	Number of Firms	Percentage of Total
Industry Grouping	Rated	Firms Rated
Industrial	370	42.0
Public Utilities	193	21.9
Finance	155	17.6
Bank Holding	119	13.6
Mortgage Finance	. 9	1.0
Insurance	25	2.8
Transportation	10	1.1
Total	881	100.0

Source: Moody's Bond Survey, Annual Review.

ers' needs. Standard credit line agreements allow commercial paper issuers to borrow under a 90-day note. Swing lines provide funds over very short periods, often to cover a shortfall in the actual proceeds of paper issued on a particular day. Revolving lines of credit establish credit sources that are available over longer periods of time, usually several years.

Noninterest Costs of Issuing Commercial Paper There are three major noninterest costs associated with commercial paper: (1) backup lines of credit, (2) fees to commercial banks, and (3) rating services fees. Payment for backup lines is usually made in the form of compensating balances, which generally equal about 10 percent of total credit lines extended plus 20 percent of credit lines activated. Instead of compensating balances, issuers sometimes pay straight fees ranging from 3/8 to 3/4 percent of the line of credit; this explicit pricing procedure has been gaining acceptance in recent years. Another cost associated with issuing commercial paper is fees paid to the large commercial banks that act as issuing and paying agents for the paper issuers. commercial banks handle the paper work involved in issuing commercial paper and collect the proceeds from an issue to pay off or roll over a maturing issue. Finally, rating services charge fees ranging from \$5,000 to \$25,000 per year to provide ratings for issuers. Foreign issuers pay from \$3,500 to \$10,000 per year more for ratings, depending on the rating service.

<sup>&</sup>lt;sup>1</sup> Sumner N. Levin, ed., **The 1979 Dow Jones-Irwin Business Almanac** (Homewood, Ill.: Dow Jones-Irwin, 1979), pp. 256-57.

Investors Investors in commercial paper include money center banks, nonfinancial firms, investment firms, state and local governments, private pension funds, foundations, and individuals. In addition, savings and loan associations and mutual savings banks have recently been granted authority to invest up to 20 percent of their assets in commercial paper. These groups may buy commercial paper from dealers or directly from issuers, or they may buy shares in short-term investment pools that include commercial paper. Except for scattered statistics, the distribution of commercial paper held by the various investor groups is not precisely known. At year-end 1979 all manufacturing, mining, and trade corporations held outright over \$11 billion in commercial paper. A substantial but undocumented amount is held by utilities, communications, and service companies. Commercial banks held approximately \$5 billion in their loan portfolios, while insurance companies had about \$9 billion. Much commercial paper, about one-third of the total amount outstanding or \$40 billion, is held indirectly through short-term investment pools, such as money market funds and short-term investment funds operated by bank trust departments. At year-end 1979, short-term investment pools held 32.5 percent of all outstanding commercial paper.

History of Commercial Paper Commercial paper has a history that extends back to colonial times, prior to the existence of a banking system in America. The precursor of commercial paper was the domestic bill of exchange, which was used to finance trade as early as the beginning of the eighteenth century.<sup>2</sup> Bills of exchange allowed the safe and convenient transfer of funds and provided a short-term loan between the time of purchase and payment for goods. As financial intermediation evolved, banks and paper brokers began discounting paper. The supply of negotiable paper was held by commercial banks or by entrepreneurs investing surplus funds.

In marked contrast to today's commercial paper market, firms that relied upon commercial paper in earlier times were usually inferior credit risks that could not obtain bank credit. Reflecting this difference in credit risk, commercial paper rates in the early nineteenth century were much higher than bank lending rates. Another basic difference between the early and contemporary commercial paper markets

is the type of obligation commercial paper represented. Up until the mid-nineteenth century, paper bore both the names of the buyer of goods (the commercial paper issuer) and the seller of goods (the commercial paper drawee), and was issued in odd denominations according to the value of the underlying transaction being financed. Hence, commercial paper was called two-name because if the issuer failed to pay an investor upon maturity of his outstanding paper, it became the obligation of the drawee. As trade and financing practices changed after the Civil War, commercial paper began to be issued extensively as one-name paper, i.e., paper was only the issuer's obligation.3 Also, the face value of the paper was unrelated to a specific purchase or shipment of goods and was instead issued in round lot denominations.

From the last quarter of the nineteenth century until the early twentieth, commercial paper allowed borrowers and investors to take advantage of substantial seasonal and more persistent interest rate differentials that existed in different regions of the country. Because of the decentralized banking system that restricted individual banks to particular states and even localities, banks could not readily exploit regional interest rate differentials. However, commercial paper was marketed throughout the country. Commercial banks were able to invest in commercial paper issued in high interest rate areas. Similarly, firms could obtain funds more cheaply by selling commercial paper to banks in low interest rate areas instead of relying entirely on local bank loans.<sup>4</sup>

In the 1920s, commercial paper borrowers included manufacturers, wholesalers, and retailers in a wide variety of product lines. There were about 4,400 firms borrowing in the commercial paper market as a seasonal supplement to bank credit, which was the primary source of funds. Virtually all paper was handled by dealers. Finance companies emerged as major commercial paper borrowers as the automobile industry, sales finance, and small-loan companies grew in importance. In 1920, the largest sales-finance company, General Motors Acceptance Corporation, began to place its paper directly with investors and set maturities specified by investors. Other large finance companies began direct placement about a decade later.

<sup>&</sup>lt;sup>2</sup> A bill of exchange is an order written by a seller instructing a buyer to pay the seller a specified sum of money on a specified date.

<sup>&</sup>lt;sup>3</sup> For an extensive account of commercial paper's early history, see Albert O. Greef, **The Commercial Paper House in the United States** (Cambridge: Harvard University Press, 1938), pp. 3-114.

<sup>4</sup> Greef, pp. 46, 55, 412-14.

Commercial banks held by far the largest portion of commercial paper outstanding, which served as a secondary reserve asset. Although no secondary market existed in commercial paper, banks nonetheless regarded paper as highly liquid because the impersonal nature of the credit usually meant there would be no requests for extensions or renewals. Moreover, paper provided banks with an opportunity to diversify their portfolios by industry and geographical area. After 1914, some categories of paper became eligible for discount by the Federal Reserve, which further increased commercial paper's liquidity.

Although the volume of directly placed paper increased during the 1920s, the total volume of paper outstanding declined. The outstanding volume of commercial paper fell precipitously between 1929 and 1932 from \$420 million to \$94 million, as the demand for business credit fell sharply in the Great Depression. In addition, the number of issuers diminished from several thousand to several hundred. From 1933 to the outbreak of World War II, the amount of commercial paper outstanding increased fairly steadily to \$840 million, reflecting improvement in the general economy, the growing role of consumer credit in financing consumer durables, and the rapid rise of finance companies. Consequently, by 1941 commercial paper outstanding had returned to the levels of the first half of the 1920s. There was a decline in outstanding commercial paper from 1941 to 1945, however.

The immediate postwar period brought a resurgence in the commercial paper market and by 1951 the market recovered almost to its 1920 peak. The market had changed substantially, however. On the issuer side of the market, directly placed paper, predominantly paper issued by the three largest finance companies, rose to about two-thirds of all paper outstanding by the early 1950s from about only onefifth at the trough of the Great Depression. - On the investor side, nonfinancial corporations were now beginning to invest liquid assets in commercial paper instead of placing them strictly in demand deposit accounts. Banks were simultaneously relying to a much greater extent on Treasury securities as secondary reserve assets and were no longer the principal purchasers of commercial paper.

Developments Since the Mid-1960s Two events stimulated growth in commercial paper in the 1960s. First, during the last three quarters of 1966, interest rates rose above Regulation Q ceilings on bank negotiable certificates of deposit (CDs), making it difficult for banks to raise funds to meet the strong

corporate loan demand existing at that time. Without sufficient funds to lend, banks encouraged their financially strongest customers to issue commercial paper and offered back-up lines of credit. Many potential commercial paper borrowers who formerly relied exclusively on bank short-term credit now turned to the commercial paper market. Consequently, the annual growth rate of total outstanding commercial paper rose from 7.8 percent in 1965 to 46.6 percent in 1966.

Second, credit market tightness recurred in 1969 as open market interest rates rose above Regulation Q ceilings, again boosting growth in commercial paper. Financial innovation by banks contributed to this growth. The banking system sold commercial paper through bank holding companies, which used the funds to purchase part of their subsidiary banks' loan portfolios. This method of financing new loans resulted in rapid growth in bank-related commercial paper during late 1969 and early 1970, as is seen in Chart 1. The annual growth rate of total outstanding commercial paper more than doubled to 54.7 percent In August 1970, the Federal Reserve System imposed a reserve requirement on funds raised in the commercial paper market and channeled to a member bank by a bank holding company, or any of its affiliates or subsidiaries.<sup>5</sup> As a result, bank related commercial paper outstanding plummeted late in 1970 and early in 1971. This episode, however, marked only the beginning of bank use of commercial paper, which would regain prominence by the mid-1970s.

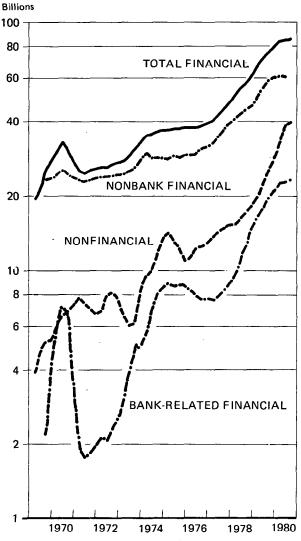
The Penn Central Crisis The commercial paper market grew steadily during the 1960s. Only five defaults occurred during this decade, the largest of which amounted to \$35 million. In 1970, however, the commercial paper market was rocked by Penn Central's default on \$82 million of its outstanding commercial paper. The default caused investors to become wary of commercial paper issuers and more concerned about their credit worthiness. aftermath of the Penn Central default, many corporations experienced difficulty refinancing their maturing commercial paper. Financial disruption was lessened due to a Federal Reserve action which removed Regulation Q interest rate ceilings on 30to 89-day CDs and temporarily liberalized the discount policy for member banks. These actions insured that funds were available from commercial banks to provide alternative financing for corporations having difficulty rolling over commercial paper.

<sup>&</sup>lt;sup>5</sup> See page 17 and footnote 6.

After the Penn Central episode, investors became more conscious of credit worthiness and more selective in their commercial paper purchases. During this period, the heightened concern over credit worthiness was evidenced by a widening rate spread between the financially strongest and weakest paper issuers. Although some paper had been rated long before the Penn Central crisis, paper was now rated on a widespread basis.

Interest Rate Controls Wage and price controls imposed during the early 1970s dampened the growth of the commercial paper market. On October 15, 1971, the Committee on Interest and Dividends (CID) established voluntary restraints on

Chart 1
OUTSTANDING COMMERCIAL PAPER



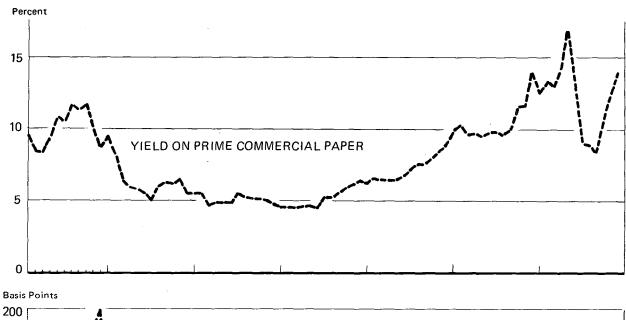
Source: Board of Governors of the Federal Reserve System.

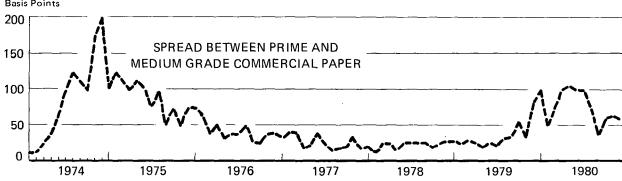
"administered" rates, such as the prime rate. No restraints were placed on open market rates, however. This policy triggered flows of funds between controlled and uncontrolled credit markets as the relationship between administered rates and market rates changed. As interest rates rose in 1972, banks came under pressure from the CID to moderate their prime rate increases. By early 1973, the prime rate was held artificially below the commercial paper rate as a consequence of CID policy. Nonfinancial firms substituted short-term bank credit for funds raised through commercial paper issues. Consequently the volume of nonfinancial commercial paper outstanding fell sharply during the first and second quarters of 1973, as is seen in Chart 1. In April of 1973, the CID tried to stem the exodus from the commercial paper market by establishing a dual prime rate. One rate for large firms moved with open market rates, while the other for smaller firms was controlled. Despite these measures, the spread between commercial paper rates and the prime rate persisted and substitution out of paper continued. In the fourth quarter of 1973 CID controls were removed and the commercial paper rate dropped below the prime rate. causing substantial growth in commercial paper. This growth continued throughout 1975.

The 1973-75 Period The recession of 1973-75 strained the paper market as investors became increasingly concerned about the financial strength of commercial paper issuers. Reflecting this concern, the quality rate spread (the difference between the interest rates on highest quality paper and medium quality paper) rose from about 12 basis points in January 1974 to 200 basis points in November of that year. Chart 2 shows movements in the quality spread from 1974 to 1980. Utility companies experienced problems selling commercial paper as their ratings were downgraded. Real Estate Investments Trusts (REITs) were another group to encounter problems in the commercial paper market. Loan defaults and foreclosure proceedings early in the recession led to financial difficulties and resulted in a downgrading of REIT paper. As a result, many REITs and utilities were forced to turn to bank credit.

Bank holding companies also experienced difficulty issuing commercial paper in the spring of 1974. The failure of Franklin National Bank caused widespread concern about the strength of other banking organizations. As a consequence, smaller bank holding companies in particular found it hard to place their paper. Nonetheless, the aggregate volume of outstanding bank-related commercial paper remained

Chart 2
YIELDS AND SPREADS ON 30—DAY COMMERCIAL PAPER





Source: Salomon Brothers.

relatively unchanged during this period of uncertainty. In general, the strongest paper issuers with prime ratings sold their paper without problems during the 1973-75 recession, although less financially sound issuers had to pay a premium to acquire funds in the commercial paper market.

The Late 1970s After the 1973-75 recession the commercial paper market grew rapidly. The volume of outstanding nonfinancial commercial paper expanded at a 31.9 percent compound annual rate from the first quarter of 1976 to the first quarter of 1980. Over the same period, nonbank financial paper grew at a 20.1 percent compound annual rate and bank-related paper at a 27.9 percent annual rate. The number of commercial paper issuers increased substantially as well. For example, issuers rated by Moody's Investor Service increased from 516 at year-end 1975 to 881 at year-end 1980.

The recent rapid growth in the commercial paper market owes much to the secular substitution of short-term for long-term debt, which accelerated because of the high rate of inflation in the late 1970s. Volatile interest rates due to uncertainty about the future rate of inflation make firms hesitant to structure their balance sheets with long-term, fixed rate assets and liabilities. In addition, because of inflation's debilitating effects on equity markets, debt has grown more than twice as fast as equity during the past decade. On the demand side, investors also have become wary of long-term fixed rate securities because of the uncertainty about the real rate of return on such commitments of funds. Therefore. funds have tended to flow away from the capital markets and into the money markets. A large share of these funds have been channeled into the commercial paper market.

Nonfinancial Paper As nonfinancial firms acquired familiarity with open market finance during the 1970s, they gradually reduced their reliance on short-term bank loans. This is understandable since use of open market funds offers the potential for substantial savings to corporate borrowers compared to the cost of bank credit. Large commercial banks' primary source of funds for financing loans is the CD market, where interest rates are roughly equal to commercial paper rates. In addition, the cost of funds to commercial banks includes reserve requirements.6 Noninterest/ expenses associated with lending also add to the cost of bank operations. These various costs drive a wedge between open market and bank lending rates, and the spread between the prime rate and the commercial paper rate is a good proxy for the difference in financing costs facing companies that need funds.

Large, financially sound nonfinancial firms, therefore, have relied to an increasing extent on the commercial paper market for short-term credit. The ratio of nonfinancial commercial paper to commercial and industrial (C&I) loans at large commercial banks, rose from about 11 percent in the mid-1970s to almost 25 percent in 1980. Chart 3 shows the movements in the ratio of paper to loans from 1972 to 1980.

Banks reacted to this loss of market share by becoming more aggressive in pricing loans. 1979, for example, some banks have begun making loans below the prime rate. In a Federal Reserve Board survey of 48 large banks, the percentage of below prime loans rose from about 20 percent of all commercial loan extensions in the fourth quarter of 1978 to about 60 percent by the second quarter of 1980. Most of these loans were extended at rates determined by cost of funds formulas. In addition, the average maturity of loans over \$1 billion, which make up almost half of all C&I loans in volume, fell from about 3 months in 1977 to a low of 1.2 months in August 1980. Loans below prime had an average maturity of well under one month. These below prime loans were in the same maturity range as the average maturity for commercial paper.

Aside from becoming more competitive with the commercial paper market, banks have tried at the

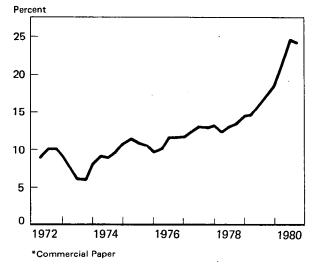
same time to provide services to support their customers' commercial paper issues. Some banks have offered customers more flexible short-term borrowing arrangements to allow commercial paper issuers to adjust the timing of their paper sales. Morgan Guaranty Trust Company, which originated this service, calls its open line of credit a "Commercial Paper Adjustment Facility" and prices the service below the prime rate. Commercial banks also provide back-up lines of credit and act as issuing agents, as discussed above.

In summary, competition with the commercial paper market is changing the lending practices of commercial banks. Although banks still extend a large volume of short-term business loans, the profitability of loans to their largest customers has been reduced partly because of competition with the commercial paper market, and some commercial bank activity now focuses on supporting the issuance of their customers' commercial paper.

Financial Paper Since the 1920s, finance companies have been important participants in the commercial paper market. They provide much of the credit used to finance consumer purchases. Historically, around 20 percent of outstanding consumer credit has come from finance companies. Finance companies also supply a large and growing amount of business credit such as wholesale and retail financing of inventory, receivables financing, and commercial and leasing financing. About half of all the credit

Chart 3

### RATIO OF NONFINANCIAL CP\*TO C&I LOANS OF LARGE WEEKLY REPORTING COMMERCIAL BANKS



Source: Board of Governors of the Federal Reserve System.

<sup>6</sup> The following example illustrates how reserve requirements on CDs increases the cost of funds to banks. Suppose the reserve requirement against CDs is 3 percent and a bank's CD offers a 12 percent yield. Then for every dollar obtained through the CD, only 97 cents are available to lend. The funds idled as reserves increase the effective cost of funds raised by issuing a CD. In this example, the additional cost imposed by the reserve requirement is 37 basis points, i.e., 12 + .97 = 12.37.

extended by finance companies goes to businesses, predominantly to small- and medium-sized firms.

The primary source of short-term funds for finance companies is sales of commercial paper. In fact, the outstanding commercial paper liabilities of finance companies were about five times as large as their bank loans in the late 1970s. Like nonfinancial companies, finance companies since the mid-1960s gradually increased the proportion of borrowing in the commercial paper market compared to short-term borrowing from commercial banks.

As seen in Chart 1, nonbank financial paper constitutes the largest proportion of outstanding commercial paper. Sixty percent of all commercial paper is directly placed and the greatest proportion of this is finance company paper. Finance company paper, however, is issued by only a small fraction of the total number of finance companies. According to the Federal Reserve Board's Survey of Finance Companies, 1975, 88 of the largest finance companies out of a total of about 3,400 such firms issued 97 percent of all finance company paper and extended 90 percent of total finance company credit.

The outstanding volume of bank-related financial paper has been extremely volatile compared to nonbank financial paper. As mentioned above, this market received a major jolt when the Federal Reserve imposed reserve requirements on bank-related commercial paper issues in August 1970. Growth in outstanding bank-related commercial paper resumed by mid-1971, however. This growth corresponded with record acquisitions of nonbank firms by bank holding companies, which peaked at 332 nonbank firms acquired in 1973 and 264 firms in 1974. Some of the primary activities of these newly acquired subsidiaries are commercial finance, factoring, and leasing. The 1973-75 recession curtailed the growth in bank paper, but growth resumed its upward trend by 1976 and has continued strongly since.

New Directions for the Commercial Paper Market Recently several new groups of issuers have entered the commercial paper market. These include foreign banks, multinational corporations, and public utilities; thrift institutions; second tier issuers relying on guarantees from supporting entities; and taxexempt issuers. These issuers have found the commercial paper market to be a flexible and attractive way to borrow short-term funds.

Foreign Issuers Foreign participation in the commercial paper market has been growing and will probably continue to be an important source of new growth. As of year-end 1980, Moody's rated 70

foreign issuers, which collectively had about \$7 billion in outstanding commercial paper. These issuers fall into three general categories: foreign-based multinational corporations, nationalized utilities, and banks. Some large foreign multinational corporations issue paper to finance their operations in the United States. Others borrow to support a variety of activities that require dollar payments for goods and services. Nationalized utilities have been major borrowers in the commercial paper market largely because their purchases of oil require payment in dollars. Finally, foreign banks raise funds for their banking activity or act as guarantors for the commercial paper of their clients by issuing letters of credit. These banks have been among the most recent entrants into the market.

The commercial paper market is often the cheapest source of dollars for foreign issuers. A major alternative source of dollar borrowing is the Eurodollar market, where rates are generally linked to the London Interbank Offered Rate (LIBOR). Many foreign banks, for example, obtain funds in the commercial paper market for ¼ percent or more below LIBOR. Aside from cost considerations, another important motivation behind foreign participation in the commercial paper market is foreign issuers' interest in obtaining ratings and gaining acceptance with the American financial community. The exposure from selling paper helps to broaden a foreign issuer's investor base and prepares the way for entering the bond and equity markets.

Two obstacles to foreign participation in the commercial paper market are obtaining prime credit ratings and coping with foreign withholding taxes on interest paid to investors outside the country. Ratings below top quality wipe out the cost advantage of raising short-term funds in the commercial paper market. To date, for example, no foreign banks have issued paper with less than top ratings.

Withholding taxes on interest paid to investors outside the country also may eliminate commercial paper's cost advantage over the Eurodollar market. These taxes are intended to curtail short-term capital outflows and are used in France, Belgium, Australia, Canada, and other countries. For foreign issuers' commercial paper to be marketable, the issuer must bear the cost of the withholding tax. The tax therefore raises the cost of acquiring funds using commercial paper.

By taking advantage of loopholes and technicalities in the withholding tax laws, foreign issuers often circumvent these laws. For example, the nationalized French electric company, Electricite de France, one of the largest foreign or domestic paper issuers, has its commercial paper classified as long-term debt, which is not subject to France's 15 percent withholding tax on interest. The reason for this classification is that the utility backs its paper with a 10-year revolving credit facility from its banks that establishes the commercial paper borrowing as long-term debt. French banks use a different approach to take advantage of a withholding tax exemption on short-term time deposits like CDs. They set up U. S. subsidiaries to sell commercial paper and then transfer the proceeds to the French parent banks by issuing CDs to their U. S. subsidiaries.

In general, foreign issuers pay more to borrow in the commercial paper market than domestic issuers for two reasons. First, almost all foreign commercial paper issues have a sovereign risk associated with the issuer that results from additional uncertainty in the investor's mind about the probability of default on commercial paper because of government intervention, political turmoil, economic disruption, etc. This uncertainty creates a risk premium which increases the interest rate on foreign issues relative to domestic issues. The size of the premium depends on the issuer, the country, and the level of interest rates. A second source of additional costs arises when foreign issuers pay to establish and operate U. S. subsidiaries to issue paper and, in the case of foreign banks, incur reserve requirement costs on commercial paper issues. In addition, rating service fees are higher for foreign issuers than for domestic issuers. as mentioned earlier. Nevertheless, the commercial paper market is proving to be the least expensive source of short-term dollar funds for an increasing number of foreign borrowers.

Thrift Commercial Paper Both savings and loan associations and mutual savings banks have recently been allowed to borrow funds in the commercial paper market. Mutual savings banks (MSBs) had the authority to issue commercial paper, but faced restrictions on advertising, interest payments, and minimum maturity that effectively prevented them from issuing commercial paper. On March 3, 1980 the Federal Deposit Insurance Corporation (FDIC) removed the restrictions and thereby cleared the way for MSB participation in the commercial paper market. The FDIC ruled that MSB commercial paper must be unsecured, have a maximum maturity of nine months, sell at a minimum price of \$100,000, state that it is uninsured by FDIC, and bear a notice that the instrument will pay no interest after maturity. Despite the relaxation of restrictions, as of early 1981 no MSBs have issued paper. The failure of MSBs to issue commercial paper has been largely due to impaired MSB earnings, which make it difficult to obtain the high credit ratings necessary to realize the cost advantage in borrowing in the commercial paper market.

Savings and loan associations have had access to the commercial paper market since January 1979. when the Federal Home Loan Bank Board approved the first applications for S&Ls to issue commercial paper and short-term notes secured by mortgage S&Ls use commercial paper principally to finance seasonal surges in loan demand and to finance secondary mortgage market operations. Commercial paper allows greater flexibility for S&Ls in managing liquidity because they can borrow large amounts of cash quickly and for periods as short as five days. Relatively few S&Ls carry commercial paper ratings. Of the 60 or so large S&Ls expected to participate in the market after the FHLBB approved the first applications, only 12 had ratings from Moody's as of mid-1980, though all were P-1. These S&Ls collectively had \$327 million in outstanding commercial paper as of mid-1980.

The attractiveness of commercial paper for S&Ls and MSBs has been sharply diminished as a result of the Monetary Control Act of 1980. Under the Act, commercial paper is considered a reservable liability, except when issued to certain exempt investors such as depository institutions. S&Ls and MSBs have to hold reserves in the ratio of 3 percent against outstanding commercial paper, which is classified as a nonpersonal time deposit. Reserve requirements increase the cost of funds raised through commercial paper and consequently reduce the incentive for S&Ls and MSBs to issue paper.

Support Arrangements Many lesser known firms gain access to the commercial paper market through financial support arrangements obtained from firms with the highest credit ratings. Second tier issuers frequently issue paper by obtaining a letter of credit from a commercial bank. This procedure substitutes the credit of a bank for that of the issuer and thereby reduces the cost of issuing commercial paper. This kind of support arrangement is known as "commercial paper supported by letter of credit" and resembles bankers' acceptance financing except that the issuance of commercial paper is not associated with the shipment of goods. Because the letter of credit is appended to the commercial paper note, commercial paper supported by letter of credit is alternatively referred to as a "documented discount note." Typically, letters of credit are valid for a specific term or are subject to termination upon written notice by either party. To have a commercial bank stand ready to back up an issue of paper, an issuer must pay a fee that ranges from one-quarter to threequarters of a percentage point.

Although commercial paper with letter of credit support reached an outstanding volume of about \$2 billion by mid-1980, this segment of the market is still comparatively small. Many issuers of letter of credit commercial paper are subsidiaries of larger corporate entities. These second tier issuers include firms involved in pipeline construction, vehicle leasing, nuclear fuel supply, and power plant construc-Other commercial paper issuers also have acquired letter of credit support from commercial banks, particularly during the period of restricted credit growth in early 1980. Issuers whose ratings were downgraded faced difficulty selling their paper and paid substantial premiums over high grade paper. Buying a letter of credit from a commercial bank reduced their borrowing costs in the commercial paper market and still offered a cheaper alternative to short-term bank loans.

Other supporting entities that provide guarantees or endorsements are insurance companies, governments for government-owned companies, and parent companies for their subsidiaries. For example, the commercial paper of the nationalized French utilities, such as Electricite de France, carries the guarantee of the Republic of France. Guarantees or endorsements by parent companies for their subsidiaries are the most prevalent form of support arrangement.

Tax-Exempt Paper One of the most recent innovations in the commercial paper market is tax-exempt paper. Except for its tax-exempt feature, this paper differs little from other commercial paper. To qualify for tax-exempt status the paper must be issued by state or municipal governments, or by qualified non-profit organizations. Like taxable commercial paper, tax-exempt paper is also exempt from Securities and Exchange Commission registration provided the paper matures within 270 days. Most tax-exempt paper matures within 15 to 90 days. These short-term debt obligations are alternatively known as short-term revenue bonds or short-term interim certificates.

The outstanding volume of tax-exempt paper has grown rapidly, rising from an insignificant amount in 1979 to about \$500 million in 1980. It will probably exceed \$1 billion in 1981. Much of the demand for tax-exempt paper comes from short-term tax-exempt funds, which had assets of \$1.5 billion in mid-1980, and from bank trust departments. Many

mutual fund groups are setting up tax-exempt money market funds in response to the apparent increasing demand for this type of investment. A current shortage of tax-exempt commercial paper has depressed the yields on outstanding issues, making this instrument especially attractive to tax-exempt issuers. However, constraints on public agency use of short-term debt in some states may continue to limit the supply of tax-exempt commercial paper.

Conclusion The commercial paper market has served the short-term financing needs of several groups of borrowers to an increasing degree in recent years. Many nonfinancial companies, especially large firms, have substituted commercial paper for shortterm bank loans to satisfy their working capital requirements. Commercial paper has generally been a less costly financing alternative than bank short-term credit for these firms. Finance companies have relied to a greater extent on commercial paper than nonfinancial companies for short-term financing and have issued the greatest proportion of outstanding commercial paper. Most large finance companies realize economies of scale by placing commercial paper directly with investors. Bank holding companies also have depended on the paper market to finance their banking-related activities, which increased in size and scope during the 1970s.

Other types of issuers have been recently attracted to the commercial paper market because of the potential saving in interest costs over alternative ways of borrowing short-term funds. Foreign issuers have sold a substantial amount of commercial paper since entering the market in the mid-1970s. Foreign and domestic issuers who lack sufficient financial strength to offer commercial paper on their own have gained access to the market via support arrangements with stronger financial or corporate entities. Tax-exempt issuers are expected to increase in number and generate larger supplies of tax-exempt paper. Thrift institutions, on the other hand, probably will not make much use of the market in the future because recently imposed reserve requirements on commercial paper have reduced its cost-advantage over other sources of short-term credit.

Many investors find commercial paper to be an attractive short-term financial instrument. Although corporations and other institutional investors held most outstanding commercial paper in the past, financial intermediation by money market funds and other short-term investment pooling arrangements has given many new investors, especially individuals, indirect access to commercial paper.

#### References

- "A Way to Upgrade Corporate IOUs." Business Week, March 31, 1980.
- Board of Governors of the Federal Reserve System. "Short-Term Business Lending at Rates Below the Prime Rate." Federal Monetary Policy and Its Effect on Small Business, Part 3. Hearings before a Subcommittee on Access to Equity Capital and Business Opportunities of the House Committee on Small Business. U. S. Congress, House. Committee on Small Business, 96th Cong., 2nd sess., 1980, pp. 318-327.
- 3. Chell, Gretchen. "Tax-Exempt Commercial Paper Beginning to Catch on as an Investment Medium." The Money Manager, July 21, 1980.
- 4. "Domestic Financial Statistics." Federal Reserve Bulletin, various issues.
- "FDIC Eases Curbs on Mutuals Issuing Commercial Paper." American Banker, February 7, 1980.
- Grant, James. "Crowding Out Chrysler . . . News in Commercial Paper." Barrons, August 4, 1980.
- Greef, Albert O. The Commercial Paper House in the United States. Cambridge: Harvard University Press, 1938.
- Hildebrand, James L. "Enter Euro-Commercial Paper." Euromoney, July 1980.
- 9. Hurley, Evelyn M. "Survey of Finance Companies, 1975." Federal Reserve Bulletin (March 1976).
- Federal Reserve Bulletin (June 1977).
- Judd, John P. "Competition Between the Commercial Paper Market and Commercial Banks." Economic Review, Federal Reserve Bank of San Francisco (Winter 1979).

- Levin, Sumner N., ed. The 1979 Dow Jones-Irwin Business Almanac. Homewood, Illinois: Dow Jones-Irwin, 1979.
- 13. McKenzie, Joseph A. "Commercial Paper: Plugging into a New and Stable Source of Financing."

  Federal Home Loan Bank Board Journal (March 1979), pp. 2-5.
- 14. Moody's Commercial Paper Record. Monthly Statistical Supplement. Moody's Investors Service, Inc. (November 1980).
- Moody's Commercial Paper Record. Quarterly Reference Edition. Moody's Investors Service, Inc. (Fall 1980).
- Nevins, Baxter D. The Commercial Paper Market. Boston: The Bankers Publishing Company, 1966.
- 17. Puglisi, Donald J. "Commercial Paper: A Primer."

  Federal Home Loan Bank Board Journal, 13

  (December 1980): 4-10.
- Quint, Michael. "Short-Term, Below-Prime Rates to Big Customers Seem Permanent." American Banker, May 2, 1978.
- "Banks Give Paper Issuers New Backup." American Banker, September 27, 1978.
- "Selling Paper Abroad to Skirt a Ratings Cut." Business Week, September 22, 1980.
- 21. Stigum, Marcia. The Money Market: Myth, Reality, and Practice. Homewood, Illinois: Dow Jones-Irwin, 1978.
- "The New Dynamics of the Market for Business Credit." The Morgan Guaranty Survey. March 1978, pp. 6-11.
- "The Rush Into U. S. Paper." Business Week, January 26, 1981.

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