

THE COMMERCIAL-PAPER MARKET

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ABSTRACT

Commercial paper consists of short-term promissory notes which are issued by business firms and finance companies and which are sold in the open market. This form of financing was important in the late nineteenth and early twentieth centuries, but virtually disappeared during the Depression and Second World War. In recent years commercial paper has experienced a very sharp revival and presently there is over \$8 billion of paper outstanding. In light of the renewed importance of commercial paper, the present work investigates the behavior of the participants in this market and attempts to relate commercial paper to the over-all money-market picture.

The study employed personal interviews to pinpoint hypotheses to be analyzed. Three questionnaires (to samples of issuers, investors and banks) were used to uncover quantitative information about actual practices.

The study concludes that the major reason why firms issue commercial paper is that the cost of funds obtained in this manner is typically lower than that on bank loans. There is an interesting distinction between the use made of open-market financing by industrial issuers and by finance companies. For the former group, commercial paper is an instrument to meet well-defined and anticipated seasonal needs, whereas finance companies continually roll-over their paper as a permanent source of finance. The degree of reliance on commercial paper

by both types of issuers is limited by the fact that much short-term borrowing is unforeseen. Since bank loans can be expanded and prepaid rapidly, they are more flexible than commercial paper and thus are used for a substantial portion of short-term finance. The direct placers, who can sell paper of short maturities economically, are able to depend more heavily on commercial paper than are issuers who use dealers.

Paper issuers raise a higher percentage of their funds in the open market in periods when the interest savings is largest. This observation suggests that issuers are somewhat sensitive to cost differentials in shifting from bank loans to commercial paper. Since such cost differentials are typically smallest when money is tight, the shift also implies an inability of some issuers to market paper in periods when the demand for commercial paper as an asset declines.

Commercial paper is widely held as a short-term investment. Commercial banks buy it as a temporary outlet for funds in order to bolster inadequate local loan demand. At present, because demand for direct loans is sufficient in many areas, less than one-third of banks invest in paper. These are mostly smaller institutions. Well over half of the large corporations sampled are presently investors in commercial paper. Increased corporate participation reflects the expanded cash flow and the more sophisticated cash-management policies of recent years. For most corporate investors, commercial paper is an ideal instrument for funds needed to meet large and foreseen outpayments, because paper can always be obtained from the direct placers in the exact amount and in

the specific maturity desired. Unlike competing investments such as Treasury bills and certificates of deposit, however, there is no secondary market in commercial paper. The study concludes that the development of such a secondary market would likely increase the demand for commercial paper by increasing its liquidity for many investors.

PREFACE

Commercial paper consists of short-term promissory notes of business firms and finance companies and is one of the oldest of money-market instruments. These notes are sold in the open market, usually at a discount, and are for maturities up to 270 days. They are generally issued by large well-known firms and are purchased by corporations, banks, and other institutions with excess short-term funds to invest.

Commercial paper had been an important source of finance in the late nineteenth and early twentieth centuries. Outstandings reached a peak in 1920, however, and during the great depression this instrument virtually disappeared from the market. Since World War II commercial paper has experienced a sharp revival, spurred in large part by the growth of the sales-finance industry. In recent years outstandings have reached new heights. In fact, the almost \$7 billion of paper at the end of 1963 was about 6 times the 1920 peak. In light of the renewed importance of commercial paper, this study investigates the behavior of the participants in this market and attempts to relate commercial paper to the over-all money-market picture.

The work is divided into eight chapters. The first provides historical perspective by tracing the major developments which have occurred since the inception of commercial paper as a means of short-term finance. The second chapter deals with the present institutional structure

of the market. Special attention is paid to the operations of participants-- issuers and investors, banks and brokers, and to the position of commercial paper in the spectrum of money-market instruments.

Chapter III focuses on how issuers utilize paper in conjunction with other borrowings to obtain needed short-term finance. The sensitivity of borrowers to relative interest costs and the constraints imposed on their behavior by the necessity to maintain adequate bank relations are analyzed.

Chapters IV and V treat commercial paper as a short-term investment for banks and business corporations, respectively. Historically, commercial banks have been the most important purchasers of commercial paper. In recent years, however, they have given way to business corporations which have channeled part of their greatly expanded cash flow into the commercial-paper market. The decisions of both these investor groups whether or not to purchase paper and their evaluations of paper relative to substitute assets are examined.

Chapter VI considers the possibility of a secondary market in commercial paper. Chapter VII attempts to explain the behavior of the commercial-paper market in periods of monetary restraint and at the end of each calendar year. The concluding chapter summarizes the major findings of the research and suggests a possible orientation for further research.

The study relies heavily on interview and questionnaire techniques. In order to try to obtain an understanding of the functioning of the market, I have spoken at length with issuers, investors, banks and commercial-paper dealers. The interview procedures are described and individual participants are listed in Appendix A. Because the individuals visited are very knowledgeable and have a genuine interest in this project, the interviews were extremely fruitful. I wish to express my sincere thanks to all these people for taking time to discuss their operations with me, frankly and thoroughly.

Three sets of questionnaires were sent out, one to a sample of about 500 banks, another to some 200 large corporations including utilities and life insurance companies, and a third to a sample of about 100 commercial-paper issuers, both finance and industrial. The response to all three questionnaires exceeded 80 percent, and I am very grateful to all the respondents for taking the time to provide the requested information.

This work was done at the Econometric Research Program of Princeton University, which is supported by the Office of Naval Research, the National Science Foundation, various philanthropic institutions, and private industry. I wish to express my appreciation to Oskar Morgenstern, its Director, who has been a source of encouragement and inspiration throughout my years as a graduate student. I have benefitted from the fruits of numerous conversations with my colleagues at the Program,

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Most of the research and writing was performed during the academic year 1963-64 at which time I had the honor of holding a Harold Stonier Fellowship in Banking. I am grateful to the American Bankers Association for their support in this manner and also for an additional research grant which aided in the completion of the study. This work made use of computer facilities supported in part by National Science Foundation Grant NSF-GP579.

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CHAPTER I

HISTORICAL DEVELOPMENT OF THE COMMERCIAL-PAPER MARKET

The commercial-paper market of the present day is characterized by a large volume of financing by a relatively few issuers of paper. Although more than 400 firms currently issue commercial paper, almost three-quarters of the dollar amount outstanding is sold by some 18 large finance companies who place their paper directly with investors, rather than utilizing the intermediary services of a commercial-paper dealer. Moreover, the three largest of these finance companies account for about one-third of the outstandings. The present situation is to be contrasted with that of earlier times when open-market financing was utilized by a much larger number of firms whose credit ratings were often not the highest.

Two striking developments that differentiate today's market from that of forty years ago are the vastly increased importance of finance-company issuers and the growing predominance of nonbank investors in commercial paper. These major changes run parallel to developments in the economy--the growth of consumer credit and increased corporate cash flow. In order to provide a historical perspective for the study which follows, the present chapter traces the development of the commercial-paper market from its beginnings to the present day and analyzes the major changes which have taken place.

In the Beginning¹

The primitive nature of the American financial system in the Colonial Period is well-known to students of economic history. Domestic commercial banks as we know them today did not exist and industry remained rudimentary. As a result, neither the supply of negotiable paper nor the demand for it as an investment was very large. A few large colonial merchants, however, did sell domestic bills of exchange to other merchants who had payments to make in distant cities. These instruments resembled the present-day bankers' acceptance which is commonly used to finance international transactions, but differed insofar as there was no bank "accepting" and thereby putting its credit behind that of the issuers.

To illustrate the nature of this open-market paper, assume a New York merchant (A) had purchased goods from a Boston merchant (B). B received a note payable in New York, and found another Boston firm (C) who was willing to purchase this note because it had payments to make in New York.² Such a bill of exchange served two purposes in colonial times.

¹This section and the following two rely heavily on A. O. Greef - The Commercial Paper House in the United States (Cambridge, Mass.: Harvard University Press, 1938) and on Roy A. Foulke - The Commercial Paper Market (New York: The Bankers Publishing Company, 1931).

²In a modern economy such transactions would ordinarily involve banks. In colonial days, it was necessary to find another merchant to buy the note. A few such transactions have been recorded, some as early as 1704. See Greef, op. cit., pp. 4,5.

First, it was a safe, cheap, and convenient way to "transfer" funds from New York to Boston in an era without banks and in which physical transfer of money was, at best, precarious. Second, the bill of exchange was in actuality, if not in intent, a loan. Firm C was lending B money for the length of time between the purchase of the bill in Boston and its payment in New York. This latter aspect, of course, is the main purpose of present-day open-market paper.

After the American Revolution, commercial banks began to be organized in the United States and they discounted bills of exchange and promissory notes. At this point, the concept of an open-market loan was beginning to emerge. Even in the 1790's commercial-paper brokers began to appear, their function being to bring together buyers and sellers of negotiable paper. By and large, however, in the period before 1800, such dealings were limited to the most important trading-and financial centers and the volume of paper bought and sold remained small, due to the nature of the economy. Nevertheless, the paper brokers did succeed in placing the supply of negotiable paper, either with one of the banks or with private entrepreneurs who had surplus funds to invest.³

³The intermediaries were generally brokers as opposed to dealers, that is, they generally did not buy paper for their own account and sell out of inventory, but instead brought buyer and seller together for a commission. Throughout this work, unless otherwise specified, the two terms will be used interchangeably to describe the intermediary function.

The growth of open-market financing continued through the first half of the nineteenth century. A large group of "note shavers" prospered. Their business involved discounting notes of merchants who could not obtain sufficient funds at banks, and attempting to resell such paper to banks or other investors or alternatively holding it to maturity. The risks of such a business were of course very high, as were the discount rates.⁴

By 1840, interest rates on commercial paper were already being published, a fact which seems to indicate that by this time a fairly broad market had developed. Banks were the chief purchasers of the notes despite the general preference to lend to local industry rather than to make "foreign" loans through the purchase of open-market paper. Also, by this time New York had achieved prominence as the money-market center of the nation. Although activity continued in other centers such as Boston, Philadelphia and New Orleans, New York served as the fulcrum of the commercial-paper business. Moreover, high-quality commercial paper became more common as many prime borrowers began to use the open-market as a supplementary source of short-term funds.

⁴It is interesting to note that this early commercial paper was often issued by a different class of borrowers than those using the open market currently. At present, commercial paper is a source of funds for the best credit risks, all of whom are able to borrow from banks, and the commercial-paper rate is generally below the bank prime rate. The main reason for resorting to the open-market is thus to obtain an interest-cost saving. In the early nineteenth century, however, commercial paper was often a source of funds for inferior credit risks, who could not obtain funds from banks and who thus had to resort to the open-market at onerous rates.

In the pre-Civil War period, open-market paper, whether in the form of bills of exchange or of unsecured promissory notes, was issued mainly by wholesale jobbers, railroads and tobacco companies. Maturities generally ranged from 60 days to 6 or 8 months.⁵ While commercial-paper houses grew in number and in the volume of paper handled, they generally continued to serve as brokers rather than as dealers. Primarily, they accepted paper from local firms with whom they were familiar. Extensive credit investigations were unknown, and were more or less precluded by the primitive nature of accounting and auditing. Largely because of this, paper remained two-named throughout the period before the Civil War, at least one co-signer being required for direct loans from banks as well as for open-market loans.

The steady growth of commercial paper outstandings was, of course, interrupted by the outbreak of the Civil War. Wartime brought very high money rates, numerous business failures especially among trading firms, suspension of specie payments, and rapid price inflation. Under such conditions both the supply of open-market paper and the demand for it as an investment declined substantially and dealers' operations were temporarily curtailed. In addition, the newly chartered national banks were forbidden to invest in commercial paper with a yield above 7 percent and this factor tended to restrict sales of commercial paper.

⁵The current maturities of commercial paper issued by such industrial companies is much the same today. Finance paper, which dominates today's market, is generally of a shorter maturity, very often under 90 days.

From Appomattox to Versailles

In the period just after the Civil War, uncertainty surrounded the national currency. The scarcity of merchandise, the rapid growth of the West and the railroads, and a precarious financial structure led to growth in very short-term financing. One-name direct-borrowing from banks for periods of 30 days became very common. Banks knew their local customers and sought after so-called "self-liquidating" loans,⁶ either through face-to-face transactions or through the purchase of open-market paper. Banks purchased commercial paper through brokers and directly from the industrial firms issuing the notes. Extensive bank credit departments did not exist, so that the paper was purchased largely with the recommendation of the particular bank director who happened to be an "expert" on the industry in question.

The difficulties of the Reconstruction period and the Crisis of 1873 hampered the expansion of all credit. After the depression, rapid increase in production of peacetime consumption goods, and the redemption of specie payments in 1879 led to a lengthening of credit terms and a growth in receivables. To support a period of very rapid economic development, the need for credit by American commercial and industrial firms

⁶The "self-liquidating" loan or "real bill" concept can be best illustrated by the case of the farmer borrowing against crops soon to be brought to harvest or a manufacturer borrowing against work in process. When the final goods are brought to market, the loan becomes "self-liquidating". Though this theory has since come into disrepute, it had a profound effect on commercial and central banking in this country and was embodied in the eligible-paper provisions of the Federal Reserve Act. The difficulty with the self-liquidating concept can be made clear by considering the case of a loan to a manufacturer of high-buttoned shoes on the cost of his work in process, given present-day demand conditions for his product.

substantially increased. The number of banks and the lending capacity of the banking system grew rapidly. In addition, borrowers in all sections of the country began to use the open market as a source of short-term funds. Prime credit risks often discovered that they could obtain money in this manner more cheaply than from their banks. Banks became the chief purchasers of commercial paper and brokers traveled from bank to bank with notes ready for delivery. They bargained with the bankers as to rate and sold notes on the spot, often in odd-dollar-and-cents amounts which corresponded to the exact amount of the accounts payable of the issuing client.

One of the real advantages of open-market financing in the last quarter of the nineteenth century was that it often led to flows of funds in response to interest rate differentials among various sections of the country. In the 1890's interest rates of 8 to 10 percent were common in the South and West whereas 4 to 6 percent were the going rates in the Boston-New York-Philadelphia area. A large number of good credit risks in the South and West were thus able to take advantage of lower rates in the open market than those charged by their local banks. In this way funds flowed to areas where presumably they were more in need. Both in large cities and in the country, commercial banks carried open-market paper as a secondary reserve. These single-named, unsecured notes were carefully selected and generally rated high in terms of safety and liquidity.

At the turn of the century, open-market finance occupied a firm position in the American financial system. Indeed, it was "a steady,

stabilizing force, ever ready to supplement banking and business needs."⁷ At this time, however, a substantial number of bankers still viewed the open market with suspicion. The behavior of commercial paper during the Panic of 1907 confirmed the faith of the investing institutions in the safety and liquidity of this instrument, if carefully selected. At a time when highest grade stocks and bonds could be sold only at a heavy sacrifice, and when call loans were virtually impossible to liquidate, the bulk of commercial-paper notes was paid promptly at maturity, without loss to holders and without any pressure for renewal. Banks which held such notes at this time were in a very fortunate position.⁸

The impressive record of commercial paper during the panic spurred a rapid increase in these notes in the years following. By 1913 some 2500 to 3000 borrowers were utilizing the open market. Since the average maturity of paper then outstanding was 4-to-6 months and since average outstandings appear to have been in the neighborhood of \$1 billion, borrowers must have been coming to the market for some \$2 or \$3 billion per year.⁹

Banks remained overwhelmingly the chief investors. Moreover, since at least occasionally they sold notes of their customers to

⁷Foulke - op. cit., p. 249.

⁸The good performance of commercial paper during the 1907 panic helped investing banks meet cash drains that they might not have been able to cope with had their secondary reserve been in other types of securities. Likely, some bank failures were prevented by the good record of commercial paper.

⁹Outstandings thus represented about 3 percent of the 1912 GNP; present 1964 outstandings amount to about 1-1/2 percent of GNP whereas outstandings in 1950 were about 1/3 percent of GNP.

correspondents, city banks sometimes assumed the broker's role. Dealer organizations became larger and performed more careful credit investigations. The large number of smaller dealers still buying and selling open-market paper generally carried on their business in a limited geographical area. Paper was by this time almost exclusively one-name unsecured promissory notes. Such losses as occurred were in large part the result of carelessness on the part of the purchasing banks and were confined in the main to paper handled by small, if not irresponsible, dealers.

Despite the generally outstanding performance of commercial paper with regard to prompt payment at maturity in times of financial crisis, it should be noted that during such periods the demand for such paper was severely restricted. As a result, many borrowers considered commercial-paper brokers as fair-weather friends who could not sell paper when money was actually needed most. The fine performance of paper in recent years coupled with the growing importance of non-bank investors in open-market paper, has somewhat alleviated the problem of lack of demand in tight-money periods.¹⁰

After the outbreak of World War I in 1914, commercial-paper sales fell off considerably. Fortunately, this drop proved to be very short-lived

¹⁰Of course, tight money has not recently been associated with financial panic, and substantial corporate liquidity has existed even in periods of monetary restraint. The question of whether the commercial-paper market is a reliable source of funds in tight-money periods will be explored in detail in Chapter VII.

and dealer sales began to increase again in the following year. At this time a new factor--the Federal Reserve System--began to influence the supply of and demand for open-market paper. On balance, it appears that the Federal Reserve authorities promoted the growth of open-market financing in the period 1914-21. This was accomplished largely as the indirect result of the increase in the demand for outside paper by commercial banks. The Federal Reserve Act made commercial-paper notes with a maturity of not more than 90 days eligible for rediscount and thereby enhanced their liquidity. Moreover, the bank-examination procedures instituted by the Federal Reserve led to the development of more careful credit investigation by both banks and dealers. This, in turn, improved the quality of paper offered for sale, ultimately enhancing the desirability of open-market paper as a secondary reserve. Finally, the Act founding the Reserve System also reduced legal reserve requirements then in effect, thereby freeing potential investment funds, some of which flowed into commercial paper.¹¹

¹¹The reserve requirements under the National Banking Act were 25 percent for banks in reserve and central reserve cities and 15 percent for country banks. After some adjustments, the legal reserve ratio effective June 1917 became 13 percent for central reserve city banks, 10 percent for reserve city banks, 7 percent for country banks and 3 percent on time deposits for all banks. See M. Friedman and A. J. Schwartz - A Monetary History of the United States, 1867-1960 (National Bureau of Economic Research, 1963), p. 59n, 208.

The Commercial-Paper Market in 1920¹²

Commercial-paper outstanding continued to increase consistently until early in 1920. At that time the volume reached a peak of almost \$1.3 billion, the highest figure to be attained until 1950. Unquestionably, commercial paper had become a major money-market instrument.

The year 1920 is a good point to interrupt the history and examine the commercial-paper institutions of that era. That year is a natural point of demarcation because it represents a peak in outstandings and because at that time General Motors Acceptance Corporation (GMAC) began to sell its notes directly to investors without the aid of a commercial-paper dealer. The advent of direct placement would prove to be a major step in extending the market for commercial paper, though its effects have been most substantial only in the last 10 years.¹³ Furthermore, the early 1920's represent the period from which reliable data became available on commercial-paper outstandings and on the type of issuers.¹⁴ Thus, meaningful quantitative comparisons can be made only from this time.

¹²This section and the next rely in part on R. T. Selden - "Trends and Cycles in the Commercial-Paper Market," National Bureau of Economic Research Occasional Paper 85 (New York, 1963).

¹³In addition to GMAC, a number of other finance companies was borrowing directly in the open market through collateral-trust notes which were a very similar instrument except that they were secured by receivables assigned to a trustee. GMAC notes, in fact, were secured until 1926.

¹⁴The former comes from a monthly release of the Federal Reserve Bank of New York, which was begun in 1918. The latter comes from the National Credit Office, a subdivision of Dun and Bradstreet, which began its annual release in 1922. The National Credit Office rates all issuers of paper and provides financial information about them, thus providing a valuable service to investors. Its present-day functions will be discussed more fully in Chapter II.

In 1920, there were some 4400 firms borrowing on commercial paper. Virtually all of the paper was issued through dealers, who purchased the paper outright and sold it to investors for a commission.¹⁵ Most of the paper represented the liabilities of commercial and industrial firms, with finance companies still but a minor factor in the market.¹⁶

Unlike the situation in the nineteenth century, trade acceptances were very uncommon offerings in the open market in 1920. Most of the commercial paper sold was an unsecured liability of the issuer, although it sometimes bore the endorsement of an officer or other principal party. Only about one-fifth of the outstanding paper was in the form of collateral-trust notes. These were generally the liabilities of finance companies, grain and cotton dealers, and cattle loan companies. The dominance of single-name paper reflected the feeling that two-name paper was a symbol of weak financial condition, and that a firm selling commercial paper should be a prime credit risk whose notes were, in the sense discussed above, self-liquidating.¹⁷

¹⁵ GMAC outstandings were only \$9 million at the end of 1920, or less than 1 percent of dealer paper.

¹⁶ This situation was so characteristic that a contemporary account described the situation as follows:

"The seller of commercial paper is the business enterprise desiring short-term credit. The buyer of commercial paper is the bank or trust company with surplus funds to invest. The intermediary is the commercial-paper broker." (Foulke - op. cit., p. 6).

¹⁷ The theory concluded that industrial paper is self-liquidating, whereas finance paper is not. In fact, by the same reasoning, the collateral-trust notes were not eligible for rediscount at the Federal Reserve. See footnote 6, above.

Commercial and industrial firms used commercial paper almost exclusively to meet predictable demands which were seasonal or periodic in nature. In 1920, firms from a wide variety of industries were using the market. Of the issuers, almost one-third were in textiles or dry-goods, while an additional 20 percent were in foodstuffs. Also important firms were metals and hardware, leather and shoes, lumber and furniture, and drugs and chemicals.¹⁸

As might be expected, commercial-paper issuers were concentrated in the most highly-industrialized areas. The first (Boston), second (New York) and seventh (Chicago) Federal Reserve districts were the most common locations of the issuers. Nevertheless, a substantial number of firms in virtually all sections of the country did some open-market borrowing.

The bulk of the firms utilizing the open market in the early twenties had net worth between \$500 thousand and \$2-1/2 million with the average size being about \$1-1/4 million. There were comparatively few issuers with net worth under \$2-1/2 million, but even fewer in excess of \$25 million. At the time it was generally felt that "any business enterprise which keeps its affairs in a healthy, balance financial condition is entitled to the advantages incident to using the open market", and that commercial-paper borrowing should not be restricted to firms above a certain size.¹⁹ The only restriction on size was the practical one;

¹⁸ First available breakdowns by the National Credit Office are actually for 1922.

¹⁹ Foulke - op. cit., p. 50.

a broker had to be able to sell enough paper to cover the fixed costs of printing credit information and distributing this information to prospective investors.²⁰

To the firm raising short-term funds in the twenties, open-market paper had several advantages over direct borrowing from banks. Then, as now, most banks were prevented by law from lending to any one borrower an amount equal to more than 10 percent of capital and surplus.²¹ Banking institutions were rather small relative to the short-term borrowing needs of their customers, and hence larger business enterprises generally needed to obtain funds from several banks. Instead of borrowing from scattered depository banks, a business could sell notes to a commercial-paper broker in one transaction. The broker could then do the work of marketing the notes among banks, in various parts of the country, which had excess funds for investment purposes.

In 1920, geographic interest-rate differentials often existed within the United States. Since open-market financing could mobilize funds in areas where they were in surplus and channel them to where they were needed, the borrower could reap an interest-rate saving which would more than compensate for the broker's fee. A collateral advantage of

²⁰ This philosophy is in direct contrast to the present-day idea that open-market financing should, by and large, be limited to large well-known names. See Chapter II.

²¹ National banks are covered by the National Banking Act of 1863 which makes this stipulation; state-chartered banks are covered by similar legislation though in some states the legal percentage is somewhat higher.

selling notes in the open market was that this practice provided valuable advertising for the borrowing firm. Since bank officers and directors had to pass on each note purchased, borrowers tended to become well-known in financial circles. Firms well-known in the open market, with good earnings records and high financial standing were in an especially favorable position when arranging for permanent financing.

Additional advantages arose out of the broker relationship. Brokers often provided valuable financial advice and assisted in obtaining bank lines and in improving bank relations. And, the commercial-paper broker, with his intimate knowledge of the firm, was often the logical underwriter of a long-term issue, at mutually advantageous terms.²²

Only in very rare cases was commercial paper the exclusive source of short-term funds.²³ The general philosophy was that the open market was a supplement to and not a substitute for direct borrowings from banks. Firms almost always maintained unused lines of credit at least equal to commercial-paper outstanding, so that in the event of a tightening in the open market, banks would feel obliged to extend the necessary credit.

²²The broker-issuer relationship was thus extended to the benefit of both parties. Goldman, Sachs and Co. is an outstanding example of a firm which built a major underwriting business largely from commercial-paper connections. The other advantages discussed are still cited today as reasons why some paper issuers continue broker relationships even when outstandings grow large enough to make direct placement economical.

²³This is still true for industrial firms. However, large finance companies, in particular the direct placers, are able to minimize the use of bank debt. See Chapter III.

Moreover, the open market enabled issuers to "clean up" borrowings with each bank, a practice which is often considered indicative of sound financial management, even today.

On the other side of the ledger, several disadvantages of open-market financing, as compared to direct borrowing from banks, must be mentioned. First, the issuer of paper was sometimes badgered by credit-investigation requests. In 1920, this factor was less important than in the nineteenth century when relatively poor credit risks were common in the market. The well-developed commercial-paper house of 1920 undertook extensive investigations and in turn disseminated the information to potential investors, at minimal burden to the issuer.²⁴ A second alleged disadvantage of open-market financing concerned the possibility of over-borrowing. This factor assumed negligible importance by 1920, however, because of the high credit standards observed by brokers offering the paper for sale, and the careful scrutiny by investors before purchase.

A final criticism was of greater practical importance, and is still somewhat relevant today. The open market is an impersonal source of funds as compared with bank loans. A firm which is temporarily in financial difficulty can expect little consideration from the holders of its notes. On the other hand, a local banker who has intimate knowledge of the company will tend to be lenient so long as he is convinced the trouble is of a temporary nature.

²⁴The credit-investigation burden is hardly relevant today as virtually all firms using the open market are very large and well-known. Furthermore, present-day auditing procedures make collection of credit information almost routine.

Just as open-market paper held many advantages for its issuers in 1920, it also had benefits for the holders. For one thing, it served as a major secondary reserve for the banking system. All but a small percentage of the commercial paper issued at this time wound up in the portfolios of commercial and mutual savings banks. Mercantile concerns or individual investors bought paper on rare occasions. Most potential investors were neither well-acquainted with the opportunities of open-market paper nor willing to appraise the credit-soundness of the various notes being offered by brokers. Firms preferred to hold demand deposits, which at that time paid a nominal rate of interest, or to enter the call-money market with surplus funds. Those firms that did invest in commercial paper generally restricted themselves to industries which were related to their own line of business and in which they were presumably competent to judge the credit standing of the issuers.²⁵

By 1920, banks which were investing in commercial paper had already developed fairly elaborate credit departments which kept posted on the credit worthiness of those firms selling open-market paper. Smaller banks which did not maintain their own credit departments either obtained such information from their correspondents, or in certain cases actually left the purchasing decision to the big-city bank. The correspondent bank,

²⁵For example, Arbuckle Bros., the roasters of Yuban Coffee, often purchased the commercial paper of wholesale grocery chains. Their competence in this regard is attested to by the fact that they were often called upon by the credit investigators of the New York banks to appraise wholesale grocery concerns who were selling open-market paper.

of course, assumed no risk. It received information as to the amount of paper desired, the denominations, and the maturity, and it performed a valuable service of credit investigation. Paper was sold subject to a 7- or 10-day credit option. During this time the financial standing of the issuer was checked. If found unsatisfactory because of inadequate available lines of credit or other reasons, the paper could be returned.²⁶

The reasons why commercial paper was so attractive an investment for surplus funds of commercial banks in the early 1920's are several. First and perhaps foremost, even in times of financial upheaval such as 1920, the losses on commercial paper were virtually negligible. Such losses compare very favorably to those on direct loans and other investments (exclusive of U.S. Government securities). The statement would remain true even if all commercial-paper names had been chosen randomly, but is especially striking since credit investigations were usually performed and options were judiciously exercised. In choosing paper, the banker did not have to consider balances, personal friendships or other elements of the direct lending relationship, and was able to decide on the basis of credit risk alone. Commercial paper was also highly liquid. Paper was always paid at par at maturity with no obligation to renew. This was in contrast to both direct loans, which involved a personal customer relationship and to investment in high-grade long-term securities, which if sold in

²⁶ Much to the chagrin of brokers, these options were often abused and exercised when the investing bank decided that it did not want to commit itself to invest to maturity, despite satisfactory credit findings. Nowadays, such options are still formally present but are almost never invoked.

times of monetary restraint inevitably involved the bank in substantial capital losses. Though no secondary market existed in paper, the eligibility of this instrument (excluding finance-company paper) for rediscount at the Federal Reserve certainly enhanced its liquidity. A third factor concerned net yield; after accounting for transactions costs, the commercial-paper rate averaged substantially better in the early twenties than did other temporary uses of bank funds such as "Wall Street" call loans. Finally investment in commercial paper was advantageous to banks in an intangible manner; buying paper kept bankers informed about business conditions in a wide variety of industries and in every area of the country. Moreover, the correspondent banking system was strengthened by the credit investigation services which the big-city banks provided for their country correspondents.

Although investment of surplus funds by banks was very widespread in 1920, individual bankers were governed by different philosophies regarding the type of paper they purchased. Some banks tried to confine themselves to the notes of relatively large nationally-known enterprises, (say, with net worth of over \$1 million) because complete credit knowledge of such firms was easier to obtain. Others preferred notes of small enterprises, going on the theory that in times of business stress, such firms could more easily liquidate their merchandise inventories and current liabilities and thereby maintain solvency. Some bankers scrupulously stayed away from finance-company paper as it was not, at that time, rediscountable, whereas others happily invested in such notes because of the collateral security and generally higher yield. Finally, some banks

considered the great advantage of commercial paper to be that it allowed diversification of their loan portfolios by industry and geographical area, but still others preferred open-market notes issued by local concerns whom they knew personally.

In summary, the commercial-paper market in 1920 was characterized by a large number of relatively small borrowers who used the open market as a seasonal supplement to bank credit. Commercial banks, large and small, were the main investors and considered paper as a relatively safe and liquid way to put excess funds to work. The commercial-paper instrument was generally 2-to-9 months in maturity and was "self-liquidating" in the commercial-loan-theory sense. Most paper was in \$2500, \$5000 or \$10,000 denominations, and the notes were usually in bearer form. Brokers (acting as dealers) generally purchased the paper outright and financed their inventories by borrowing at commercial banks. The brokers performed the marketing functions, finding investors through a system of salesmen who called on banks. They also kept in constant touch with customers in order to ascertain when funds were needed and what the status of the issuers' credit was at all times. Commercial paper was an important money-market instrument for a large number of borrowers and lenders.

The Decline Before the Boom (1921-1951)

The most fundamental change in the commercial-paper market which occurred in the 1920's was the growth of finance-company paper. Spurred on largely by the progress of the automobile industry, sales finance,

business finance and small-loan companies expanded rapidly during this period. The number of finance companies obtaining short-term credit in the open market increased from 9 in 1922 to almost 100 at the end of the decade. These firms issued almost \$2 billion of commercial paper in 1926. The "Big Three" [General Motors Acceptance Corporation (GMAC), Commercial Investment Trust (CIT) and Commercial Credit Corporation (CCC)] accounted for about half of these borrowings.

At first, most investors in the money and capital markets did not view the finance industry with favor, because it was a relatively new line of business. The bulk of short-term borrowing by finance companies was done through collateralized bank loans, and where these companies did utilize the open market, the instrument was generally, as noted above, a collateral-trust note. Most banks investing in commercial paper did not prefer finance-company liabilities, partly because such paper was not rediscountable at the Federal Reserve and partly because the prevailing attitude at that time in the banking community was not favorable toward consumer credit. The growth and good performance of the finance companies led to a gradual lessening of resistance to their paper.

In 1920, GMAC, the largest sales-finance company, began to place its paper directly with investors, thereby bypassing the commercial-paper broker. This innovation involved the issuer in maintaining its own marketing force to seek out potential paper investors. The need for funds by GMAC was substantial and reasonably steady the year round. Due to apparent economies of scale it was therefore cheaper to sell paper directly

than to pay a commission to brokers. Moreover, there were difficulties in interesting investors in finance paper in the 1920's, and a firm of the size and stature of GMAC could concentrate its resources on enhancing the market for its own notes. The direct seller, therefore, might be more effective than a broker with responsibilities for selling notes of several firms.²⁷

Despite the rapid growth of finance companies, the decade of the 1920's showed a gradual decline in the amount of commercial paper outstanding, in the number of firms using the market, and in the number of dealers operating. These trends were accelerated by the Great Depression. Table I-1 presents relevant data.

Several explanations can be offered for the decline in the commercial-paper market from its 1920 peak. First, the 1920 figures were probably abnormally high. In that "high credit-pressure year immediately following the inflation, interest rates were high, but credit was vitally needed by many concerns in order to carry larger inventories and slow accounts".²⁸ The substantial decline in the volume of commercial paper outstanding in 1921 reflected a sharp recession in business activity which was accompanied by a definite easing of credit. In addition, the large

²⁷ Despite these advantages, GMAC remained the only direct placer in the twenties. Early in the thirties, CIT and CCC began to issue directly. These three finance companies were the only direct placers until after 1950.

²⁸ Foulke - op. cit., p. 35.

Table I-1

Trends in Commercial Paper: 1920-1933

	<u>Commercial Paper Outstanding (\$ millions)</u>	<u>Number of Commercial Paper Issuers</u>	<u>Number of Commercial Paper Dealers</u>	<u>Number of Defaults on Commercial Paper</u>
1920	957	4,395	30	31
1921	671	3,767	30	46
1922	739	2,259	26	7
1923	787	2,171	26	7
1924	830	2,705	26	16
1925	645	2,754	26	11
1926	569	2,743	26	4
1927	610	2,490	26	5
1928	458	2,354	23	2
1929	420	1,653	22	7
1930	462	1,674	20	7
1931	167	1,239	20	16
1932	94	651	15	2
1933	139	548	13	8

Source: Commercial paper outstanding and number of dealers are reported to the Federal Reserve Bank of New York; number of issuers from National Credit Office. Dates shown are end of year. Data from R. T. Selden, op. cit., Tables 2, 4, 8, A-1, A-2.

number of commercial-paper defaults in 1920 and 1921 led the dealers to apply higher credit standards to issuers and led to a substantial decline in the number of issuers and in the amount of outstandings. (See Table I-1.) The moderate increase in the volume of commercial paper in 1922-24 was indicative of the desire of issuers to obtain part of their credit in the open market and to keep part of their bank loans in reserve.

The fall in commercial paper outstanding after 1924 can be explained in part by factors relating to the stock-market boom. In the late 1920's, many businesses took advantage of high common-stock prices to add to their capital by issuing equities. This, taken with the increase in funded debt in this period, lowered the requirements for seasonal borrowings in the open market. On the investors' side, many outlying banks ceased to buy paper due to the relatively attractive yields offered in the call-money markets. One broker who was active in the market in the twenties has suggested that quantitatively, the decline in the supply of commercial paper was probably more important than the lack of demand.

Total commercial paper declined sharply with the Great Depression and outstandings remained low throughout the 1930's. Needs for funds were substantially reduced because of the depressed state of the economy and borrowing requirements by commercial-paper issuers were no exception. Banks had excess reserves and encouraged business to borrow directly those funds that were needed; loan rates at banks were so low that the saving obtained by selling paper was hardly meaningful.

The Great Depression also accelerated the decline in the number of paper issuers. Many firms that previously had been prime credit risks

found themselves in much poorer financial positions. In addition some dealers and investors adopted more selective credit standards in the face of business uncertainty and widespread failures. Both of these factors worked to decrease the volume of paper outstanding as well as the number of issuers. Finally, the advent of the term loan in the mid-thirties gave borrowers an alternative to short-term finance which undoubtedly had some effect toward reducing the demand for open-market funds.

During the Depression, commercial paper performed quite well, from the standpoint of defaults. The decline in outstandings was a factor in keeping the dollar volume of failures down. Still, even as a percentage of paper outstanding, defaults were moderate given the circumstances. The worst year, 1931, saw defaults at about 6/10 percent of paper outstanding; this was about 5 times as great as the other years of the period.²⁹

The good record of commercial paper during the Depression was an important factor in attracting nonbank funds into paper. Many firms had substantial excess cash balances which, since the Banking Act of 1933, could earn no interest when kept in demand accounts. Corporations thus sought a safe medium through which to obtain some yield on their temporarily idle balances.

During this same period, CIT and CCC joined GMAC in selling paper directly. From the start, the direct placers were willing to sell

²⁹ See Selden, op. cit., p. 24.

notes of any maturity specified by the investor. This feature appealed especially to business corporations. As can be seen in Table I-2, directly-placed paper expanded rapidly during the middle and late thirties, both absolutely and as a percentage of total outstandings. And, under the assumption that banks continued to hold all the paper sold through dealers in this period, nonbank investors supplied over half of the funds flowing into the direct market.³⁰ Previously untapped corporate funds were to prove crucial in the postwar expansion of the commercial-paper market.

The decline in the dealer segment of the market in the thirties brought with it some institutional changes. First, the drop in the number of borrowers-per-dealer was accompanied by a closer watch on the financial condition of each borrower. By and large, it was the smaller issuers who left the open market. Those firms continuing to sell paper generally had a national reputation. Largely because of this, from 1936 until very recently, there were no losses sustained on paper. Second, interest rates were so low in the thirties that the traditional dealer commission of 1/4 percent on the face value of the note became very high relative to total borrowing costs. (On a 90-day note, 1/4 percent on-the-face amounts to 1 percent per annum.) Substantial competition for customers among dealers and a desire to prevent borrowers from abandoning the open market entirely in favor of bank loans, led dealers to cut their commissions. Often the 1/4 percent was stated on a per-annum basis and occasionally no

³⁰ Ibid., p. 28.

Table I-2

Directly-Placed and Dealer Paper: 1933-1939
(\$ millions)

	<u>Direct Paper Outstanding</u>	<u>Dealer Paper Outstanding</u>	<u>Direct Paper as Percent of Total</u>
1933	30	109	21.6
1934	135	166	44.9
1935	166	171	49.3
1936	199	215	48.1
1937	273	279	49.5
1938	151	187	44.7
1939	228	210	52.1

Source: Selden, op. cit., Tables A-1, A-2. End-of-year figures are shown.

commission at all was charged. In these latter cases, the dealer's profit was obtained by purchasing the paper outright and trying to sell it at a higher price (lower yield), in the manner in which dealers in Government securities operate. The actual spreads were often very small indeed. A third development occurred in October of 1937, when finance-company paper within 90 days of maturity became eligible for rediscount at the Federal Reserve for the first time. This factor added some liquidity to the instrument as a bank secondary reserve.

At the end of 1940 dealer paper outstanding was just over \$200 million, roughly the level it had maintained since 1934. Direct paper outstanding at this time had climbed to almost \$400 million. The year 1941 was a good one for automobiles and other consumer goods; Europe was already at war and the American economy was feeling the impetus of recovery from a decade of depression. Commercial paper climbed to \$840 million (\$375 million dealer and \$465 million direct) which was almost up to the post-World War II peak. With the entrance of the United States into the War, however, the situation changed rapidly. The supply of directly-placed paper contracted rapidly since the business of the three direct sellers was largely financing the sale of consumer durables, the production of which virtually ceased. By the end of 1942, the volume of direct paper had declined to \$111 million, and in 1943-45 virtually no such paper was issued. The bulk of consumer goods that was produced was paid for in cash, given the high wartime liquidity of the consumer sector. Dealer paper, which is not nearly as closely tied to the financing of consumer durables, declined to about the level of the thirties and maintained this throughout the War. Funds which had previously flowed into commercial paper were used instead to purchase the vast volume of Treasury liabilities which were issued to finance the War.

The large pent-up demand for consumer durable goods which was released after hostilities had been terminated led to a rapid growth in

the need for funds by sales-finance companies.³¹ Interest rates remained pegged at unrealistically low levels and, to stem inflationary pressures, reliance was placed on selective controls. In the first two years following the War, finance companies increased their bank lines and utilized them for the great part of their short-term needs. Bank credit was so cheap relative to interest rates on receivables that most finance companies did not consider the rate saving obtained by using the open market very important.³² Bank loans were considered to be much more flexible than open-market paper and could have been contracted more rapidly if the monetary authorities had seen fit to tighten selective controls on consumer credit in response to inflationary pressures, or if the expected post-war recession had materialized. Moreover, finance companies went to the capital markets to issue medium-term debt. This action, based on the expectation that interest rates would rise, proved very profitable in the long run. These factors, together with the need of the direct placers to rebuild their sales organizations to concentrate on nonbank investors, prevented commercial paper from rising rapidly in the immediate post-war period.

By the end of 1947, however, finance companies were already using their bank lines heavily. In fact, the large direct placers were

³¹The following discussion relies heavily on Donald P. Jacobs - "Sources and Costs of Funds of Large Sales Finance Companies," Consumer Installment Credit Conference on Regulation, Part II, vol. 1, pp. 324-423.

³²The prime rate was 1-1/2 percent in 1946 and 1947 as compared to an average rate of 3/4 percent on GMAC paper in this period. The rates for dealer finance companies were, of course, slightly higher.

in many cases approaching the legal lending limits of their line banks. Rather than increasing vastly the number of line banks to include smaller and smaller institutions, the commercial-paper market posed as a good alternative source of short-term funds. Direct paper outstanding virtually doubled in 1948. In addition, finance companies increased their funded debt, reflecting an optimistic appraisal of the future of the economy. In mid-1947 the peg on short-term Treasury securities was lifted and money rates began to drift upward, though remaining historically very low. The interest-rate saving to issuers of commercial paper, coupled with a desire to keep an "added string to the bow", (i.e., to have an additional source of short-term funds to supplement bank loans) led to an increase in open-market borrowings.

By March 1951, the date of the Treasury-Federal Reserve Accord, total commercial paper had passed \$1 billion, almost its 1920 peak. At the latter date, however, two-thirds of the paper was directly placed by three large sales-finance companies, and served as a permanent source of finance. The number of borrowers had dropped sharply and the dealers' role in the money market had much diminished. Investors were no longer limited to commercial banks; nonfinancial corporations with excess funds also resorted to the market. Maturities were flexibly arranged by the direct placers. Commercial paper had become most important not as a seasonal bank-loan supplement, but instead as a less expensive method of obtaining short-term funds to finance consumer credit. These trends were to continue and be reinforced as the fifties and early sixties passed, a period that was to see commercial paper outstanding increase eightfold.

The Boom in Commercial Paper (1951-1963)

The period since the Accord has seen many major money-market changes. The rapid growth of the commercial-paper market and the role which commercial paper has assumed must be viewed in the perspective of these over-all developments. The present section discusses some of these changes. Present-day commercial-paper institutions will be examined in Chapter II.

Two major developments since the Accord have been instrumental in expanding the commercial-paper market. First is the rapid growth of consumer credit; total consumer debt increased over threefold. Since consumer-credit receivables are held in substantial part by finance companies who obtain short-term funds in the commercial-paper market, the supply of paper was likely to increase markedly. Second, the period saw an increasing desire on the part of nonfinancial corporations to conserve on non-interest-bearing demand deposits in order to put their excess funds to work in the money market to earn some return. In part, this development can be explained by the "educated" attitude of the "mew generation" of corporate treasurers. Very important are the increased corporate liquidity and the relatively attractive yields prevailing on short-term securities during the period which made investment worthwhile. At first most corporations limited themselves to Treasury bills, but gradually they extended themselves to other high quality short-term assets. A great volume of funds that had previously been kept idle or in Governments was thus made available to the commercial-paper market. Significant supply-and-demand factors thus combined to promote the growth of open-market financing.

Table I-3 shows the extent of the growth of commercial paper outstanding from 1951 to 1963 both for the direct placers and for the dealer issuers. Directly-placed paper has remained at about two-thirds of total outstandings throughout the period. This percentage, however, appears to be higher in periods of business expansion. This phenomenon is related to the close tie between the need for funds by the direct placers and the sale of consumer durables. The demand for funds by dealer issuers appears to be more sensitive to the interest-rate saving obtained by substituting open-market financing for bank debt. This saving is relatively large in periods of monetary ease.³³

In addition to the increase in open-market borrowings, bank-lines were extended throughout the period under discussion. For both sales-finance companies and consumer-finance companies, however, bank debt has played a decreasing role relative both to commercial paper and to long-term debt. Such a trend is revealed in the ratios which are published by the First National Bank of Chicago for selected sales-finance and consumer-finance companies, and which are summarized in Table I-4. The table also indicates that the increase in the role of open-market borrowings has been pronounced in relatively poor business years such as 1954, 1958 and 1960, during which the interest saving obtained in the commercial-paper market has been especially large. Issuers note that the steady increase in the long-term debt base reflects their expectation of a higher minimum level of operations.

³³See Chapter III.

Table I-3

Directly-Placed and Dealer Paper: 1951-1963
(\$ millions)

	<u>Direct Paper Outstanding</u>	<u>Dealer Paper Outstanding</u>	<u>Direct Paper as Percent of Total</u>
1951	884	449	66.3
1952	1197	552	68.4
1953	1409	564	71.4
1954	1200	733	62.1
1955	1525	510	74.9
1956	1677	506	76.8
1957	2121	551	79.4
1958	1821*	840	68.4
1959	2437	677*	78.3
1960	3039	1358	69.1
1961	2925	1711	63.1
1962	3791	2088	64.5
1963	4714	1928	71.0

* Break in series

Source: Federal Reserve Bank of New York release. End-of-year figures are shown; figures are for original maturity under 270 days.

Table I-4

Borrowing Ratios for Finance Companies
(Percentages)

	Sales Finance			Consumer Finance		
	Bank Borrowings to Debt	Open-Market Borrowings to Debt	Long-term Borrowings to Debt*	Bank Borrowings to Debt	Open-Market Borrowings to Debt	Long-term Borrowings to Debt*
1951	73.4	11.4	15.2	66.3	6.3	27.4
1952	71.6	14.4	14.0	64.6	7.6	27.8
1953	65.8	14.1	20.1	62.0	6.0	32.0
1954	59.0	17.3	23.7	61.9	9.1	29.0
1955	67.7	10.1	22.2	65.3	5.3	29.4
1956	61.5	11.1	27.4	60.5	4.4	35.1
1957	60.2	11.2	28.6	54.5	4.8	40.7
1958	52.5	17.5	30.0	53.6	8.0	38.4
1959	56.3	17.1	26.6	56.1	7.0	36.9
1960	49.1	21.2	29.7	46.7	9.1	44.2
1961	45.3	20.6	34.1	47.1	9.8	43.1
1962	44.6	23.6	31.8	45.4	11.2	43.4
1963	44.7	26.2	29.1	46.7	13.4	39.9

* Residual - so that columns 1 + 2 + 3 add to 100.0. This ignores net payables and other liabilities, which are small and display no important trends.

Source: The First National Bank of Chicago - "Ratios of the Installment Sales Finance and Consumer Finance Companies" and supplements.

The greater predominance of nonfinancial corporations as the investors of the fifties led to a demand for commercial-paper notes of much shorter maturities than had previously prevailed. Unlike commercial banks, corporations often do not want to commit their idle funds for a 6-month period; indeed corporations often have idle funds for a few weeks or even a few days. Large direct placers, which grew from 3 in number in 1951 to 18 in 1963, have been more than willing to oblige their investors by issuing very short notes, often under 14-days maturity and sometimes for as short as 3 days. The direct issuers have thus been able to attract large blocks of money, often at relatively low rates of interest. At the same time, the direct issuers maintained added flexibility which they previously had obtained almost exclusively through bank lines.

Another manifestation of the growth of nonfinancial corporations as investors has been the accentuation of the year-end runoff in commercial paper. For a large variety of reasons, to be explored in Chapter VII, such corporations have been reluctant to hold paper over the year-end. The most important factor has probably been the desire to show cash on the balance sheet. The fall in direct paper outstanding in December has presented somewhat of a problem to issuers, and has led them to maintain large open lines of credit as well as to offer higher yields for January-2nd money.³⁴

Despite the rapid growth of commercial paper outstanding in recent years, the number of firms issuing paper has shown no definite trend. Only

³⁴Other innovations which have been developed in recent years to alleviate this problem will be discussed in Chapter VII.

large firms with high credit ratings have obtained funds in the open market. Because of this, and because of the generally sound condition of business, there were no defaults on commercial paper between 1950 and 1961. In the last few years there have been a few defaults but as of the present time it appears that only one of these will actually result in losses, to the extent of about 50 percent.³⁵ The credit standing of the big names in the market remains impeccable, and in terms of safety, commercial paper might be considered close behind Treasury bills.

Having traced in some detail the historical development of the commercial-paper market we are now prepared to take a close look at the present-day structure of this market. The following chapter discusses the nature of the instrument and focuses on the roles of the participants--the buyers, the sellers and the intermediaries active in the market.

³⁵The case cited is that of Credit Industrial, a New York finance company dealing in commercial receivables. The notes of this firm were given only a satisfactory rating by the National Credit Office, and this rating was removed five months before the failure. Fraud was alleged to have been involved in this default.

CHAPTER II

PRESENT-DAY COMMERCIAL-PAPER INSTITUTIONS

In light of the historical background of the last chapter, this section discusses the present-day structure of the commercial-paper market. The nature of the commercial-paper instrument and the roles of the issuers, investors, dealers, and banks operating in this market will be considered. In addition, an attempt will be made to analyze the expected behavior of the various participants in the market.

The present chapter relies heavily on information gathered during personal interviews which were designed to include a comprehensive cross-section of participants in the market.¹ The interview technique was chosen because of the desire to obtain an understanding of the workings of the commercial-paper market through developing a "feel" for the institutions. The present chapter attempts to give the reader such an understanding in order to place the analysis which follows in its proper perspective.

Another possible advantage of the interview technique rests in the fact that much of the information about the workings of a financial market is qualitative rather than quantitative. Since the data necessary to permit exact statistical testing are so often not available, a consensus of opinion among experts is often the best way to learn about the functioning of a market.

¹A discussion of the interviewing procedures employed and of the method used in selecting those firms to be interviewed, as well as a list of individuals who were visited, appears in Appendix A.

When testing hypotheses by means of interviews, special care was taken to examine both sides of a given relationship. For example, when transactions involving a dealer and an issuer of paper are discussed, both dealers and sellers were interviewed. When assessing the quality of commercial paper, the opinions of issuers, investors and intermediaries proved relevant.

Where possible of course, quantitative information was obtained. Exact figures, however, were generally not available. Many data are either not collected or are not comparable from firm to firm. In addition actual percentages, even if obtainable, often prove uninteresting because of very wide month-to-month variance. Finally, many financial data are understandably of a confidential nature and cannot be divulged in print. Because of these factors much of the discussion is based on the writer's impression of several interviews, and figures cited can often be no more than approximations and educated guesses which represent some average of the opinions of informed participants. Hence such terms as "large proportion", "not very common", "increasingly important", "almost exclusively", etc. are to be interpreted as qualitative concepts, designed merely to convey a feeling for the institutional structure of the commercial-paper market.

In situations where exact information would be desirable, however, but is not available, an attempt will be made to explain the special problems involved which preclude the presentation of exact figures in tabular form. The remainder of the study which will involve deeper analysis of the operations of issuers and investors, is also subject to

some of the data limitations in the present section. In these later chapters, however, quantitative information derived from questionnaires will be presented.

The Commercial-Paper Instrument

A commercial-paper note is an unsecured, negotiable promissory note made payable to the bearer on a stated maturity date. Such notes are generally sold on a discount basis, but occasionally at the request of the buyer they are sold at par, with interest to be paid at maturity.

Paper may be purchased from a direct placer or a commercial-paper dealer. Many investors, however, prefer to have their banks buy either type of paper in an agent's capacity.² In either event, delivery is usually made to the investor's bank, against payment. Occasionally at the request of the investor, notes are held until maturity in custody of the dealer from whom they were purchased. Almost invariably, the paper is payable at a New York or Chicago bank. The investor's bank then makes collection for him and credits his account.

Commercial-paper notes can be found in denominations of anywhere from \$500 to \$5 million or more. The very small and very large notes are most often confined to the direct placers, who stand ready to offer paper at the going rate in any denominations which the buyer specifies. In actual practice, notes under \$20,000 are not very common and notes

²The services offered by commercial banks to participants in the commercial-paper market will be discussed in some detail below.

under \$100,000 are generally purchased by commercial banks and occasionally by individuals. With few exceptions, issuers of paper do not specify in what denominations their notes should be written and leave this decision up to the dealer, whose task it is to market the paper. Although all dealers will try to accommodate specific investors with notes of the desired maturities, the philosophies of dealers differ. Some dealers prefer to market notes of small denomination. These generally handle paper of moderate-size issuers who may prefer to spread out the maturity dates of their notes, and appeal to relatively small investors who want to diversify their paper portfolios. Other dealers try to avoid handling small notes because the marketing effort is much the same as for large notes, and the commission earned is calculated on the dollar value of the transaction.

Commercial paper is available in maturities from 3 to 270 days. Notes under 30 days are confined almost exclusively to the direct placers because dealer commissions would prove prohibitive for these very short issues. Exact data are not available, but maturities under 30 days, which are purchased mainly by large corporations and insurance companies, have accounted for an increasingly important part of total commercial-paper volume in recent years.³ Participants in the market

³Not all of the direct placers will issue notes for 3 or 4 days, but a few finance companies actively solicit such very short funds, especially over a weekend. All direct placers do accept funds for 5 to 270 days and write notes to the exact maturities desired by investors.

estimate that about half the total dollar volume of direct paper is under 30-days maturity, while perhaps 90 percent is under 90-days maturity at time of issue. Despite the large volume of short paper, some direct placers are wary of exploiting the under-30-day market and do not make their offering rates in this range attractive. They feel that drumming up "weekend money" may be poor bank relations and, although turnover costs of short maturities do not present a significant problem, they try to meet daily fluctuations in needs for funds at their banks.⁴

Notes with maturities beyond 270 days cannot be sold without SEC registration unless they are negotiated as private placements. In practice, however, a one-year note can be obtained by purchasing a 270-day note with an informal agreement that a 90-day note will be issued at maturity with the same interest rate. Quantitatively, such arrangements are not very important.

Yield on commercial-paper notes is quoted in intervals of 1/8 percent and different rates are quoted for different maturities. Although it might be argued that the commercial-paper market would operate more efficiently if notes were traded in basis points (as are Treasury bills) rather than in eighths, the present situation has one basic advantage. Paper is sold by a large number of salesmen in different areas of the country; thus minute-to-minute changes in the rate would present difficult technical problems. Also, in the case of dealer paper, the added complication of constantly repricing inventory should not be overlooked. To adapt

⁴Quantitative information on maturities appears in Chapter III.

to the practical advantages of finite interest rate movements, "deals" between buyers and sellers are sometimes made; these are most common with directly-placed paper. These concessions, for example, might involve issuing a note of 4-1/8 percent to a buyer of an equal amount of paper at 4 percent if the quoted rate is 4 percent. Also, direct placers might give a 90-day rate to a "good customer" with 88-day money when the equilibrium rate is slightly higher than the quoted rate, i.e., when there is a small excess supply of paper at the quoted rate.

The majority of commercial-paper transactions are made in Federal funds although clearing-house funds are often used when "immediately-available funds" are not specified. Actual practices vary from dealer to dealer, and the employment of Federal funds is actually more common in New York than in Chicago. When the notes are originally issued, the dealer generally pays the borrower in Federal funds if so requested. In turn, dealers usually insist that investors purchase the paper in this manner. Likewise, when the notes mature, the bank pays in Federal funds only if the investor so specifies.

At the present time, there is no real secondary market for commercial paper. The basic philosophy of most issuers and particularly of dealers appears to be that paper should be purchased with the definite intent to hold to maturity. In order to enhance the liquidity of the instrument, however, direct sellers give an informal understanding that in the event of unforeseen needs for cash on the part of the investors, they will repurchase the paper, although they will not do this habitually

for any single investor. Likewise dealers usually try to resell the paper for investors on a "best-efforts" basis and will on occasion re-inventory the paper for a good customer. In addition, certain "gimmicks" have been devised in order to increase the appeal of commercial paper to investors in the absence of a secondary market.⁵

Issuers and Credit Rating

Having discussed the basic characteristics of the commercial-paper instrument, we now proceed to consider the classes of issuers of commercial paper. We shall also describe the assessment of credit risk in this market.

There are, at present, over 400 issuers of commercial paper, including 18 direct placers. These direct placers, which are exclusively finance companies, account for about 70 percent of total outstandings.⁶ All industrial issuers use the services of dealers, although a few of the largest of these occasionally place some of their paper, particularly short-maturity notes, directly.

Of the firms placing paper through dealers, about one-third are finance companies, and two-thirds are industrial companies. In the

⁵These "gimmicks" and present repurchase practices will be discussed in Chapter VI which considers the possibility of the development of a secondary market for paper.

⁶Data on directly-placed paper and dealer paper outstanding appear in Table I-3.

former group, auto, small loan, commercial and factor finance companies are all represented, with automobile finance companies quantitatively the most important. Among the nonfinancial firms selling paper, commonly known as the "industrial" issuers, a large variety of businesses is represented. Textiles, traditionally very important, are still significant, along with growers and processors of various food products and tobacco. In addition, a sizeable number of wholesalers and retailers resort to the commercial-paper market as a source of funds. Table II-1 presents data on the number of commercial-paper borrowers in 1963, by line of business.

A basic difference between finance companies and industrial issuers of commercial paper is that the former are in the business of borrowing and lending money. They usually have paper outstanding at all times and roll-over their notes at maturity. In this sense, commercial paper is a "permanent" source of finance. Industrial issuers, on the other hand, generally use the commercial-paper market to meet seasonal-borrowing needs. A canner, for example, purchases fruits and vegetables during a few months of the year, at harvest time. His sales, however, occur rather uniformly throughout the year. This pattern of receipts and expenditures means that, unless the firm maintains very high working capital, it will be a net borrower in those months when and just after payments are made, and may be a net investor at other times of the year. Commercial paper is used as an ideal supplement to bank loans for these seasonal needs. In fact, the existence of such seasonal demands for funds is a common denominator among virtually all industrial issuers.

Table II-1

Number of Commercial-Paper Borrowers
by Lines of Business, 1963

Finance:

Autos	74	
Small Loans	43	
Home Mortgage	3	
Commercial	12	
Factors	5	
Total	137	

Manufacturers:

Textiles	35	
Metal Products	24	
Grains, Flour, Fertilizers and Seed	18	
Meat Packers, Canners and Sugar Refiners	15	
Leather and Leather Products	7	
Lumber, Wood, Paper and Rope	13	
Cigars and Cigarettes	11	
Chemicals, Drugs and Paints	8	
Food and Dairy Products	3	
Other	36	
Total	170	

Wholesalers	33
Retailers	35
Other	41
Total Commercial-Paper Borrowers in 1963	416

Source: National Credit Office - "Current Industry Comment," 1963.

Only those industrial firms whose seasonal borrowing needs are predictable enough for them to sacrifice the added flexibility of bank loans, and are large enough to make the savings over bank loans worthwhile, find it practical to resort to the open market.

Of the finance companies issuing commercial paper, a special type of firm known as the "captive" is extremely important. A captive is a wholly-owned subsidiary of a corporation. General Motors Acceptance Corporation, General Electric Credit Corporation, and Sears Roebuck Acceptance Corporation, to cite just a few examples, are finance subsidiaries of their respective parent companies. The capital stock of the captive is provided by the parent and the subsidiary itself borrows money from banks, in the commercial-paper market, and in the capital markets, in order to hold its receivables. Often these receivables consist almost exclusively of paper used to finance the sale of the parent company's products, while other captives are authorized to finance a wide variety of products, often those of direct competitors.⁷

The nature of the relationship between captives and parent companies varies widely from situation to situation. When the parent and captive are both very large firms, the policy is often to keep the two very much apart; the parent, for example, would not buy the commercial paper issued by the subsidiary but would purchase that of a competitor.

⁷Occasionally the captive lends to the parent who holds the receivables directly.

In such a situation, directors feel that it is better public (and anti-trust) relations for the captives not to appear to reap the benefits of the parents' relationships with banks, dealers, etc. The captive is independently managed, is often in itself a profitable venture and at the same time serves its primary purpose of taking the debt out of the parent company's balance sheet. In other cases, especially common when the captive is small relative to its competitors, the subsidiary is encouraged to reap all the benefits which the prestige and bank relations of the parent company can offer. In fact, in certain cases it has been alleged that the parent might apply pressure to its banks and suppliers to give favorable treatment to its captive, specifically fostering the purchase of the captive's paper. And it is common for the parent's normal deposit balances to be used to satisfy the compensating-balance requirement applied to the subsidiary.⁸

At the present time, typically only very large firms borrow on commercial paper. Table II-2 presents data on the number of commercial-paper issuers in 1963 by net-worth groups. Of the 416 issuers only 2 had net worth under \$1 million and but 77 under \$5 million, whereas 121 had net worth in excess of \$50 million. As has been discussed in Chapter I, this situation is in sharp contrast to that of the 1920's when a large number of relatively small firms were borrowing in the

⁸ Even where the parent-captive relationship is de facto independent, there are certain legal ties which affect their behavior. For example, national banks must split their legal lending limit between both parent and captive, even though the captive may maintain full compensating balances independent of the parent's normal deposits.

Table II-2

Number of Commercial-Paper Borrowers
by Net-Worth Group, 1963

\$ 500,000 - 1,000,000	2
\$ 1,000,000 - 5,000,000	75
\$ 5,000,000 - 25,000,000	166
\$25,000,000 - 50,000,000	52
\$ Over 50,000,000	121
Total	<u>416</u>

Source: National Credit Office - "Current Industry Comment," February, 1964.

open market. Explanations for this change can be found from factors influencing both the supply of paper and the demand for this asset. Nowadays, many firms which were formerly issuers of paper have substantially smaller short-term borrowing needs. Diversification has decreased the seasonality of business operations. Often the internally-generated cash flow is sufficient to meet seasonal swings. And mergers and consolidations, which have decreased the number of operating firms and increased the average size of firm, are probably an additional factor in reducing the number of commercial-paper issuers. This trend is especially apparent in the textile industry, which traditionally has used the open market heavily.

Turning to the demand for commercial paper as an asset, the market has become much more selective in recent years. Much of this change is related to the replacement of commercial banks by large business corporations as the chief investors in commercial paper. Given the nature of their business, corporate treasurers usually cannot devote the same attention to analysis of credit position as can commercial bankers. Therefore corporations very often confine their investments to notes of very large, well-known firms.⁹ This attitude on the part of investors has led commercial-paper brokers to become increasingly selective and to discourage all but the best credit risks from issuing paper.

Of invaluable assistance to all buyers of commercial paper in assessing the credit worthiness of the various notes, is the National Credit Office (NCO) which is a subsidiary of Dun and Bradstreet. The NCO collects financial data on virtually all firms issuing commercial paper. Especially careful checks are made of the bank relations of the individual firms. The NCO then publishes a separate confidential release concerning each commercial paper borrower which it makes available, upon subscription, to actual and potential investors. The release provides information concerning the names of principal banks and amounts of credit lines open to the firm in question, current and historical balance-sheet data and information regarding management, lines of business and subsidiaries. After careful analysis, the NCO rates the paper of the company

⁹Evidence for this argument is the preference for directly-placed to dealer paper by corporations, most often because the direct placers are large well-known finance companies. Banks are much more favorable to dealer paper than are corporate investors. See Chapter V.

in question as "prime", "desirable", or "satisfactory." Somewhat over half of the firms are rated prime with the majority of the remainder rated desirable. The ratings are based on consideration of the financial position of the firm and are arrived at after consultation with the firm's lending bankers. A net worth in excess of \$25 million and no loss years for a specified period are necessary but by no means sufficient conditions for a prime rating. The NCO ratings and reports are important guides to investors and save the individual commercial-paper buyer much credit-investigation work.

Dealer vs. Direct

Throughout this study commercial-paper issuers are divided, for analytic purposes, into three groups: those finance companies that sell paper directly; those finance companies that issue paper through dealers, and industrial borrowers, all of whom use dealers.

The direct placers are finance companies whose borrowing needs are so large that it is worthwhile for them to maintain their own selling forces and thereby save the commission which the dealers charge. Participants in the market estimate that when a firm has commercial paper outstanding of at least \$100 million at all times, it might be profitable to begin direct placement.

The decision of whether to place paper directly has more dimensions than merely calculating the total commissions saved against the marketing expense of selling directly. Due to competitive pressures, the direct

placers must quote an interest rate at which they will accept all the funds supplied by investors. Also, they must leave the maturity dates of their notes up to the discretion of the buyers. If the direct sellers are "in funds", they might be able to discourage potential investors by dropping temporarily their quoted rate in certain maturity ranges below that of their competitors. Rates below market cannot be maintained, however, without endangering the investor relationship.¹⁰ Because of this factor the direct placers occasionally borrow funds which they do not need and are forced to invest these moneys in short-term securities at no net gain. For industrial issuers, whose needs for funds vary widely from month to month, such a situation is undesirable. Direct placement is confined therefore to finance companies with steady borrowing requirements. Very large industrial issuers may have peak outstandings well in excess of \$100 million, but by utilizing dealers they can restrict their borrowings to those periods when funds are actually needed.

A positive advantage to direct placement is that these issuers can rely more heavily on notes of short maturities than can firms selling paper through dealers. As mentioned above, commission to a dealer to market a very short note would prove prohibitive to the issuer. Therefore,

¹⁰ One important reason for this is that many investing corporations have a limited list of approved names, which their directors have authorized for commercial-paper purchases. If one direct issuer is habitually under the market, the investor may well want to seek a replacement, where he can be assured of placing his funds so that they will consistently earn the market rate.

borrowers who use dealers meet their day-to-day needs from banks. The direct placers, however, can solicit short money by quoting an attractive rate, the marginal cost of marketing these notes being very small. Short maturity notes provide these borrowers with added flexibility and allow them to obtain a larger proportion of their debt in the open market than can other issuers.¹¹ This ability is reinforced by the large size and strong position in bargaining with banks enjoyed by the direct placers. These factors are considered in detail in Chapter III.

Investors in Commercial Paper

Having presented a brief glimpse of the nature of commercial paper as a source of funds, we now turn our attention to the investors' side. Again, our treatment here will be only cursory; detailed discussion will be presented in Chapters IV and V.

Commercial paper is purchased by a wide variety of institutions. As has been noted in Chapter I, commercial banks were the chief investors before World War II. In recent years, although nonfinancial corporations

¹¹ Another possible advantage of placing directly is the freedom from certain restrictions which brokers have imposed, to assist their marketing of paper. These restrictions, such as those requiring unused credit lines to be maintained to cover commercial paper outstanding, may be unrealistic for large finance companies. This factor was perhaps more important in the thirties, but nowadays dealers are sufficiently flexible to adapt their requirements to the situation of each individual issuer. Also, it was argued in the twenties and thirties that direct placement would increase the acceptability of finance paper through developing a specialized marketing force. Given the excellent reputation of the large finance companies with today's corporate investor, this reasoning is no longer relevant.

have supplied the bulk of funds to the commercial-paper market, commercial banks have remained important, especially in the dealer market.

Large banks generally do not purchase paper for their own accounts, but many of them are very active in the market on behalf of their correspondents and nonbank customers.¹² Small country banks are significant investors in paper, especially those located in areas where loan demand is of a seasonal nature. When demand for direct loans slackens, these institutions buy paper to build up their loan portfolios. Their purchases of open-market paper generally consist of notes of small denominations (\$50,000 to \$100,000) and their preference leans toward the dealer market. Here, with one contact, they can purchase several notes, each within their legal lending limit, representing firms from a wide variety of industries.

Participants in the market estimate that bank purchases of commercial paper--for their own investment accounts, for their correspondents, or for their nonbank customers--amount to about half of the transactions in the dealer market. Half of this total is estimated to remain in bank portfolios. In dollar volume, the bank share is somewhat smaller than the above figures would indicate. Banks are less important in the market for direct paper. Although they purchase about one-third of directly-placed paper, all but a small portion of this is on behalf of nonbank customers.¹³

¹²The nature of services performed by banks relating to commercial paper will be discussed below.

¹³The above estimates have been derived from conversations with dealers and direct placers. The Flow-of-Funds accounts base their ownership figures of commercial paper on the assumption that banks and insurance companies together hold 10 percent of directly-placed paper outstanding.

Nonfinancial corporations are responsible for substantially over half of the dollar volume of commercial-paper notes purchased. These investors are somewhat more important a factor in the direct than in the dealer market. Commercial paper competes with other short-term instruments such as Treasury bills, bankers' acceptances, and time certificates of deposit in the short-term investment portfolios of these institutions. Although there is no secondary market, the fact that direct paper can be "tailormade" with respect to amount and maturity makes commercial paper an attractive investment for many corporations. The growth of corporate liquidity, coupled with the increasing desire to manage short-term funds more closely, has exerted an important influence on the recent growth of the commercial-paper market.¹⁴

Insurance companies account for some 5 percent of commercial-paper purchases. These institutions are essentially long-term investors but do have a substantial cash position from time to time. This may serve as a contingency for large predictable payments, such as for taxes, and also may be the result of the timing of longer-term commitments awaiting attractive opportunities. Commercial paper is an ideal instrument, especially for the former purpose, as it can be made payable on the day the money is needed. Insurance companies generally buy their paper in large lots and from the direct placers.

¹⁴The various money-market instruments which compete with commercial paper will be described briefly below. The corporate decision to buy commercial paper as compared with other short-term investment alternatives will be discussed in Chapter V.

Pension and trust funds, which have experienced extremely rapid growth in recent years, also invest short-term funds in the commercial-paper market. They are becoming an increasingly important factor, especially in the market for directly-placed paper. Because these institutions often are unwilling to commit their short-term funds to a nonmarketable instrument (such as commercial paper) while they are seeking more permanent investment media, an interesting arrangement has evolved. Several of the direct placers have sought trust-fund money which is handled by large commercial banks. They have accepted this money, up to a prescribed limit, on a regular basis. The notes are technically one-day demand liabilities, but they are issued with the tacit understanding that the amount of the notes held by any individual bank will not vary greatly from day to day. Interest is computed on a daily basis on the indebtedness for each day, and is generally at the 90-day rate. The large dollar amount of individual transactions makes this a profitable and steady source of funds for the direct placers. In addition, since the trust funds can vary daily the amount of paper which they hold, they are more liquid than if they invest in a 90-day nonmarketable instrument for the average amount of their paper holdings. Alternatively, the trust funds are receiving a higher yield on the difference between their average and minimum paper holdings than they could obtain without this arrangement.

Other commercial-paper purchasers include colleges and universities who invest tuition and building-fund money and arrange for paper to mature on dates coinciding with expected out-payments. Foreign investors occasionally purchase paper when interest rates are relatively more

attractive in the U.S. than abroad. Individuals seldom buy commercial paper, preferring marketable securities or convenient savings-and-loan shares at comparable yields.

Money-Market Instruments

The decision to invest funds in commercial paper is affected by the characteristics of various substitute assets. Yield, default risk, marketability, and availability of the alternative instruments are compared with the corresponding aspects of commercial paper. The choice among these assets by an individual investor will depend on his preferences, that is, on his willingness to sacrifice some liquidity and perhaps assume greater risk in exchange for a higher return. To provide background for the analysis of commercial paper as a short-term investment, the present section briefly discusses some of the substitute assets and considers the type of investors to whom they are expected to appeal. Investors' evaluation of paper relative to these substitutes is considered in Chapters IV and V.¹⁵

An appraisal of default risk leads to the opinion that this factor is objectively negligible not only in Government securities but also in obligations of large commercial banks and prime commercial-paper issuers.

¹⁵For more detailed descriptions of the various money-market instruments see Morgan Guaranty Trust Company of New York - "Money Market Memorandum," (mimeographed, 1963); J. E. Lineberger - "The Applicability of Selected Money Market Instruments to Corporate Portfolios," (unpublished M.B.A. thesis, New York University, 1963); and Federal Reserve Bank of Cleveland - "Money Market Instruments," 1962.

Therefore, even though most investors would prefer direct Treasury obligations were other things equal, the more interesting criteria for determining what securities an investor will choose are yield and some measure of liquidity. For those investments in which there is a secondary market, liquidity is measured by the typical dealer spreads between "bid" and "ask", i.e., by the transactions cost of disposing of these securities before maturity. The spread necessary to induce dealers to assume a position in a given instrument will be smaller the greater the "depth, breadth and resiliency" of the market.¹⁶ Lower spreads, of course, imply greater liquidity for the investor.

Short-term U.S. Government securities are the most liquid of money-market instruments. The secondary market is so deep that very large blocks of 3-month bills (even in excess of \$20 million) can be sold at a spread of 1 or 2 basis points. For short maturities of about 30 days, Treasury bills are especially liquid relative to competitive assets, the prevailing spread being 5 or 6 basis points.¹⁷ At the end of 1963, some \$65 billion

¹⁶Depth implies the existence of a large number of buy-and-sell orders at prices slightly below and above the market; breadth indicates a heavy volume of orders from widely divergent investor groups and resiliency signifies that they will quickly take advantage of, and thereby reverse, any sharp changes in price. Other things equal, dealers generally demand greater spreads when interest rates are high and rising than when they are low and falling due to the greater risk of assuming a position in the former case. See B. G. Malkiel - "Problems in the Structure of Financial Markets," (unpublished doctoral dissertation, Princeton University, 1964), Chapter VI, passim.

¹⁷Since the basis-point spreads are per annum, they would always be expected to be higher for very short maturities. The expansion is that the dealer's profit, which is necessary to induce the transaction, depends on his buying and selling price. Spreads are derived from conversations with dealers and reflect typical operating conditions. In periods of high and rising interest rates, spreads are usually larger.

of short-term Governments were held by the public, including \$17 billion owned by commercial banks and about \$9 billion held by nonfinancial corporations and insurance companies.¹⁸ Because of their high degree of marketability, Governments are an ideal secondary reserve for commercial banks and a protection against unforeseen contingencies for corporate investors. In addition, their superior marketability makes short-term Treasury securities well suited for adventurous corporate treasurers who desire to "play rate" and attempt to second-guess the market's expectations.

Governments, however, do offer the lowest yields of the money-market instruments. And, most nonbank investors do not require liquidity to the degree offered by Treasury securities for all their short-term investments. Much of their cash needs can be forecasted quite accurately and these institutions are willing to sacrifice some liquidity and assume some slight risk in exchange for a higher yield. Even commercial banks, faced with the increasing importance of interest-bearing time deposits, have become willing to hold part of their secondary reserves in instruments other than Governments.¹⁹

¹⁸Data based on "Treasury Survey of Ownership". Actual corporate ownership is substantially larger as these data reflect merely the 469 corporations surveyed.

¹⁹For a detailed discussion of the Government-securities market, see A. H. Meltzer and G. von der Linde - "A Study of the Dealer Market for Federal Government Securities," prepared for Joint Economic Committee (Washington, 1960).

A very conservative way for investors to reap a slightly higher yield than that which is available on Treasury bills is to purchase obligations of the various U. S. Government agencies.²⁰ These issues are widely held by commercial banks, nonfinancial corporations and various savings institutions. The volume of Agency securities maturing within one year is about the same as commercial paper outstanding. In terms of liquidity and yield, Agencies represent an investment alternative which is intermediate between Treasury bills and commercial paper.

There is a fairly good secondary market for Agency securities, although this market is not nearly as deep as that for Treasury bills and transactions costs are substantially higher. Typically dealers' spreads are 8 basis points for securities with 6 months to maturity, 10 or 12 basis points on 3-month issues and 20 basis points and up on obligations with less than 30 days to maturity. This decreased marketability is compensated by a yield which is generally 10 to 15 basis points above that on direct Treasury obligations.

Still higher yields can be obtained on short-term tax-exempt securities, of which somewhat over \$3 billion are presently outstanding. Of special importance to short-term investors are notes of local United

²⁰The Federal agencies were established to provide direct financing or facilitate private financing in specific areas of the economy. They include the Federal Intermediate Credit Banks, the Federal National Mortgage Association and the Federal Home Loan Bank Board. These Federal agencies finance their lending and other activities in large part by the issuance of debt.

States Public Housing agencies (PHA's) which account for about two-thirds of the municipals with less than one year to maturity. These latter notes are the most marketable of the tax-exempts and are of the highest quality since they are backed by the "full faith and credit of the United States".²¹ In blocks of a few million dollars, PHA's are about as liquid as Agencies. Typically spreads of about 5 tax-free basis points prevail for 90-day notes, with spreads of 10 to 15 tax-free basis points common on 30-day securities. The market is too thin, however, to absorb sales in excess of \$5 million, and it may be prohibitive for investors to dispose of these securities without a substantial capital loss. Because of this, PHA's have been issued to mature on quarterly tax and dividend dates and are often purchased with a specific need in mind, as is commercial paper. For an investor in the 50-percent tax-bracket, the yield on PHA's is comparable to that on directly-placed paper, or 25 to 30 basis points above the Treasury-bill rate.

Bankers' acceptances are time bills of exchange (drafts) drawn on and accepted by a bank, or bearing the credit of the accepting institution. Like commercial paper, acceptances were a very important source of finance in the twenties, declined in volume during the Depression and World War II, and have risen sharply in recent years. At present, there are some \$3 billion of bankers' acceptances outstanding. Almost half of the outstanding acceptances, however, are held by accepting banks and another 10 percent by Federal Reserve Banks for their own accounts or

²¹Citation from the Housing Act of 1961.

for foreign correspondents. The bulk of the remainder is held by foreign banks, who have traditionally regarded acceptances as a good investment for dollar balances because of their tax-exempt status.²² The participation of nonbank investors in the acceptance market is limited, despite the fact that yields are comparable to those on directly-placed commercial paper. The main explanation for this is that it is very difficult to obtain large blocks of acceptances with the maturity desired, since the initial investors usually hold acceptances to maturity. Although a secondary market does exist, the market is rather thin and dealer spreads are about 1/8 percent per annum. Acceptances should be considered less liquid than other marketable money-market instruments.²³

Investors can presently obtain greater liquidity and somewhat higher yields by purchasing negotiable time certificates of deposit (CD's). This instrument was established early in 1961 by commercial banks as a competitive reaction to the secular flow of corporate funds from demand deposits to earning assets. CD's have experienced a spectacular rise and at present total over \$12 billion. About 75 percent of these outstandings represent the liabilities of major banks and are traded actively on the secondary market.

²²Unlike Treasury bills, bankers' acceptances are exempt from Federal income tax when held by foreign investors.

²³For more detailed discussion of bankers' acceptances, see "Bankers' Acceptance Financing in the United States," Federal Reserve Bulletin, May 1955, and "Bankers Acceptances," Monthly Review of the Federal Reserve Bank of New York, June 1961.

Because CD's are time deposits, legal interest-rate ceilings are established by Regulation Q. At the present time, banks are permitted to pay 1 percent on under-90-day money and 4 percent on funds committed 90 days or longer. Therefore, because of present interest-rate levels, maturities under 90 days must be obtained on the secondary market. This market makes a strong distinction between "prime" CD's issued by the money-market banks in New York and Chicago, and the certificates of lesser-known banks with more regional business. The marketability of the former certificates is second only to that for Treasury bills, although CD transactions are limited largely to denominations of \$1 million. For maturities of 90 days, dealer spreads are usually under 5 basis points and may be as low as 2 or 3 basis points when the dealer is able to match buyer and seller on a specific transaction. Spreads are generally about 10 basis points for certificates with 30 days to maturity. Under normal conditions, the CD market is deep enough to handle transactions of \$5 million easily.

At the present time, in spite of their greater liquidity, prime certificates are yielding 5 to 10 basis points more than directly-placed commercial paper of corresponding maturities, with CD's of outlying banks offering a slight premium. The discrepancy is partially explained by the fact that CD's are readily marketable only in million-dollar lots, and that smaller certificates are really no more liquid than commercial paper.²⁴ In addition, since small investors can obtain commercial paper

²⁴The liquidity of commercial paper is discussed in detail in Chapter VI.

in the exact amount and maturity desired but can only approximate this situation with primary CD's over 90 days, paper is a more convenient medium for many investors. Finally, large numbers of investors intend to hold their assets to maturity and therefore are almost indifferent to the added liquidity afforded by certificates. In spite of all these reasons, however, it appears that a situation in which CD's bear a higher yield than commercial paper is not an equilibrium one. To stimulate the CD market to grow as rapidly as it has, it seems that banks have boosted the CD rate to provide investors with a "sweetener." At present CD's do appear to be more attractive than substitute investments, but as the rate of growth of the instrument subsides, yields will probably decline relative to those on other assets.²⁵ Table II-3 summarizes bid-and-ask spreads, and yield differentials over Treasury bills for the various marketable short-term investments and for commercial paper.

In addition to the marketable securities discussed above and summarized in the table, high-quality foreign investments compete with commercial paper in periods when short-term interest rates are relatively higher abroad than at home. To protect against the risk of the alteration of exchange rates, investors usually sell future foreign currency, effective on the maturity date of the security. The transactions cost of such a foreign-exchange hedge is generally 1/4 percent per annum, plus or minus the difference between the future and spot quotes on the foreign currency

²⁵For more detailed discussion of the CD market, see R. Fieldhouse - Certificates of Deposit, (Boston, 1962) and T. C. Gaines - "Certificates of Deposit Reappraised," The Bankers Magazine, Winter 1964.

Table II-3

Money-Market Instruments: Dealer Spreads and Relative Yields
(Basis Points per Annum)

<u>Instrument</u>	<u>Bid-Ask Spread¹</u>		<u>Differential Yield over Treasury-bill Rate²</u>
	<u>30 days to maturity</u>	<u>90 days to maturity</u>	
Treasury Bills	5-6	1-2	--
Federal Agency Notes	20	10-12	10-15
PHA's ³	20-30	10	25-30
Bankers' Acceptances ⁴	12.5	12.5	25
Certificates of Deposit ⁵ (prime banks)	10	4-5	35
Direct-Placed Commercial Paper	No secondary market. Direct placers will buy back paper in emergency.		25-30
Prime Dealer Paper	No secondary market. Dealers will try to resell paper on "best-efforts basis" in emergency.		40

¹ Bid-ask spreads are designed to be illustrative. In practice, they vary from transaction to transaction depending on volume, availability of buyers, etc. In addition, these spreads are usually somewhat higher in periods of tight money.

² Differentials over Treasury-bill rate reflect conditions prevailing in September 1964.

³ Tax-exempt spreads are adjusted on the assumption that the effective tax rate is 50 percent.

⁴ In practice, short maturities of acceptances are seldom traded on the secondary market.

⁵ Secondary market generally limited to denominations of \$1 million.

Source: Conversations with several dealers and Federal Reserve Bulletin.

in question. Firms which have foreign subsidiaries and which have scheduled payments to meet abroad, however, may find foreign investments ideally suited to their needs. For them, a foreign-exchange hedge is unnecessary and foreign investment eliminates the need to sell future U.S. dollars to protect against domestic devaluation. Such businesses account for the bulk of short-term foreign investment by U.S. corporations.

Canadian commercial paper, which is a very similar instrument to American paper, is a common investment for corporations with Canadian subsidiaries. At the present time, it is estimated that there is about \$650 million of finance and \$600 million of industrial paper outstanding in Canada. Currently, about 10 percent of these outstandings are held by Americans, but this figure has been as high as 25 percent in the past.²⁶ As in the United States, a large bulk of finance paper is placed directly and most industrial paper is sold through dealers. Industrial paper in Canada has become important only since about 1957 largely due to the relatively substantial spread which has existed between open-market rates and bank-borrowing rates.

In terms of liquidity, Canadian commercial paper is comparable to that in the United States. The large finance companies, many of which are subsidiaries of American corporations, will buy back their notes before maturity if the investor is faced with unforeseen needs for funds.

²⁶ Letter from Wood, Gundy and Company Ltd., a leading Canadian dealer, dated May 1964. For additional information about the Canadian market see their booklet, "Discount Paper in Canada," (Toronto, 1958).

Other Canadian paper can be sold on the open market, in a fashion similar to the best-efforts system which is common in the United States. Specifically, a new buyer must be found before the notes can be disposed of; some delay may result before the investor can realize the proceeds. Interest rates, however, often have been higher than in the United States. Many corporations have purchased Canadian paper to reap the higher yield without suffering a substantial loss of liquidity or accepting additional default risk.²⁷

Another medium for short-term investment is the Eurodollar market, which describes the practice of borrowing and lending U.S. dollar balances abroad.²⁸ Foreign banks and foreign branches of U.S. banks accept U.S. dollar deposits for stated periods of time. They then relend these deposits, either to banks in other foreign countries or to businesses desiring dollars, perhaps to pay for imports from America. The profitability for the participating banks depends on the spread between borrowing and lending rates.

Eurodollars are generally quoted for call, one week, one month and longer maturities, and are nonmarketable. The yield depends on interest rates in the country of the depository bank. As would be expected,

²⁷As one investor put it, "Since much of the (Canadian) paper is issued by subsidiaries of American corporations, it is possible to get American credit at more attractive interest rates."

²⁸The term Eurodollars is used to include U.S. dollars traded in Canada and elsewhere outside Europe. Since the deposits are in U.S. dollars, no foreign-exchange hedge is necessary for American investors..

highest returns can often be obtained in semi-developed countries, though some amount of default risk is no doubt involved in these circumstances. Prime 3-month Eurodollar deposits, however, (e.g. on British or American banks in London) bear little credit risk and often yield a full percentage point above the Treasury-bill rate. This interest-rate differential is explained by the lack of marketability and unfamiliarity of investors with the relatively new international instrument. As acquaintance with this market increases, it is likely that the presently small volume of Eurodollars held by U.S. corporations will grow.

In summary, short-term investors for whom marketability is very important should limit themselves to Treasury obligations, and to certificates of deposit if they are large enough to deal in million-dollar lots. On the other hand, firms whose cash flows are fairly predictable, and who need to obtain securities at all times and in the exact amount and maturity desired, will find commercial paper attractive. More adventurous corporations to whom liquidity is not paramount, may find that short-term foreign securities and Eurodollars offer higher returns without bearing any substantial default risk.

The Role of the Commercial-Paper Dealer

Having discussed briefly the types of issuers and investors which are active in the commercial-paper market and having outlined some of the assets which compete with paper as a short-term investment, attention is now turned to the activities of the paper dealer. The dealer is an

intermediary who brings borrower and lender together. Despite the dominance of the direct placers in terms of volume of funds raised in the open market, some 95 percent of the issuers of paper still utilize the services of a dealer.

At the present time there are under ten active paper dealers. Although figures on business handled are not available, it is widely known that Goldman, Sachs and Company is much the largest dealer whose market share is probably over 75 percent. Goldman handles most of the large industrial accounts and has utilized its position as a paper dealer to develop relationships which in turn foster its underwriting business. A. G. Becker, Solomon Brothers Hutzler, and Lehman Brothers are other diversified investment houses which handle commercial paper, the latter being a new entry into the paper business. All of these firms are based in New York and maintain sales offices throughout the country. Weil Pearson and Company, probably the largest firm dealing exclusively in commercial paper, maintains an affiliation with Piper, Jaffray and Hopwood, a Minneapolis-based investment-banking firm. Weil Pearson handles the joint business of the two firms in the East and Piper Jaffray does the marketing in the Midwest. Ashwell and Company is a Chicago-based dealer which has recently expanded its operations into the East. This firm handles only commercial paper and specializes in small accounts.

Presently, all active commercial-paper houses operate as both "dealers" and as "brokers." On some transactions, they buy the paper outright from issuers and sell it from their own portfolios; on others

they act merely as intermediaries, receiving an order from an investor and asking a firm in need of funds to write such a note. Although no general rules can be drawn and practices vary from dealer to dealer, the following distinction is interesting. In general, larger industrial issuers sell their notes outright to the dealer, in denominations which the dealer feels will be most convenient to market. The dealer quotes the rate of interest prevailing on the market and generally assumes the risk of an interest-rate rise while he is holding the paper. Should interest rates fall, the dealer of course, has a profit which is seldom rebated to the issuers. In the case of smaller industrial issuers, dealers try very hard to sell ahead, that is to find buyers before they actually accept the paper. Finance company paper is very seldom inventoried and is usually "tailormade" to investors' specifications. The finance company tells the broker the amount of funds it will need and the broker sets out to seek buyers. After a sale has been consummated, the broker orders the paper from the issuer.²⁹

The typical method of financing the dealers' commercial-paper inventory is by direct loans from large money-market banks, the commercial

²⁹The above observations as well as other generalizations in this section are meant to describe usual procedures rather than hard-and-fast rules. Because of competition, commercial-paper dealers must be willing to accommodate both issuers and investors and it is the nature of their business to be as flexible as possible. Thus it will sometimes be possible for an investor to obtain an industrial note tailormade to his specifications, and, by the same token, a finance company in need of extra funds for an unforeseen reason might well coerce its broker into inventorying paper until it could be resold.

paper serving as collateral. Such loans are made below the prime rate (usually at 1/4 percent over the rate for Government-bond dealers) and are always available at depository banks. In addition, some dealers are making increasing use of repurchase agreements ("repos") which have long been a popular method by which Government-securities dealers finance their inventories. The repo involves the dealers in lending out paper for short periods while shopping around for a permanent buyer. This method has the advantage of expanding dealer relationships and is often cheaper than bank financing.

The actual marketing operation of the dealer involves less emphasis on face-to-face sales-campaign work than in previous years and more mail and telephone contacts. Dealers send offering ("throw-away") sheets to potential investors and banks, who often act as agents for correspondents and nonbank customers. The offering sheets contain the names and maturities available for the week, and give the quoted interest rates. Accompanying these sheets, if so requested, are financial data and listings of line banks for those firms whose paper is being offered. Investors then contact the dealer concerning those securities in which they are interested or with special requests for notes to match specific needs. The issuing firms seldom know who has purchased their paper and are so informed only by an infrequent endorsement of the note.³⁰

The most important function of the dealers, as they see it, is to create a reliable market through which to obtain funds for borrowing

³⁰ Brokers generally do not reveal information about the firms to whom they sell paper as this knowledge is their stock in trade.

clients. Their basic allegiance is to the paper issuer because it is the issuer that chooses a dealer and pays the commission. Since the competition between dealers is basically to obtain borrowing clients, the dealer tries to set the lowest rate of interest possible to sell the paper. At the same time, in order to serve issuers well, the broker must develop contacts with a large number of investors and must set interest rates high enough to allow commercial paper to compete effectively with the other money-market instruments. Since there is no secondary market for commercial paper and dealers are reluctant to buy back paper into inventory, the dealers must also try to place paper where it can be held to maturity with reasonable certainty.

When the paper is sold, dealers generally offer a 7- or 10-day credit-option period to allow investors to investigate the quality of the paper. Usually the options are given to bank buyers automatically, and to corporate investors on special request. Normally such options are not granted when the paper is specially-ordered and tailor-made for the investor. The option specifies that its purpose is "for credit investigation only", and not to allow investors to speculate at the dealers' expense. Today such options are seldom exercised. When they are, the reasons are almost always legitimate, but such has not historically been the case. In the twenties, this privilege was widely abused and presented a real problem to the paper dealers.

Traditionally, some large industrial firms have used more than one dealer to market their paper. The dealers in turn, agreed informally

to divide up the market, usually on a geographic basis, with each dealer handling one market area exclusively. Occasionally marketing arrangements involved one dealer selling to banks and another to corporate investors. Although regional affiliates still exist, exclusive national distribution of each issuer's paper is becoming more the rule. The major explanation for this change lies in the attitude of dealers who argue that it is in the best interest of an issuer to use only one dealer. They claim that a situation where two brokers offer the same paper at different quoted rates is likely to antagonize investors. Dealers also argue that it is more difficult for two brokers to control the volume of outstanding paper than for one to do so. Finally, they claim that in the long run an issuer will not get a better rate by using more than one dealer; an efficient broker will market paper so as to get a good price on the average, and it is on this criterion that a broker should be chosen.

Although all of these statements are possible, they are not convincing. It might just as easily be argued, for example, that two brokers, each operating with a target for outstandings, would be more likely to achieve the desired volume than would one broker. If one broker undersells the target, it is possible that the other will compensate by exceeding the target. At worst, both dealers will err in the same direction, a situation which will yield a result identical to that in the one-broker case.³¹

³¹ Assume that both brokers set an interest rate so as to achieve an expectation of target outstandings with a possible error of +10 percent. Assume also that the actual outstandings are rectangularly distributed, that is...

In any event, the dealers generally like to maintain exclusive distribution of the notes of an individual issuer and have succeeded in making this practice more and more the rule. Since most issuers nowadays have a nationwide reputation, dealers prefer national marketing organizations. Dealers appear to be unwilling to compete with each other in selling the paper of a specific issuer. Rather, they limit their competition to establishing a reputation for ability to place paper and thereby attempt to win over clients from each other.

There is also very little competition between dealers in the commission which is charged issuers. Traditionally, the commission charge had been 1/4 percent "on the face" of the note, which on a 6-month note amounts to 1/2 percent per annum and on a 90-day note to 1 percent per annum. Under these terms issuers prefer to extend their maturities, other things being equal. Recently, increased competition and the desire for shorter maturities have led to the computation of commission on an annual basis rather than on the face. Commission typically range from 1/4 percent per annum on the large companies to 1/2 percent per annum on the smaller companies. Under this arrangement it is the dealers who want to extend maturities because it is more effort to market two 90-day notes than one

³¹...that any value around the mean is equiprobable. If two brokers are employed, each to sell half of the paper, the expected value will remain the same but the variance will be reduced. If one broker undersells the mark by 10 percent, and the success of the other is completely independent, the expectation is that both brokers together will undersell the target by 5 percent. Only if the success of the two is completely dependent, will the expected result be the same as if there were only one broker employed.

180-day note for the same commission. The lower charges to larger firms can be explained by several factors.

First, better-known firms' paper will, on the average, prove easier to market, especially in a falling market, and hence the dealer assumes less risk. Second, larger firms often issue bigger notes and dealer costs do not rise proportionally with the dollar size of the note issued. Third, larger names are in a better bargaining position, are good publicity for the dealer, and are often sources of other business such as underwriting of long-term issues. In fact, in some exceptional cases, prime industrial firms have used this bargaining position to bid the commission rate to $1/8$ percent per annum.

In addition to the primary function of marketing a firm's paper, a commercial-paper dealer is occasionally called upon by its smaller customers for financial advice, which is provided as a service. Dealers insist that as a general rule all but the largest commercial-paper issuers maintain unused bank lines of credit to cover at least all paper outstanding. This is an important selling point for the dealer; in the event that the open market should dry up, the issuer could resort to bank borrowings to pay off his paper at maturity.³²

Since the reputation of the commercial-paper broker depends on the good financial record of its customers, the dealer must be concerned with their performance as long as he continues to handle the paper. In accordance with this, dealers often help their customers obtain lines of

³² Line-of-credit policy is discussed in detail in Chapter III.

credit at banks, for which they receive a commission for the first year of the line. The service appeals mainly to smaller customers.

The Intermediary Role of Commercial Banks

As mentioned above, commercial banks invest in commercial paper as principals and also enter the market as intermediaries. The latter function, done mostly by big-city institutions, will be discussed in this section.

The most widely performed intermediary function is that of purchasing paper for the account of smaller correspondents and nonbank customers. Well over half of the banks sampled in "major financial cities" indicated that they purchase paper for correspondent banks, and a similar percentage indicated that they perform this service for nonbank investors.³³ The corresponding percentages of banks in "other urban areas" are very much smaller, and banks in rural districts are seldom requested to act in this capacity. The intermediary participation of banks is similar in all areas of the country and, as would be expected, increases markedly with deposit size of bank. These results are presented in Table II-4.

The big-city banks which are active in the commercial-paper market generally maintain a staff in the Investment or Credit Department to act as agent for customers in purchasing paper from the direct placers and

³³The classifications "major financial cities", "other urban areas" and "rural districts" are defined in Appendix B, where the sampling procedure and response patterns are also discussed.

Table II-4

Banks Purchasing Paper for the Account of Customers
(percent of total respondents)

	Deposit Size of Bank (\$ Millions)							Location Category			
	Under 20	21- 50	51- 100	101- 200	201- 500	501- 1000	Over 1000	Major finan- cial centers	Other urban areas	Rural Dis- tricts	All Respon- dents
Purchase for account of correspondent banks	2	7	15	29	42	60	74	61	8	4	21
Purchase for account of nonbank customers	3	8	27	29	45	51	91	56	22	5	24
Don't pur- chase directly but arrange through correspondents	5	8	4	6	4	0	0	1	7	6	5
Generally not asked to per- form services of this nature	89	77	61	46	36	23	4	24	65	85	62

Source: Response to questionnaire on "Role of the Banks in the Commercial Paper Market", Appendix C.

brokers. These institutions provide interest-rate and credit information on the different commercial-paper notes available at any moment, and also make investing customers aware of opportunities for alternative uses of short-term funds, such as Treasury bills or certificates of deposit. Many banks make specific recommendations concerning the paper to be purchased. The advice given, however, is usually quite conservative and reflects the feeling that safety of principal is the chief consideration. Often banks will restrict their recommendation to notes of those firms for whom they service credit lines, arguing that they are best acquainted with the financial structure of these companies.³⁴ When the customer purchases a note through his bank, his account is charged, and when the note is paid off, his account is credited.

Buying paper through a bank has the distinct advantage of saving the investor much of the paperwork involved. In addition, up-to-date information on the various opportunities open to him is made available from one source. Finally, the investing firm has the choice of remaining anonymous when it deals through its bank, thus avoiding future solicitations from dealers and direct placers.

³⁴The real explanation for this practice is probably bank loyalty to their own credit-line customers. It should be noted that this practice does not imply that the paper of all firms to whom a bank extends credit lines is deemed a fit medium for all investor customers. Different types of investors should assume different types of risks; money-market banks often feel that correspondent banks, as opposed to corporations, are in a position to move away from the prime names in order to earn a higher yield. They reason that, after all, lending money is the "business" of commercial banks.

In addition to acting as agent, some of the larger commercial banks will buy commercial paper notes for their own portfolios and parcel out pieces of the note to correspondents as participants. This must be done on an informal basis because commercial banks are not permitted to be underwriters or to take a dealer's position in corporate securities. In addition, big-city banks are usually willing to buy commercial paper from small correspondents in need of funds. This willingness is not an obligation, but rather a correspondent service which enhances the liquidity of commercial paper for small investors.

A few of the very large money-market banks perform two additional intermediary functions, that of issuing agent and that of paying-and-receiving agent. The issuing agent performs a service for the direct placer (or occasionally for an issuer who uses a dealer). The issuer sends presigned and prenumbered notes to the bank acting as agent. When the note is sold, the seller or dealer notifies the bank to "issue" the note. The note is usually payable at the issuing bank but this can be altered to suit the investor. The issuing agent either holds the note in safe-keeping or delivers it, on instruction, to the investor or his bank.

The paying-and-receiving service involves crediting the account of the paper issuer when paper is sold and debiting this account when it is redeemed. The bank thus serves as a clearing house. It charges daily interest on the computed debit balances, or wires out any credit balance on instructions of the issuer. The paying-and-receiving agent must also

make corresponding adjustments with the dealers and investors who are buying or redeeming their notes. This function is largely confined to New York and Chicago banks.

The bank services outlined above are generally performed not for direct service charges, but instead for compensating balances. There are some exceptions to this general rule, but most banks and customers seem to prefer this method of compensation.

CHAPTER III

COMMERCIAL PAPER AS A SOURCE OF FUNDS

The present chapter considers the role played by commercial paper in the over-all financing picture of issuing firms. Commercial paper competes directly with bank loans as a source of short-term funds. The major reason why borrowers use the open market is that the cost of funds obtained in this manner is less than that on bank loans. Commercial-paper issuers, however, are dependent on their banks for the lines of credit necessary to provide insurance against fluctuations in paper outstanding. Bank relations are thus important to open-market borrowers and are discussed below.

Special attention is paid to the sensitivity of issuers in shifting from bank loans to commercial paper when the interest saving increases. We conclude that borrowers rely more heavily on open-market finance when the interest savings is larger, but that part of this shift is to be explained by money-and-credit conditions and only part by sensitivity to interest rates.¹

Quantitative Importance of Commercial Paper

The direct placers generally rely much more heavily on commercial paper than do issuers who sell their paper through dealers. Typically,

¹This chapter relies heavily on the results of the questionnaire on "Commercial Paper as a Source of Funds", Appendix C.

commercial paper outstanding accounts for over three-quarters of the short-term debt of the direct placers, and often for over half of their total debt. In contrast, the dealer issuers commonly maintain commercial paper at a level under 50 percent of their short-term debt, and under 30 percent of total debt. There appears to be little difference in the dependence on commercial paper between the dealer finance and dealer industrial issuers, although a few industrial issuers do rely very heavily on paper. Table II-1 presents these results.

When interpreting the table, it should be borne in mind that the percentages are not constant at all times, and in many cases vary substantially seasonally and cyclically. And, notably in the case of industrial borrowers, the figures represent the proportion of commercial paper to debt at times when the firm is borrowing, which may be only a few months out of the year.

The very high ratio of commercial paper to debt maintained by the direct placers is the result of the exploitation of their top credit ratings and strong borrowing positions with banks. These issuers are therefore able to obtain the interest saving from open-market borrowing for a larger proportion of their total financing needs.²

²The interest saving referred to includes the lower borrowing rate in the open market, any reduction in compensating balances allowed by switching from bank loans to open-market paper (see below), and any discrepancy in transactions costs between the two borrowing methods. In the questionnaire results and the statistical analysis that follow, the spread between the prime rate and the commercial-paper rate is used as a proxy for the gross interest savings, but it is the latter concept that is theoretically relevant.

Table III-1

Percentage of Commercial Paper to Debt
(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct- Placers</u>	<u>Total*</u>
<u>To Short-Term Debt</u>				
Under 15%	19	14	0	13
16-30	48	24	0	26
31-50	29	41	8	32
51-75	5	6	31	10
Over 76%	0	14	62	18
<u>To Total Debt</u>				
Under 10%	38	33	0	29
11-20	38	18	0	20
21-30	19	8	23	13
31-50	0	12	31	12
51-75	0	0	8	1
Over 76%	0	4	23	6

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

* May not add to 100% due to rounding or due to some respondents omitting the question.

Another factor which enables the direct placers to maintain high commercial-paper-to-debt ratios is their ability to sell paper of short maturities. Very short notes (30 days and under) give the paper issuer substantial flexibility. Outstandings can be expanded and contracted rapidly in response to changes in the need for funds. Because firms issuing paper through dealers cannot sell short maturities economically, they must rely on bank loans for a substantial portion of their borrowings. The superior flexibility of bank loans is thus an important limiting factor to the reliance of the dealer issuers on open-market paper.

For both direct placers and borrowers using dealers, the fear of straining bank relations is the most important constraint on commercial paper outstandings. This factor appears to be especially important for the direct placers; better than three-quarters of this group indicated its importance as compared with over half of dealer issuers. Since the direct sellers are using paper for a very high percentage of their short-term debt, they often feel that any increase would be denying banks proper line usage.

Very few commercial-paper issuers (only 5 percent of respondents) feel that they would have trouble selling additional paper if they so desired. Most of these are smaller and less well-known finance company issuers. A more important consideration limiting open-market paper is the existence of long-term debt agreements subjecting many issuers to maximum stipulated percentages of commercial paper to total debt. Finally,

inertia in senior management no doubt keeps the commercial-paper liabilities of some borrowers within specified limits, with bank debt being used for the remaining needs. Reasons for not increasing reliance on commercial paper are tabulated in Table III-2.

Table III-2

Reasons for Not Increasing Percentage of Commercial Paper
(Percent of Total Respondents in Category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct- Placers</u>	<u>Total*</u>
Higher commercial-paper borrowings would strain bank relations	52	59	77	60
Demand for paper not sufficiently strong to increase outstandings at the going interest rate	14	2	0	5
Don't desire to increase outstandings**	48	39	38	41

* Columns need not add to 100% because more than one alternative may be checked by each respondent, and some respondents may omit the question.

** Reasons offered explained in text.

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

The Function of Commercial Paper

Issuers of paper were asked to describe the position of commercial paper in their over-all debt picture. The vast majority of finance companies, including all of the direct placers responding, indicated that paper is a "permanent" source of finance. Industrial companies, on the other hand, indicated that the main function of open-market financing is to meet well-defined seasonal needs.

Although many firms emphasized that paper is a good replacement for a portion of bank borrowings, very few issuers noted that commercial paper is a perfect substitute for virtually all borrowing from commercial banks. A few firms indicated that commercial paper is used as only an occasional adjunct to bank borrowings. These results are summarized in Table III-3.

The seasonal aspect of commercial paper financing emphasized by the industrial issuers (and discussed in Chapter II), is more important for finance companies than the table indicates. Open-market borrowing is used at all times since these companies are always in debt. Where demand for funds is seasonal, however, these firms use paper along with bank loans to expand and contract their indebtedness. Such seasonals are especially prominent, for example, in the consumer-finance business, where loans increase rapidly before Christmas and then decline in the first quarter of the year.

Table III-3

Position of Commercial Paper in the Debt Picture of Issuers
(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct- Placers</u>	<u>Total</u>
Commercial paper outstanding is continually rolled over and is a permanent source of finance	86	8	100	42
Commercial paper is an instrument to meet well-defined seasonal needs for funds	14	82	23	55
Commercial paper is an almost perfect substitute for virtually all borrowings from commercial banks	0	4	15	5

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

Advantages and Disadvantages of Commercial-Paper Borrowing

Firms who have short-term borrowing needs and a very high credit rating should consider the use of commercial paper as a substitute for a portion of their borrowings from commercial banks. As noted above, the chief advantage of the open market is that interest costs are generally lower than borrowing rates at banks, even when allowance is made for broker commissions. Over the last ten years this interest-rate spread has ranged

between 1/2 percent and 2 percent per annum on direct paper and between 0 and 1-1/2 percent for most dealer paper.³

In addition to a lower quoted rate, the true interest saving obtained by using the open market is augmented for some issuers by a lower compensating-balance requirement. Banks typically require compensating balances against direct loans and against line-of-credit commitments, especially with finance-company customers. Sometimes the requirement is a flat percentage against both lines and loans, but often it is higher against loans. A common arrangement is a compensating balance of 20 percent of direct loans and 10 percent of open lines. In this situation, a borrower which uses the open market and keeps an unused credit line against this borrowing must put up only half the balance required of a firm which obtains all its funds from the bank. Moreover, if the open-market borrower needs no additional credit line against a marginal commercial-paper issue, the saving is even larger.⁴

In addition to the interest-cost saving, several other factors enter into the decision of whether or not to engage in open-market financing. To determine the importance of the various considerations, commercial-paper issuers were asked whether they would continue to sell

³For data on the spread between the prime rate and the commercial-paper rate, see Appendix D.

⁴For a fuller discussion of compensating-balance policy, see N. D. Baxter and H. T. Shapiro - "Compensating-Balance Requirements: The Results of a Survey," Journal of Finance, September, 1964.

commercial paper if the costs of borrowing at banks and in the open market were the same. The response pattern is summarized in Table III-4.

The dealer issuers, both finance and industrial companies, were about equally divided on whether or not they would issue paper if there were no interest-rate savings. The fact that commercial paper is a supplementary source of finance, a so-called "added string to the bow", was the most important argument to these issuers. Some of them, especially industrial companies, also found the idea of a national distribution of paper appealing. This national distribution would allow them to obtain

Table III-4

Attitudes toward Selling Commercial Paper in Absence
of Interest Rate Advantage

(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct- Placers</u>	<u>Total</u>
<u>Paper would be sold</u>				
Desire to keep a supplementary source of finance available	43	49	85	53
Desire for a nationwide distribution of paper	14	27	62	29
<u>Paper would not be sold</u>				
Fear of straining bank relations	10	12	0	10
Bank loans preferred because of greater flexibility	43	37	8	34

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

funds from different areas of the country if there is geographic tightness at any time and would also provide good advertisement in the financial community.⁵

The major argument against using commercial paper in the absence of an interest-cost saving is that bank loans have more flexibility, given the ability to prepay. Over one-third of dealer issuers cited this factor. As would be expected, however, the direct placers virtually ignored this alternative because of their ability to provide for flexibility by selling a substantial volume of very short-term paper. In fact, the direct placers overwhelmingly stated that they could continue to sell paper in the absence of an interest-cost savings. The majority of these issuers cited both the "supplementary source" argument and the idea of national distribution as being important. Many of the direct placers have borrowing needs which are so large that they would tax the combined lending limits of several banks. Although the correspondent system could conceivably be expanded to facilitate the meeting of these needs, under the present system it is certainly more convenient for the direct placers to obtain large amounts of funds in the open market, independent of any interest-cost savings.

Of paramount importance, however, is the necessity for the direct placers to be constantly in touch with potential investors. In fact, this rule is germane to their whole marketing effort. Since

⁵The "advertisement" argument is certainly less important today than it was in the twenties when a large number of smaller firms was issuing commercial paper.

commercial paper is a cheaper source of funds, on the average, than bank loans, the direct sellers must maintain their investor contacts by always accepting funds at the going rate. The direct placers thus remain in the market even if the interest savings should vanish temporarily. This argument leads one to suspect that direct placers are somewhat less sensitive to interest-rate differentials than are dealer issuers. This is precisely the finding discussed below.

Line-of-Credit Policy

All issuers of commercial paper maintain substantial lines of credit with commercial banks. Should funds suddenly become scarce in the open market, the issuers are then in a position to obtain bank loans at once to make up the deficiency. The lines assure commercial-paper investors of the issuers' liquidity in the event of a drying up of the open market. Also, the commitment to lend by large well-known banks gives credence to the credit stature of the issuer.

Traditionally, open-market borrowers have followed prevailing rules of thumb and maintained unused credit lines, dollar for dollar, against commercial paper outstanding. In the last decade, however, as the issuers have become larger and better-known, and as the commercial-paper market has become more reliable, the dollar-for-dollar rule has not been strictly adhered to. The change has been especially pronounced among the largest issuers, notably the direct placers. This result is not surprising because the open market is most reliable for the more

widely-known issuers. A drying up of the commercial-paper market would affect smaller industrial and dealer finance issuers most harshly. And, the vast majority of these issuers still do maintain open lines in excess of their commercial-paper borrowings. Data on unused lines of credit as a percentage of paper outstanding appear in Table III-5.

Table III-5

Unused Lines of Credit as a Percentage
of Commercial Paper Outstanding
(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct Placers</u>	<u>Total</u>
100% or greater	95	65	46	70
Greater than 75% but under 100%	0	8	23	8
Greater than 50% but under 75%	0	2	15	4
50% or under	5	18	23	16

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

It is doubtful whether the two fundamental purposes served by open credit lines, i.e., a hedge against an open-market dry-up, and an assurance to investors of the issuer's liquidity and credit strength, are a sufficient justification for maintaining lines as large as exist

at present. In fact, only about one-quarter of issuers feel that they genuinely need all their lines because of the unreliability of the commercial-paper market. Most issuers admit that they maintain lines in excess of their actual needs in order to satisfy banks, brokers and the constraints of long-term debt agreements. Banks, of course, desire these lines because they can earn compensating balances; brokers because the lines are an aid in marketing paper. Brokers have a responsibility in the credit worthiness of the issuer and generally insist that finance companies have "established lines" and industrial companies "assured credit" for a specified percentage of commercial paper outstanding. The percentage will vary from case to case but only the largest firms will be permitted to carry less than full coverage.

About half of the issuers sampled indicated that their desire to maintain favorable bank relations was the main reason for maintaining lines to the extent that they do. This consideration is about equally important for direct placers and dealer issuers. About a third of dealer finance companies, and dealer industrial firms to a lesser extent, indicated that brokers insist on the lines before they will market the paper. These results are summarized in Table III-6.

A relatively new innovation is the "swingline" account. Such accounts are offered, most commonly by banks in money-market centers, to large finance companies such as the direct placers. Usage, however, has spread to banks in other large cities and to smaller customers.

Table III-6

Factors Determining the Extent of Unused Lines of Credit
(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct Placers</u>	<u>Total</u>
Dealers insist on lines before they are willing to sell paper	33	16	0	18
Lines kept to maintain favorable bank relations	43	57	54	53
All lines genuinely needed because commercial paper felt to be unreliable source of funds	29	22	31	25
Other	19	20	31	22

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

The idea of a swingline is to allow the finance company to borrow to offset day-to-day and hour-to-hour fluctuations in its cash position. As commercial paper is sold, the proceeds are deposited in this swingline account; as paper matures, payments are made from this account. The finance company pays interest daily on the average debit in the account and can quickly wire out any credit balance to where the funds are needed. The bulk of bank borrowings by the direct placers is overnight and the swingline procedure thus helps increase line usage. These accounts have become essential to the flexible operations of large finance companies and constitute, in essence, an overdraft system.

Bank-Finance Company Relations

The nature of finance-company business often necessitates that these institutions consider peculiar bank-relations problems. Finance companies maintain lines of credit which are very large relative to their normal deposit balances. Direct interest payments by finance companies and working deposits generated by their business are generally insufficient to compensate banks for the costs of maintaining credit lines.

This basic difficulty is compounded by the fact that finance companies generally need bank loans most at the height of a cyclical expansion when credit is usually tightest. In a recession, when banks are anxiously seeking loans, finance companies can more than satisfy their needs in the open market, in the face of declining receivables.

An additional consideration is the fact that banks and finance companies are natural competitors in their lending activities. This competition has been intensified in recent years as banks have moved more heavily into personal and automobile loans and as many finance companies have paid more attention to commercial lending. Another aspect to this competition is the fact that finance-company paper and bank certificates of deposit are good substitutes in many investment portfolios. Finally, as finance companies have increased their reliance on open-market paper as opposed to bank loans, the competitive aspect with banks has been intensified.⁶

⁶ Many bankers will argue that their relationship with finance companies is further strained by the fact that these "professional borrowers" deal with large numbers of banks and therefore the finance-company relationship is "cold, impersonal and sterile." By sterile, they mean mostly that finance companies do not generate as great a volume of deposits as industrial firms with equal credit lines.

Because of the factors discussed, and especially because the volume of finance-company deposits and direct loans are often insufficient to make the relationship profitable for the banks, most banks apply compensating-balance requirements to these customers. The requirements are more widely applied and more rigidly enforced with finance companies than with other borrowers.⁷ In addition, most bankers insist on minimum line usage from finance companies. Small firms are generally requested to aim for 50 percent usage, but recently the direct placers have been borrowing for only about 30 days during the year. Size of compensating balances and amount of usage will vary from case to case. Some large finance companies prefer to treat all their banks uniformly in this regard while others like to treat each situation individually.⁸

Banks are often successful in persuading large national finance companies to fit their line usage into the seasonal needs of the banks. The finance companies can usually rotate their borrowings to be indebted to banks in those areas where credit is seasonally easy. Moreover, due to the tightness of the open market over the year-end line usage is generally high at this time. Banks encourage this because they then will show high loan figures on their balance sheets.

⁷ Averaging a compensating balance, for example, is less common with finance companies than with other borrowers. See N. D. Baxter and H. T. Shapiro, op. cit.

⁸ The foregoing remarks might be altered somewhat in the case of captive finance companies. Here, the relationship with the parent company is often dominant in the treatment of the captive. See Chapter II.

Finally, the need to maintain good bank relations, because of the importance of credit lines, acts as a constraint on the issuance of commercial paper. As was seen in Table III-2 above, 52 percent of dealer finance companies and 77 percent of direct placers cited bank relations as a reason why the percentage of open-market debt is not higher.

Borrower Sensitivity to Relative Interest Costs

In raising funds, issuers of commercial paper must make two choices: first, what proportion of debt is to be short-term and what proportion is to be long; second, of the short-term debt how much is to be bank loans and how much is to be commercial paper. The present section considers the responsiveness to relative interest costs of the proportion of commercial paper to short-term debt, assuming the ratio of short-term to total debt is fixed. The discussion concludes with some comments about the utilization of long-term financing by commercial-paper issuers.

If issuers are responsive to relative interest rates in shifting between bank loans and commercial paper, assuming that bank loans against unused credit lines are always available, the ratio of commercial paper to paper-plus-bank loans should be highest when the spread between the cost of funds at banks and in the open market is greatest. In other words, the greater the saving on commercial paper the larger the expected reliance on paper relative to bank debt. Correlation analysis was performed to see if any association existed between usage of the commercial-paper market and relative interest costs.

Quarterly data were collected on total commercial-paper outstanding, directly-placed paper outstanding, bank loans to finance companies and the spread between the prime rate and the commercial-paper rate. These data and their sources appear in Appendix D. Eleven years (1953-1963, 44 observations) were included. By necessity the series on bank borrowings includes finance companies who do not issue commercial paper and excludes industrial issuers, but major movements should not be disguised by this treatment. And, despite difficulties mentioned above, the spread between the prime rate and the commercial-paper rate was taken to represent the true interest saving obtained by using the open market.

The ratio of total paper to total-paper-plus bank debt was correlated with the interest-rate spread, as was the ratio of direct paper to direct-paper-plus-bank debt. The correlations were performed five times--first with all observations, then with all first-quarter observations, all second-quarter observations, etc. In this manner the seasonal influences, especially the sharp drop in commercial paper in the fourth quarter of each year, could not affect the quarterly results. The correlation coefficients (r) are presented in Table III-7.

Analysis of Table III-7 indicates that commercial paper is relatively more important when the interest-rate saving on paper is relatively large. The correlation coefficients are not very high but are significant. All borrowers taken as a group seem to be slightly more responsive than are the direct placers, taken alone. The seasonal

Table III-7

Correlations Concerning the Sensitivity of Commercial-Paper Borrowers
to Relative Interest Costs

(Values of r)

	<u>All</u> <u>Observa-</u> <u>tions</u>	<u>1st Qtr.</u> <u>Observa-</u> <u>tions</u>	<u>2nd Qtr.</u> <u>Observa-</u> <u>tions</u>	<u>3rd Qtr.</u> <u>Observa-</u> <u>tions</u>	<u>4th Qtr.</u> <u>Observa-</u> <u>tions</u>
$\frac{\text{TCO}}{\text{TCO}+\text{BBF}}$ with p-r	.7145	.7421	.8366	.6328	-.1393
$\frac{\text{DDP}}{\text{DPP}+\text{BBF}}$ with p-r	.6313	.6772	.7960	.5139	.4971
FRS with p-r	.9286	.9184	.9457	.9347	.9046

TCO = total commercial paper outstanding

BBF = bank borrowings of finance companies

DPP = directly-placed paper outstanding

P = prime rate

r = commercial-paper rate (direct)

FRS = free reserves

Source: Appendix D.

the widely-recognized difficulties with this sort of question, the responses cannot be accepted as conclusive. They are, nevertheless, interesting and are summarized in Table III-8.

Over one-third of all issuers, and nearly half of the direct placers indicated that fluctuations in relative costs are not important. This evidence is consistent with the correlation results and also with the theory. Both had indicated that while relative costs are a factor influencing the degree of reliance on commercial paper, they are by no

Table III-8

The Sensitivity to Relative Interest Costs of the Ratio of Commercial Paper to Short-Term Debt

(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct Placers</u>	<u>Total</u>
<u>Yes</u> , the proportion of commercial paper is responsive to changes in cost	19	39	23	31
<u>Yes</u> , but constraint of maximum ratio of commercial paper to short-term debt	52	33	23	36
<u>No</u> , fluctuations in relative cost not generally important	38	33	46	36

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

means the only consideration. And, both indicated that the direct placers should be expected to be somewhat less responsive to interest costs than are the dealer issuers.

The lack of sensitivity on the part of many open-market borrowers is not very surprising given that historically, though the spread has varied, there has almost always been an interest-rate saving associated with using the open market.⁹ Thus, it may be wise to utilize the open market as much as possible, given the constraints already discussed, and not to shift in and out of banks with changes in the spread. This latter practice, in fact, is often actively discouraged by banks and dealers. As has been discussed above, the lack of sensitivity by the direct placers is also due to their desire to offer paper at all times to maintain investor relations. Also, the overhead costs of their marketing establishments lead them to try to use banks as little as possible and they do not markedly shift to bank loans as long as the interest spread remains positive.

More than half those issuers who indicated that they are responsive to changes in relative costs, also noted that they are constrained by a maximum ratio of commercial paper to short-term debt. The main reasons for such a constraint, which have been discussed above, are bank relations, superior flexibility of bank loans and fear that at times open market will prove unreliable.

⁹The commercial-paper rate, including dealers' commissions, has exceeded the prime rate only for very brief periods of time during the last decade.

Those issuers who expressed sensitivity are influenced by two main factors. The direct placers, and other larger borrowers who are constantly in the market, find that the time when the interest saving is smallest is often the occasion to give banks necessary line usage. Other issuers, notably industrial firms, who borrow on commercial paper only from time to time, may find that there is a minimum spread of perhaps 1/4 percent, which is necessary to induce them to use the open market. For smaller spreads they may feel that the added trouble of commercial paper outweighs the saving and they prefer more flexible bank loans.

While commercial paper and short-term bank loans are good substitutes, and the volume of paper outstanding depends somewhat on their relative costs, commercial-paper issuers generally do not shift between paper and long-term debt. In fact, issuers claim that the volume of commercial paper outstanding is virtually independent of the volume of long-term liabilities of issuing firms, and of the relative cost of paper and funded debt.

Long-term financing is of varying importance to different commercial-paper issuers. Industrial firms usually borrow long for capital expenditures and meet seasonal needs by selling commercial paper. Most finance companies feel that they need a base of long-term debt which is free from the necessity of constant roll-over. As finance-company receivables have become more stable, these borrowers have increased their reliance on funded debt. This is true despite the fact that long-term debt has been more expensive than short.

Although commercial paper and funded liabilities are not considered as good substitutes, most issuers indicate that they try to time their long-term issues to get the most attractive rates possible. The expectation of rising interest rates will generally speed up the long-term financing decision and that of falling rates will lead to its postponement. Borrowers utilize short-term debt, both bank loans and commercial paper, to provide funds until the long-term flotation.

CHAPTER IV

COMMERCIAL PAPER AS A USE OF BANK FUNDS

Having considered commercial paper as a source of funds, attention is now turned to paper as a short-term investment. It will be recalled that commercial banks, historically the most important commercial-paper purchasers, have given way to nonfinancial corporations as the chief investors in the market. For many banks, however, commercial paper is still an important use of funds. The present chapter, which relies heavily on the "Questionnaire on the Role of Banks in the Commercial-Paper Market" (Appendix C), tells which banks are buyers of paper for their own portfolios, and analyzes the types of paper preferred, reasons for favoring or opposing this type of bank investment, and how banks evaluate commercial paper relative to alternative investments.

Who Buys Commercial Paper?

About 30 percent of the banks sampled indicated that they are presently buyers of commercial paper. Many of these banks, however, are not in the market at all times, and some may purchase paper only on occasion. Of those banks not presently buying commercial paper, slightly more than half have never invested in this instrument, while the remainder bought paper at one time but have discontinued doing so. See Table IV-1.

Table IV-1

Percentage of Banks Investing in Commercial Paper
(Percent of total respondents)

	<u>Major Financial Centers</u>	<u>Other Urban Areas</u>	<u>Rural Districts</u>	<u>All Banks</u>
BUY paper at the present time	24	37	29	30
NEVER have bought paper	37	33	45	39
HAVE DISCONTINUED purchase of paper:				
Before 1945	11	9	6	8
Between 1946 and 1951	3	6	7	5
Between 1952 and 1960	18	9	9	11
Since 1961	7	9	6	7

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

Paper is found in the portfolios of banks of all sizes, although banks with deposits in the \$20-100 million range appear to be the most frequent investors, and banks with deposits over \$1 billion, the least common participants. There seems to be no difference among banks in different areas of the country, but banks in "other urban areas" appear to invest in commercial paper more regularly than their counterparts in either major financial centers or rural districts. These results are

summarized in Table IV-2. These data will be analyzed in the discussion of the reasons influencing banks' decisions to buy commercial paper.

The banks who purchase paper were asked to indicate the percentage of commercial paper to total assets which they have held, on the average, in the last two years. Some 40 percent noted that this figure has been under 1 percent and some three-quarters of the banks stated that it has been under 3 percent. Only a handful of banks have held over 5 percent of their total assets in commercial paper.

Table IV-2

Percentage of Banks Investing in Commercial Paper
by Deposit Size and Location
(Percent of total respondents)

<u>Deposit Size of Bank</u> (\$ millions)							
<u>Under</u> <u>20</u>	<u>21-50</u>	<u>51-100</u>	<u>101-200</u>	<u>201-500</u>	<u>501-1000</u>	<u>Over</u> <u>1000</u>	
26	41	45	27	21	26	9	

<u>Area of Country</u>							
<u>North-</u> <u>west</u>	<u>Mid-</u> <u>Atlantic</u>	<u>South</u>	<u>Midwest</u>	<u>Great</u> <u>Plains</u>	<u>Texas</u>	<u>Mountain</u>	<u>Pacific</u>
26	25	33	38	31	26	29	24

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

The larger banks who invest in commercial paper generally reported lower percentages of paper to total assets. And banks in cities maintained lower percentages than banks in rural districts. No clear pattern distinguishes paper holdings of banks in different areas of the country. About 5 percent of the respondents did not give figures, usually commenting that they purchased paper only occasionally and therefore average percentages would be meaningless. Furthermore, many of the banks furnishing the data indicated that their purchases of commercial paper are subject to wide seasonal swings; commercial paper might be 25 percent of loans for 3 months and zero the rest of the year. The figures cited, therefore, should be treated as annual averages.

Banks were also asked if the percentage of commercial paper to total assets is presently higher, lower or about the same as the average percentage maintained during the last decade. Less than 10 percent of the banks who still buy paper suggested that it is lower and the remainder were about equally divided between the other two alternatives. No significant difference seemed to exist by deposit size of bank, but banks in the southern states appeared to be purchasing more paper than they had previously.¹ Results are summarized in Table IV-3.

¹In the South, 71 percent of the banks buying commercial paper indicated that the percentage of paper to total assets has increased; this is against 37 percent of all banks in the nation who checked this alternative. The apparent decreased participation (50% lower, 50% the same) of banks with deposits over \$1 billion is not significant because there is only one bank in each category.

Table IV-3

Percentage of Commercial Paper to Total Assets Held by Banks
(Percent of Banks Purchasing Paper)

	Deposit Size of Bank (\$ millions)						Location Category				All Respondents					
	Under 20		21-50		51-100		101-200		201-500			501-1000		Major Financial Centers	Other Urban Areas	Rural Districts
	26	33	41	33	33	54	64	56	100							
Under 1%	26	33	41	33	54	64	56	100	59	43	28	40				
1 to 3%	33	34	34	47	38	9	33	0	21	40	37	35				
3 to 5%	28	10	10	10	0	9	0	0	10	9	19	14				
Over 5%	5	10	10	7	8	0	0	0	0	4	11	6				

Comparison of Percentage with Average for last decade:

Higher	36	31	40	46	45	33	0	34	32	42	37
Lower	8	14	3	8	18	0	50	14	9	7	9
About the same	38	45	57	38	0	56	50	31	55	37	42

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

Types of Paper Purchased

It will be recalled from Chapter II that commercial paper is rated as "prime", "desirable" or "satisfactory" and that much the largest part of dollar outstandings are prime.² Banks were asked what percentages of their paper falls into each of the categories. Two-thirds of those banks purchasing paper indicated that more than 95 percent of their paper is prime, and only 10 percent of banks have more than half of their portfolios in non-prime paper. About 15 percent of the banks purchasing paper did not answer the question. Many of these suggested that ratings are not really a factor and each note is evaluated on the basis of the bank's own credit files or those of their correspondents. Although the difference is not striking, rural banks seem to buy more desirable and satisfactory paper than do city banks. No interesting discrepancies appear among practices of banks of different deposit size or in different areas of the country. Table IV-4 presents data on the reliance on prime paper by different groups of banks.

Banks purchasing commercial paper were further questioned about the percentage of their paper portfolios which consists of finance-company notes. The response is summarized in Table IV-5. Slightly less than half of the banks generally keep 25 percent of their paper holdings in

²The quantitative dominance of directly-placed paper makes this statement obvious. The majority of dealer paper is also rated prime.

Table IV-4

Percentage of "Prime" Notes in Commercial-Paper Portfolios
(Percent of Banks Purchasing Paper)

	<u>Major Financial Centers</u>	<u>Other Urban Areas</u>	<u>Rural Districts</u>	<u>All Respondents</u>
0-25%	0	2	5	3
26-50%	3	4	11	7
51-75%	7	2	7	5
76-95%	10	4	5	6
96-100%	62	77	58	65
No answer to question	18	11	14	14

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

Table IV-5

Finance-Company Paper as a Percent of Commercial-Paper Portfolios
(Percent of Banks Purchasing Paper)

<u>Percent of Commercial Portfolio</u>	
0-25%	46
26-50%	14
51-75%	10
76-100%	20
Percent varies widely from month to month	28
Percent does not vary widely	42

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

finance notes and only one-fifth of the banks maintain over three-quarters in finance notes. Since more than 80 percent of total commercial paper outstanding is a liability of finance companies, commercial banks appear to rely less heavily on finance paper than do other investors.³ No significant differences are apparent among banks of different sizes, in different areas of the country, or in cities versus rural areas.

Two major considerations help explain the interest shown by commercial banks in industrial paper, and in dealer names in general. First, prime dealer paper often can be obtained with a yield of 1/8 to 1/4 percent above that available on directly-placed paper. Since, as a rule, bank investors neither purchase very large blocks of paper, nor consider exact maturity dates as being very important, banks are often anxious to take advantage of the higher yield.⁴ Second, several banks indicated that they prefer dealer industrial paper because this form of investment enables them to diversify their loan portfolio among several industries.

³Because of some confusion in the terminology commonly used in the market, some respondents no doubt interpreted finance-company paper as synonymous with directly-placed paper and not including notes of finance companies issued through dealers. The figures presented may therefore understate the reliance of the banks on finance paper. In any event, the figures indicate that banks buy a much greater percentage of their commercial paper through dealers than do other investors.

⁴Business corporations often prefer direct paper because of their desire to obtain large blocks and to tailor maturities. See Chapter V.

Reasons for Investing in Commercial Paper

Commercial paper is generally purchased by banks because it provides a temporary outlet for funds at a rate more attractive than that on Treasury bills. Paper is treated as a loan on the balance sheet and is thus an instrument to supplement insufficient local loan demand--seasonal, cyclical or chronic.

Banks were asked to indicate which factors are most important in influencing the decision to purchase commercial paper. Of those banks who buy paper, 81 percent noted that paper "provides a temporary outlet" for funds. In agricultural communities, for example, loans are lowest and deposits are highest at harvest time. Banks in these areas are thus heavy buyers of commercial paper in the autumn. By the same reasoning, Florida banks purchase paper in the winter, a time when their deposits are inflated and their loans are being paid off.

Some 40 percent of the banks indicated that an attractive commercial-paper rate is important in influencing their decision to invest in this asset. The fact that this figure is not higher can be interpreted as evidence supporting the hypothesis that banks treat paper more as a loan than as an investment. Since no secondary market exists in paper, the interest-rate spread over Treasury bills is often not a sufficient consideration in deciding whether to purchase commercial paper. Rather, the availability of ample lending opportunities appears to be the prime factor influencing this decision.

About 30 percent of the banks buying paper believe that the ability to obtain paper in the exact amount and maturity desired is important. This feature, of course, adds to the flexibility of paper and maturities can be timed to meet expected large deposit outflows. Yet, as mentioned above, this factor is not an important for banks as for business corporations who very often purchase paper expressly because of the desire to obtain a maturity date to correspond with specific out-payments.⁵

Less than 10 percent of the banks buying paper indicated that the desire to diversify loans by industry and geographical area was important. This implies that such diversification would not overcome the cut in interest income and the impairment of borrower relationships that a bank would suffer if it refused a direct loan in favor of open-market paper. When ample direct loans are not available, however, diversification may well prove an added incentive to purchase paper.

The various reasons inducing banks to buy commercial paper are summarized in Table IV-6. No significant discrepancies appear among banks of different deposit sizes or in different areas of the country. Nor are attitudes of big-city banks substantially different from those of other banks, except that the former seem to be somewhat more concerned with interest-rate considerations.

⁵In fact, some 81 percent of corporate buyers indicated that the ability to tailor maturities was an important factor in the decision to purchase commercial paper. See Chapter V.

Table IV-6

Factors Influencing Banks' Decisions to Buy Commercial Paper
(Percent of Banks Purchasing Paper)

	<u>Major Financial Centers</u>	<u>Other Urban Areas</u>	<u>Rural Districts</u>	<u>Total</u>
The commercial-paper rate is attractive	48	40	35	40
Paper allows diversification of loans by industry or geographical area	7	9	11	9
Paper can be obtained in exact amount and with exact maturity desired	31	26	32	29
Paper provides a temporary outlet for funds	76	81	84	81

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

In addition to the factors discussed, banks sometimes buy commercial paper over the year-end so as to build up their loss reserves by adding to their loan totals. This practice involves a tax savings and is examined in Chapter VII.

Why Don't More Banks Buy Paper?

Since over two-thirds of commercial banks do not purchase paper for their own portfolios, it is interesting to investigate the considerations which prevent them from doing so. This will make possible an

appraisal of whether banks have been fully exploited by dealers and direct placers as a source of funds for the commercial-paper market.

The overwhelming majority (86 percent) of banks not purchasing paper indicated that there are "sufficient direct lending opportunities at more attractive interest rates." These include participations as well as local loans. Many small banks have been relying on participations in prime-rate loans which are granted by their big-city correspondents. The small bank sometimes receives the full interest rate and sometimes $1/4$ percent less, which represents, in effect, the correspondent's commission. Since the larger bank does all the credit-investigation work, such participations are really no more trouble than investing in commercial paper, and the interest rate is more attractive.

Less than one-fifth of banks not buying paper seem concerned with the lack of a secondary market in commercial paper. The main explanation for this has been mentioned above. Banks generally compare the liquidity of commercial paper not with that of other secondary reserves (such as Treasury bills) but rather with other lending alternatives. In fact, some banks who indicated that the illiquidity of commercial paper is a negative consideration specifically mentioned that for this reason they prefer call loans to brokers at comparable interest rates.

A third alternative, which 11 percent of the banks checked, is that commercial-paper issuers are unusually large credit-line customers

and that legal lending limits prevent buying their paper. It has already been noted that national banks are prevented from lending more than 10 percent of capital to any individual borrower and that state banks are subject to similar limitations, though the percentage and definition of capital varies from state to state. Large commercial paper-issuers (notably the direct placers) maintain credit lines at many banks for amounts equal to their lending limits. Should these line banks purchase paper for their own portfolios, it counts against the legal limit as does any other line.

For example, assume that a bank with a legal lending limit of \$1 million has granted a line of credit to GMAC for this amount. If this bank holds \$500 thousand of GMAC paper, it can honor only half of the credit line should GMAC want to borrow. Issuers often notify their banks when they will not be using their lines so as to allow banks to purchase their paper, but legal lending limits still remain a deterring factor. This applies especially to the larger banks which provide the bulk of credit lines to issuers of commercial paper.

Table IV-7 presents data on the percentage of banks not buying paper for the various reasons discussed. Once again, no major discrepancies appear to exist among banks of different deposit sizes and locations.

The above factors aside, it is undoubtedly true that some banks, especially very small ones, do not purchase commercial paper because they are either uneducated in the possibilities of this market,

Table IV-7

Reasons for Banks' Decisions Not to Invest in Commercial Paper
(Percent of Banks Not Purchasing Paper)

	<u>Major Financial Centers</u>	<u>Other Urban Areas</u>	<u>Rural Districts</u>	<u>Total</u>
There are sufficient direct lending opportunities at more attractive interest rates	90	90	81	86
Commercial paper is relatively illiquid, because there is no well-established secondary market	22	14	16	17
Commercial-paper issuers are usually large credit-line customers and legal lending limits prevent buying their paper	17	10	8	11

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

or feel that it is not worth the trouble to set up credit files, check with line banks and think about a new investment medium. These very banks may still indicate that they have "sufficient" direct lending opportunities, though sufficient may be below the profit-maximizing optimum.

The major piece of evidence supporting the hypothesis that some banks avoid commercial paper because they are uneducated or feel it is not worth the trouble is derived from Table IV-2. Only 26 percent

of banks with deposits under \$20 million purchase paper, a percentage similar to that for banks with deposits over \$100 million. On the other hand, over 40 percent of the banks in the \$20 million to \$100 million range purchase paper. It can be argued that the big banks do not buy paper because of sufficient direct-lending opportunities.

The fact that the smallest banks are less active in the commercial-paper market than are banks which are slightly larger, however, gives support to the hypothesis that some of the former institutions are either unaware of the opportunities of paper or are overcome by the inertia of their present investment policies. This hypothesis is further substantiated when we consider that 44 percent of banks in the smallest group located in urban areas buy paper, but only 25 percent of those in rural areas do so. There is no reason to suspect that differences in loan demand account for this discrepancy.

The fact that many banks may avoid commercial paper because they feel it is not worth the trouble does not imply that these institutions are necessarily irrational. The psychic costs of buying paper (obtaining directors' approval, checking credit files with correspondents, keeping posted on interest rates, etc.) may well exceed the added yield over Treasury bills which is thereby obtained. If psychic costs are assumed to be fixed, the average costs of investing in paper decline with the amount of paper purchased.⁶ It follows that very small banks are

⁶This implies that monetary costs do not rise more than proportionally with the amount of paper purchased, an assumption which certainly appears to be reasonable.

likely to avoid commercial paper more than do larger institutions with similar loan-demand problems.

As long as psychic costs remain high among bank investors, dealers and direct placers have a fertile field toward which to direct their selling efforts. Their major task is to convince banks of the high quality of commercial paper and of the facility with which it can be obtained. Such marketing techniques cannot be expected to be successful, however, among banks who already have very high loan to asset ratios.

Bankers' Evaluation of Commercial Paper and Substitute Investments

As has been pointed out, in addition to Treasury bills, several instruments compete with commercial paper in the portfolios of banks. These include Federal Agency securities, time certificates of deposit (CD's) at other banks, tax-exempt notes, and bankers' acceptances.⁷ The present section discusses how bankers rate commercial paper relative to these various substitute assets. The evaluations are derived from bankers' indications of the spreads necessary to induce a shift from Treasury bills to the various alternatives.

Table IV-8 shows the spreads required to induce a shift from Treasury bills to commercial paper. Slightly over half of the banks who buy paper need a spread no greater than 1/4 percent to shift to paper. Less than one-fifth of banks who do not buy paper, on the other hand, could be induced to make this shift for 1/4 percent.

⁷These instruments are described briefly in Chapter II.

Table IV-8

Spread Required to Induce Shift from Treasury Bills to
Commercial Paper - Both of 90 Days Maturity
(Percent of Banks in Category Responding to Question)*

SPREAD (Commercial-paper rate less Treasury-bill rate) in percent per annum	SPREAD								
	<u>1/16</u>	<u>1/8</u>	<u>1/4</u>	<u>3/8</u>	<u>1/2</u>	over <u>1/2</u>	1/4 or <u>less</u>	over <u>1/4</u>	
Banks who <u>buy</u> paper	7	28	20	12	8	25	55	45	
Banks who <u>do not buy</u> paper	3	10	5	19	26	37	18	82	

* Of those banks buying paper, 123 of 133 (92 percent) provided information for this question; of non-buyers, 146 of 312 (47 percent) provided this information. Percentages in body of table are based only on the banks answering this question and therefore add to 100 percent.

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

The actual yield differential between Treasury bills and commercial paper has averaged about 1/4 percent over the last few years. Therefore, it seems reasonable to conclude that an unattractive rate is a sufficient condition to exclude four-fifths of banks not buying paper from the market. Since the prevailing market spreads are deemed adequate by the other one-fifth of non-buyers, these banks probably interpreted

the spread as that which would induce them to buy paper were other conditions changed, e.g., were loan demand insufficient. Other conditions unchanged, this latter group probably would not venture into commercial paper were the rate raised.

Of the banks presently buying paper, 45 percent indicated they would require a spread greater than 1/4 percent to shift into commercial paper. This group would likely consider increasing their holdings of paper were the spread increased. The buying banks who noted smaller spreads would probably increase their holdings if funds became available, but cannot be induced to shift into paper by an increase in the interest-rate differential alone.

In short, it appears that there is a large number of banks, both buyers and non-buyers, who might be induced to increase their holdings of commercial paper were the spread over Treasury bills widened. If issuers are willing to boost the rate in tight-money periods, the supply of funds to the commercial-paper market might well be more elastic than dealers and direct placers generally believe to be the case.⁸ In fact, only 37 percent of non-buyers and 25 percent of buyers who ventured an opinion indicated that they need a spread of more than 1/2 percent to consider a shift from Treasury bills to commercial paper.⁹

⁸ See Chapter VII.

⁹ There appears to be no interesting difference in spreads required among banks of different deposit sizes or in different locations. It is important to note that, as expected, non-buyers in each group consistently demanded higher spreads than buyers. This speaks well for the accuracy of the information derived from the questionnaires.

To determine their relative preferences, banks were asked to indicate the spread over Treasury bills which might induce them to shift into Federal Agency securities, certificates of deposit, tax-exempt notes and bankers' acceptances. Where the spread checked is smaller than that indicated for commercial paper, the other instrument is said to be preferred to paper; where the spread is the same, the respondent is said to be indifferent; where the spread is greater than that for commercial paper, paper is said to be preferred. Many banks did not check any spread for some assets; these are tabulated under "no answer".¹⁰ These data appear in Table IV-9.

An examination of the table indicates that, at the same yield, banks generally prefer all of the other listed assets to paper. This preference seems strong however, only in the case of bankers' acceptances, both for banks who buy and who do not buy commercial paper; in both groups of banks at least five times as many respondents prefer acceptances as prefer paper.¹¹ One interesting observation is that banks not investing in commercial paper do not seem to rate this asset any lower relative to its substitutes than do banks who buy paper. An explanation may be that

¹⁰It seems to be a good assumption that banks who do not indicate a spread for a given instrument do not purchase this instrument. It is not safe to conclude, however, that those banks who do purchase paper actually prefer paper to the other instruments. This is so because paper yields are sometimes higher than those on competing assets.

¹¹One possible explanation for this is the developed secondary market in bankers' acceptances. See Chapter VI.

Table IV-9

Bankers' Evaluation of Prime Commercial Paper
and Substitute Investments

(Percent of total respondents in category)

	<u>Banks who buy paper</u>	<u>Banks who do not buy paper</u>
<u>Federal Agency Securities:</u>		
Agencies preferred	22	10
Indifferent	6	1
Paper preferred	13	9
No answer	59	80
<u>Certificates of Deposit:</u>		
CD's preferred	17	11
Indifferent	5	3
Paper preferred	12	8
No answer	66	78
<u>Tax-exempt Notes:</u>		
Tax-exempts preferred	17	11
Indifferent	13	5
Paper preferred	11	8
No answer	59	76
<u>Bankers' Acceptances</u>		
Acceptances preferred	20	10
Indifferent	5	2
Paper preferred	3	2
No answer	72	86

Source: Response to questionnaire, "Role of Banks in the Commercial Paper Market", Appendix C.

non-buying banks have no excess funds available for investment in any of these securities, or prefer to keep their secondary reserves in Treasury bills.¹²

In conclusion, bank investment in commercial paper is undertaken largely by those institutions who have an insufficient loan demand. Many banks are reluctant to use commercial paper as a substitute investment for Treasury bills, at current interest differentials. Although greater familiarity might lead to more banks buying paper, it does not appear that the increase in bank purchases will be very large as long as ample direct-lending opportunities exist.

¹²The higher "no answer" percentages for the non-buyers should not be interpreted as a difference in preferences but instead as an interpretation by those respondents that this question does not apply to them.

CHAPTER V

COMMERCIAL PAPER AS A SHORT-TERM INVESTMENT FOR CORPORATIONS

Having discussed the position of commercial paper in the portfolios of commercial banks, we now turn our attention toward its role as a use of short-term funds for business corporations. It has been noted at several points that the bulk of paper is purchased by such corporations. The present chapter, which draws on the results of the questionnaire, "Commercial Paper as a Short-term Investment", treats the investment practices of manufacturing concerns, merchandising and transportation firms and utilities.¹

Corporate investment in commercial paper must be considered in light of the growing liquidity of these institutions and the increasing "sophistication" of their financial officers. The desire of corporations to put idle cash to work in the money market at an attractive return has been instrumental in the growth of the commercial-paper market. It is important therefore to examine some of the recent changes in corporate-cash-management policy.

Corporate-Cash-Management Policy

It is often alleged that the last several years have witnessed a change of attitude on the part of business corporations toward the

¹The manufacturing firms are classified into three groups (I the largest, and III the smallest) according to their ranking in the "Fortune 500." See Appendix B for discussion of the sample design and response summary. The questionnaire appears in Appendix C.

management of their short-term investment portfolios. In fact, interview and questionnaire evidence indicates that the influence of the so-called "new generation" of corporate treasurers has become especially pronounced in the period since 1959 or 1960. Whereas liquid funds previously had been largely confined to demand deposits and Treasury bills, many corporations have recently sought higher yields in commercial paper, time certificates of deposits (CD's), bankers' acceptances, and even Eurodollars and other foreign investments.

Table V-1 illustrates this shift in corporate investment practices. In the period from 1956 to 1963, nonfinancial corporations increased their holdings of cash and U.S. Government securities actually declined by \$4.4 billion. Net trade credit and "other financial assets", which is in large part foreign investment, increased steadily. Especially interesting is the growth of holdings of commercial paper and time deposits since 1959, which is especially striking given their absolute levels at that time. Estimated holdings of commercial paper and time deposits in 1959 and 1963 are summarized below:

	<u>1959</u>	<u>1963</u>
Commercial paper [*]	2.3	4.4
Time deposits	1.5	10.4

The explanation for this shift in corporate-cash management policy rests on several factors. The large internally-generated cash flow throughout

* Figures in billions of dollars, source same as Table V-1.

Table V-1

Net Acquisition of Financial Assets by Corporate Nonfinancial Business
(in billions of dollars)

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>Cumulative 1956-1963</u>
Demand deposits and currency	.2	--	1.5	-1.0	--	1.3	-2.1	-1.0	-1.1
U.S. Government securities	<u>-4.5</u>	<u>-.4</u>	<u>--</u>	<u>3.8</u>	<u>-2.7</u>	<u>-.4</u>	<u>.3</u>	<u>.6</u>	<u>-3.3</u>
Cash and Governments	-4.3	-.4	1.5	2.8	-2.7	.9	-1.8	-.4	-4.4
Time Deposits	--	--	.9	-.4	.8	1.3	2.6	4.2	9.4
Commercial paper ¹	.1	.3	--	.5	.6	.1	.8	.7	3.1
Net trade credit ²	1.8	2.5	3.4	4.0	3.8	5.5	5.0	2.5	28.5
Other financial assets ³	<u>2.6</u>	<u>2.7</u>	<u>2.0</u>	<u>2.7</u>	<u>2.4</u>	<u>2.1</u>	<u>3.0</u>	<u>2.7</u>	<u>20.2</u>
Total financial assets	.2	5.1	7.8	9.6	4.9	9.9	9.6	9.7	56.8

Source: Board of Governors of the Federal Reserve System, Flow of Funds Account, 1963 Supplement and Federal Reserve Bulletin, April 1964 - Table 4.

¹Total paper less estimate of holdings of banks and insurance companies. This item is listed in the Flow of Funds as "finance" paper but actually includes both finance and industrial commercial paper.

²Trade credit minus trade debt (line 59 less line 68).

³Consumer credit (line 57) and "other financial assets" (line 60) which consists mainly of directly-held foreign investments.

the period, due to the high level of retained earnings and the increasing depreciation allowances, is of major importance. This cash flow is summarized in Table V-2. The increased corporate liquidity, and the relatively high level of short-term interest rates which have prevailed since 1959, made it worthwhile for corporate treasurers to seek alternatives to cash balances and Treasury bills. When interest-rate levels were low, corporations were not as concerned about employing their short-term funds as efficiently as possible. The "psychic" costs of adopting a general investment program, and the monetary costs of maintaining a portfolio manager, outweighed the possible gains of short-term investment. Thus many firms maintained large demand-deposit balances and invested surplus funds in Government securities which were well-known and readily marketable.

Table V-2

Cash Flow of Business Corporations (in billions of dollars)								
	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Profits after Taxes	23.5	22.3	18.8	24.5	22.0	21.8	24.6	27.1
Cash Dividends	12.1	12.6	12.4	13.7	14.5	15.3	16.6	17.8
Undistributed Profits	11.3	9.7	6.4	10.8	7.5	6.5	8.1	9.3
Capital Consumption Allowances	20.0	21.8	22.7	24.3	25.6	26.8	30.8	32.4

Source: Department of Commerce estimates, from Federal Reserve Bulletin, April 1964.

The very tight-money period of late 1959 and early 1960, however, heightened by the much-publicized "magic 5's",² increased the awareness of how great the opportunity cost of holding idle cash balances had become. Since the cash flow of many corporations now warranted a portfolio manager and other fixed costs involved, more and more firms began to enter the investment arena.

For many corporations the transition has been slow and boards of directors have authorized only a few of the most conservative investments. For example, commercial paper investment in many cases has been limited to liabilities of the direct placers. Interview evidence indicates, however, that as knowledge about alternative instruments has spread, individual treasurers have been given more and more freedom. Practices, of course, vary widely from firm to firm, but a large number of corporate treasurers have been very successful in "riding the yield curve", in moving their portfolios from short (long) maturities to long (short) when interest rates are expected to fall (rise), and in shifting between alternative assets in response to changes in the interest-rate spreads. These men are able to keep funds working at all times by such methods as participating in repurchase agreements with security dealers, overnight or over the weekend. They are known as careful "shoppers", in that they quickly assess all alternatives before committing short-term funds. Such "pencil sharpening"

²The magic 5's were 4-year-10-month Treasury notes yielding 5 percent; this issue was quickly purchased by the investing community and attracted much attention in the financial press.

has been aided by more accurate cash forecasting, which has been made possible by the increasingly widespread employment of electronic computers in industry.

The "sophisticated" cash-management policies have deprived the commercial banks of the non-interest-bearing demand deposits which they so long enjoyed. Bankers have reluctantly accepted this phenomenon and many of them have taken to competing for balances by providing corporate customers with investment advisory services. In addition, these banks act as agent in buying and selling various money-market instruments on behalf of their customers. As was noted in Chapter II, over half of the banks in major financial centers buy commercial paper for the account on nonbank customers.³

Of major importance is the introduction of time certificates of deposit by large banks as a response to declining corporate demand deposits. The advent of the CD helps explain the very rapid increase in corporate-held time deposits and has enabled commercial banks to maintain their competitive position. CD's are marketable instruments, and compete directly with Governments and commercial paper in corporate investment portfolios.⁴

³See Table II-3.

⁴For an elaboration of the discussion in this section, see N. D. Baxter, "The New Generation of Corporate Treasurers and Their Impact on the Commercial Banking System" - The Bankers Magazine, forthcoming.

Who Buys Commercial Paper?

In line with their desire to earn a relatively good yield on otherwise idle funds, over 60 percent of corporations responding to the survey indicated that they are buyers of commercial paper. This is about double the frequency reported by banks. Like banks, however, many corporate investors do not own commercial paper at all times. In fact, many firms have sharp seasonal swings in their cash balances and use paper as a vehicle for their excess funds.

The largest group of manufacturing firms, insurance companies, and merchandising businesses, appear to purchase paper most frequently; over three-quarters of these respondents buy paper as compared with less than half of the respondents in the other groups. The large majority of companies who do not presently invest in commercial paper have never done so. In fact, less than 10 percent of the firms has discontinued purchasing paper over the last 20 years. Many of the respondents in this latter group explained that commercial paper investment was discontinued because they no longer have funds available for investment. These observations confirm the general trend of an increased number of corporations buying paper, a trend which is consistent with the changes in corporate-cash management discussed above. Table V-3 presents relevant data.

Corporations were asked the percentage of total short-term debt which is typically held in commercial paper. The number of respondents holding under 20 percent is about the same as the number holding over 60 percent; a somewhat larger proportion maintain between 20 and 60 percent

Table V-3

Percentage of Corporations Investing in Commercial Paper
(Percentage of Total Respondents)

	Manufacturing			Insur- ance	Merchan- dising	Transpor- tation	Util- ities	Total
	I	II	III					
Buy paper at the present time	82	49	47	81	75	53	40	61
Never have bought paper	9	41	38	13	25	40	53	30
Have discontinued purchase of paper:								
Before 1945	0	0	0	0	0	0	0	0
Between 1946 and 1954	2	2	0	0	0	0	0	1
Between 1955 and 1960	2	5	7	0	0	7	0	4
Since 1961	2	3	5	0	0	0	7	3

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

of their short-term assets in paper. In short, the relative importance of commercial paper to other short-term assets varies widely from firm to firm. Manufacturing firms in the smallest group seem to rely more heavily on paper than do their larger counterparts. About one-half of the respondents in the former category who buy paper do so for over 60 percent of short-term investment; the comparable figure for the larger manufacturing

companies is under 20 percent. No interesting differences appear among the practices of the other investor groups. About one-fifth of corporate paper-buyers did not supply information about percentage holdings, often noting that these figures vary too widely from month-to-month, often in response to changes in interest-rate differentials, to be interesting.

Half of the firms buying paper indicated that their holdings of paper relative to other short-term assets have increased over the last decade; and only 8 percent indicated a decrease. The large manufacturing firms and utilities were especially prominent in noting increased usage of paper. This result is again in support of the preceding discussion of the "new generation of corporate treasurers" and indicates a stronger tendency for corporations to increase their holdings of paper than was indicated for commercial banks.⁵ These results appear in Table V-4.

Types of Paper Purchased

Corporate commercial-paper buyers appear to depend much more heavily on finance paper than do commercial banks, an observation which is indicative of the competition for corporate funds between banks and finance companies. In fact, over half of the corporations buying paper indicated that more than 75 percent of their holdings consist, on the average, of finance-company paper; this compares with only 20 percent of banks who rely this heavily on finance paper. And, only 15 percent of

⁵See Table IV-3.

Table V-4

Percentage of Commercial Paper to Short-Term Investments
Held by Corporations

(Percent of Corporations Purchasing Paper)

	Manufacturing			Insur- ance	Merchan- dising	Transpor- tation	Util- ities	Total
	I	II	III					
Under 10%	21	27	16	0	50	0	0	15
11 to 20%	18	7	5	0	0	0	0	7
21 to 40%	27	13	11	22	0	25	33	17
41 to 60%	12	27	11	33	25	25	0	15
61 to 80%	6	13	32	22	0	38	0	14
81 to 100%	9	7	16	22	25	0	33	10
Comparison of per- centage with average for last decade:								
Higher	76	67	47	44	0	38	100	50
Lower	6	7	16	22	25	0	0	8
About the same	12	20	11	33	75	25	0	16

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

corporations hold less than one-quarter finance paper; the corresponding figure for banks is 46 percent.⁶

The dominance of finance paper is quite uniform except for merchandising and transportation firms. In most groups, about two-thirds of the respondents indicated that the percentage of finance paper is fairly stable and the other third that it varies widely from month to month. See Table V-5.

Table V-5

Finance Company Paper as a Percent of Corporate
Commercial-Paper Portfolios
(Percent of Corporations Purchasing Paper)

	<u>Manufacturing</u>			<u>Insur-</u>	<u>Merchan-</u>	<u>Transpor-</u>	<u>Util-</u>	<u>Total</u>
	<u>I</u>	<u>II</u>	<u>III</u>	<u>ance</u>	<u>dising</u>	<u>tation</u>	<u>ities</u>	
0-25%	14	11	16	0	50	25	17	15
26-50%	11	21	16	23	33	38	33	19
51-75%	3	5	21	0	0	17	0	6
75-100%	62	63	47	69	17	25	50	55
Percentage varies widely from month to month	26	32	37	31	33	13	67	31
Percentage does <u>not</u> vary widely	68	63	58	69	33	75	33	62

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

⁶ Insofar as many corporate respondents (as well as banks) interpreted "finance paper" to include only direct-placed paper, the high percentage is even more striking. See Chapter IV, footnote 3.

As is the case for commercial banks, "prime" notes dominate the investment portfolios of corporations. This, of course, is not surprising, given the quantitative importance of such notes in total paper outstanding. Two-thirds of corporations hold more than 95 percent of their commercial paper in the "prime" category. This situation is fairly uniform for all categories of corporate investors and no interesting differences appear to exist among the various categories.

Corporations were also asked about the maturity distribution of their commercial paper holdings at the initial date of purchase. Short maturities (under 30 days) and long maturities (over 91 days) are each relied on heavily by a small proportion of investors. Intermediate maturities (31-90 days) appear to be somewhat more important in that they are virtually absent from fewer portfolios. Precise statements about maturities, however, are misleading because many respondents noted that maturities vary widely depending on changes in cash-flow projections. The major conclusion that remains is that maturities under 90 days are very important in the corporate investment picture. It is only in the postwar period that these short notes, which give the corporate treasurer greater flexibility, have become widely available. Data on percentages of prime notes and maturity distribution of paper purchases appear in Table V-6.

A substantial proportion of corporate investors purchase commercial paper both from the direct placers and from dealers. These investors were given a listing of several factors and were asked to check those which are important in influencing the choice between direct and

Table V-6

Percentage of Prime Notes in Commercial-Paper Portfolio
and Maturity Distribution of Paper at Time of Purchase

Percent Breakdown of Portfolios	Prime Notes (Percent of corporations purchasing paper)	Maturity of Date of Purchase		
		under 30 days	31 to 90 days	91 days or over
		(Percent of Corporations purchasing paper)		
0-25%	6	58	42	54
26-50%	3	17	22	18
51-75%	5	6	13	9
76-95%	19	14	18	12
96-100%	68			

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

dealer paper. The two most important features favoring direct paper, both of which were chosen by over half the commercial-paper buyers, are that directly-placed paper can be more easily "tailormade" with respect to maturity and amount, and that the direct placers are "large well-known finance companies." The first reason seems especially important to the largest group of manufacturing corporations, insurance companies and utilities. These giant investors often cannot obtain, in large enough volume, dealer paper which meets their specifications. By the same token, the related alternative that direct paper is always in ample supply was cited particularly by insurance companies which have enormous cash flow.

Over one-third of the investors indicated a preference for direct paper because direct placers will generally repurchase paper whereas dealer paper is harder to liquidate, and a similar number noted that direct paper is available in very short maturities. The fact that both of these factors prove important in the decision to purchase directly-placed paper has interesting implications for the need for a secondary market in commercial paper. This will be discussed in Chapter VI.

Some 30 percent of firms who purchase paper indicated that they often buy dealer paper because it offers a higher yield. And, about 20 percent indicated that the fact that paper of many different issuers can be obtained by one contact with a dealer is an important consideration. Many investors choosing neither of these alternatives indicated that some of the reasons favoring direct paper were overriding, and they seldom purchased commercial paper through dealers. These results appear in Table V-7.

Reasons for Investing in Commercial Paper

Over 90 percent of corporations purchasing commercial paper indicated that an attractive rate of interest is an important factor in influencing the decision to do so. This figure is uniformly high for all categories of corporate investors, and is interesting in light of the fact that only 40 percent of commercial banks buying paper indicated the importance of an attractive rate.⁷ This result implies that most

⁷See Table IV-6.

Table V-7

Factors Influencing the Choice Between Directly-Placed Finance-Company
Paper and Commercial Paper Issued Through Dealers

(Percent of corporations purchasing paper)

	Manufacturing			Insur- ance	Merchan- dising	Transpor- tation	Util- ities	Total
	I	II	III					
Directly-placed paper preferred because:								
Direct paper more easily tailormade with respect to maturity and amount	78	47	32	69	33	50	100	60
Direct placers will generally repurchase paper	38	47	26	46	33	13	67	38
Direct paper available in very short maturities	49	37	11	38	17	38	67	37
Direct placers are large, well-known finance companies	68	58	53	54	17	63	50	57
Direct paper of specific issuer always in ample supply	30	32	5	54	0	25	33	26
Dealer paper preferred because:								
Dealer paper generally offers higher yield	30	21	37	38	33	13	33	30
Paper of many different issuers can be obtained by one contact	14	11	42	31	33	25	0	21

Source: Response to Questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

corporate investors are fairly sensitive to persistent rate differentials between various assets and that a boost of the commercial-paper rate relative to that on Treasury bills in a tight-money period could lead to an inflow of funds to the commercial-paper market.⁸

The feature that commercial paper (specifically directly-placed paper) can be obtained in the exact amount and maturity required appealed to over 80 percent of corporate investors. This compares with less than 30 percent of commercial banks. This result helps support the theory that commercial paper serves a very different purpose for business corporations than for bank investors. For corporations, paper is an ideal instrument for funds needed to meet large and foreseen outpayments such as dividends or taxes. It is thus especially important for these investors to obtain paper in the exact amount and with the exact maturity date to match the date and amount of the planned expenditure. Commercial banks, on the other hand, generally use paper to bolster inadequate loan demand, and hence to them the ability to tailor-make paper is less important. The greater reliance on finance paper by corporations than by banks is consistent with these observations.

Almost half of corporate buyers suggest that the availability of short maturities is important to them. These respondents often have large blocks of money for a few days or for an uncertain period, and find commercial paper more profitable yieldwise than, for example, repurchase agreements on Government securities. Moreover, buying very short paper is

⁸This will be discussed further in Chapter VII.

often considered superior to investing in a marketable security with the intent of quick sale, because of the absence of "market risk" from the commercial-paper investment. Short maturities thus enhance the desirability of commercial paper to the "new generation" of corporate treasurers.

Date on the major reasons for corporations buying paper appear in Table V-8.

Table V-8

Factors Influencing the Corporate Decision to Buy Commercial Paper
(Percent of corporations purchasing paper)

	Manufacturing			Insur- ance	Merchan- dising	Transpor- tation	Util- ities	Total
	I	II	III					
The commercial-paper rate is attractive	95	95	89	92	67	100	83	92
Commercial paper can be obtained in the exact amount and maturity required	84	79	68	85	67	88	100	81
Commercial paper can be obtained in very short maturities	49	42	47	46	33	38	50	45

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

Why Don't More Corporations Buy Paper?

Many corporations who do not buy commercial paper explained that they do not have funds available for short-term investment. Very often these companies are net short-term borrowers and internally-generated funds are plowed back into inventories or fixed investment. Almost half of the nonbuyers, including respondents from every category but insurance companies, specified this reason.⁹

More than one-third of the corporations not buying commercial paper indicated that directors prefer to confine short-term investment to Treasury bills. Several of these firms noted, however, that this policy is presently in process of being re-examined. One respondent stated that "investment philosophy is in process of change, new authorization will give the treasurer authority" to purchase commercial paper. This comment is in line with the discussion of the "new generation of corporate treasurers" earlier in this chapter. Within a few more years, the number of firms who do not purchase commercial paper because of lack of authorization by the directors should decline substantially.

Only 10 percent of nonbuyers indicated that they find the commercial-paper rate unattractive and a similar percentage feel that commercial paper is relatively illiquid because there is no secondary market. These results appear in Table V-9.

⁹No specific choice was provided in the questionnaire (Appendix C) to indicate the absence of funds for short-term investment, but 50 percent of the respondents checked "other" and virtually all of them indicated lack of investment funds as the reason. The fact that no insurance-company respondents checked "other" is consistent with this, since all insurance companies have short-term investment funds.

Table V-9

Reasons for Corporate Decision Not to Invest in Commercial Paper
 (Percent of corporations NOT buying paper)

	<u>Manufacturing</u>			<u>Insur-</u>	<u>Merchan-</u>	<u>Transpor-</u>	<u>Util-</u>	<u>Total</u>
	<u>I</u>	<u>II</u>	<u>III</u>	<u>ance</u>	<u>dising</u>	<u>tation</u>	<u>ities</u>	
Commercial paper is relatively illiquid (no secondary market)	25	5	5	0	0	29	0	9
Commercial-paper rate is relatively unattractive as compared to that on other short-term investments	0	20	10	0	0	14	0	10
Investment in commercial paper is more trouble than it is worth	0	0	0	0	0	14	0	1
Directors prefer to confine short-term investments to Treasury bills	38	30	43	33	0	43	44	37
Other*	38	55	52	0	100	29	66	50

*Most respondents specified that no short-term investment funds are available.

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

Corporate Evaluation of Commercial Paper and Substitute Investments

Corporations were asked to indicate the interest-rate spread that would induce them to shift from 90-day Treasury bills into commercial paper of the same maturity. 88 percent of those firms buying paper who ventured an opinion indicated that a spread of $1/4$ percent is sufficient, and half of these indicated that a spread of $1/8$ percent over Treasury bills would suffice.¹⁰ Only 3 percent of the corporate buyers indicated they needed a spread of $1/2$ percent or greater. This is in striking contrast to the position of commercial banks; nearly half of bank buyers wanted a spread over $1/4$ percent and one-third a spread of $1/2$ percent or more.¹¹ These figures again point up the different role of paper for corporations and for banks. For corporate buyers, paper is a much better substitute for Treasury bills than for banks. Because of this, although present market differentials (about $1/4$ percent) are sufficient to induce corporate investors to hold paper, it is possible that enlarging the spread would expand the corporate market, at least in the short-run. Relevant data appear in Table V-10.

Corporations were also asked to rank their preferences for various assets by indicating the spreads over Treasury bills sufficient to induce a shift. In this matter, it is possible to determine whether

¹⁰85 percent of the respondents buying paper answered this question. Too few of the nonbuyers provided any information about their evaluation of paper versus substitute assets to make any significant statements about their opinions.

¹¹See Table IV-8.

Table V-10

Spread Required to Induce Shift from Treasury Bills to Commercial Paper--
Both of 90-Days Maturity
(Percent of corporations purchasing paper responding to question)*

Spread: (Commercial-paper rate less Treasury bill rate)	Manufacturing			Insur-	Merchan-	Transpor-	Utili-	Total
	I	II	III	ance	dising	tation	ties	
Percent per annum								
1/16	9	13	0	0	0	0	20	7
1/8	25	25	62	40	80	57	0	37
1/4	44	38	38	50	20	43	80	43
3/8	19	13	0	10	0	0	0	10
1/2	0	13	0	0	0	0	0	2
greater than 1/2	3	0	0	0	0	0	0	1
1/4 or less	78	75	100	90	100	100	100	88
over 1/4	22	25	0	10	0	0	0	12

*Of corporations purchasing paper, 85 percent responded to question.

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

an investor prefers a given asset to commercial paper, is indifferent between the two, or prefers paper.¹²

Almost three-quarters of the corporations who purchase paper provided information about certificates of deposit. The majority of these are indifferent between the two instruments, but of the remainder twice the number prefer paper as prefer CD's. Because most paper-buyers indicated spreads for CD's (the "no answer" figure being relatively low), it is likely that a majority of paper-buyers are also active in the CD market. This is in contrast to the case of tax-exempt securities where fewer than half of the paper-buyers answered. Paper is again preferred by more respondents than are tax-exempts, and the "indifferent" total is substantially smaller. About half of the commercial-paper buyers indicated spreads for bankers' acceptances; half of these are indifferent between acceptances and paper, but the majority of the remainder prefer paper.

Only one-fifth of paper-buyers evaluated Eurodollars, indicating the inactivity of most corporations in this market. As would be expected, virtually all respondents prefer paper since paper is more easily liquidated and the credit risks are more familiar, if not superior. The preference of paper over Canadian commercial paper is unanimous even after accounting for the cost of a foreign-exchange hedge. Many large investors mentioned

¹²As was explained in the discussion of bankers' evaluations of the various assets, a smaller spread than that for paper indicates a preference over paper, the same spread denotes indifference, and a higher spread implies that paper is preferred.

that they avoid short-term foreign investments unless they have specific payments to make abroad. They expressed the feeling that such investment might constitute bad public relations in light of the balance-of-payments problem, and only very large yield differentials would make it worthwhile.

No interesting discrepancies in the evaluation of assets appear among the various categories of corporate investors. The results for all corporations buying paper appear in Table V-11.

The fact that commercial paper is ranked so highly by corporate investors is interesting in light of the discussion to follow. Substitutes such as certificates of deposit and bankers' acceptances have default risks equally as low as those on paper, and can also be sold on a secondary market. If the majority of corporate investors prefer paper to these alternatives, some doubt exists about how much a secondary market in paper is really needed. The next chapter investigates the possibility of the development of such a secondary market in commercial paper.

Table V-11

Corporate Evaluation of Prime Commercial Paper
and Substitute Short-Term Investments

(Percent of corporations purchasing paper)

Certificates of Deposit:

CD's preferred	9
Indifferent	46
Paper preferred	18
No answer	27

Tax-exempt Notes:

Tax-exempts preferred	10
Indifferent	16
Paper preferred	16
No answer	58

Eurodollars:

Eurodollars preferred	1
Indifferent	1
Paper preferred	18
No answer	80

Canadian Commercial Paper:

Canadian paper preferred	2
Indifferent	2
Paper preferred	31
No answer	65

Bankers' Acceptances:

Acceptances preferred	6
Indifferent	24
Paper preferred	17
No answer	53

CHAPTER VI

THE POSSIBILITY OF THE DEVELOPMENT OF A SECONDARY MARKET IN COMMERCIAL PAPER

It has been pointed out that, in contrast to the situation with competing investments, there is no secondary market where investors can sell commercial paper before maturity. The present section analyzes the liquidity of the commercial-paper instrument in the absence of a secondary market. Drawing heavily on the attitudes of participants (issuers, investors, and dealers), the need for a secondary market and the likelihood of obtaining it are discussed.

The Liquidity of Commercial Paper

Because of the lack of a secondary market, commercial paper is purchased with the intent of being held to maturity. Paper cannot be a vehicle for "playing rates" but does serve as an instrument to put idle funds to work at a relatively attractive yield. In fact, commercial paper is an ideal instrument for investors with specific payments to make on a known future date because directly-placed paper can be tailormade with respect to amount and maturity date, and dealer paper can usually be obtained with specifications very close to the desired ones. And, should urgent unforeseen needs for funds by holders of commercial paper arise, arrangements often exist whereby they can recoup their money.

The direct placers abide by a "gentlemen's agreement" to buy back their notes from investors who are faced with a "valid emergency." There is no contractual obligation to prepay, however, and the direct placers may refuse to sell paper in the future to individual investors who habitually ask for buybacks. In short, the buyback is offered not to encourage rate speculation, but rather to provide commercial paper with additional liquidity in the event of unforeseen needs.

When the direct placers repurchase paper, they often do so with an interest-rate "cutback." For example, if a 120-day note is held 30 days, the direct placers repurchase this note at a price which yields the investor the 30-day rate that prevailed at the time of original purchase. The cutback policy is flexible, however. Many direct placers will pay the full rate on paper held within a few weeks of maturity and, in the case of very good customers who obviously are not speculating on interest rates, a cutback will sometimes not be invoked.

As would be expected, investors feel that the willingness to buy back paper enhances the liquidity of this instrument. In fact, 38 percent of corporations buying paper indicated that they prefer notes of the direct placers for this reason.¹ Many firms, however, report that they feel reluctant to ask the direct sellers to repurchase paper. Instead, although some additional cost is involved, they prefer to discount the paper at their banks, usually at the prime rate. This is not irrational given the attitude of the direct placers toward the buyback.

¹See Table V-7.

In the case of dealer paper, repurchase features such as those described above are generally absent. However, some arrangement can often be made whereby a firm which has unexpected needs for funds can recoup its money invested in commercial paper. The traditional method of redeeming dealer paper before maturity has been referred to in Chapter II, and is known as the "best-efforts basis." By this method, the investor asks his dealer to try to find another home for the paper, and the dealer then proceeds to seek a suitable buyer. The best-efforts system provides no assurance that the investor can sell his paper, but, in practice, dealers estimate that this remarketing effort is successful about 70 percent of the time. This percentage is somewhat lower in tight-money periods. Dealers generally perform the remarketing service without requiring a spread between buying and selling rates.

Recently, some dealers have begun to promise to buy back paper into inventory with appropriate rate cutbacks, an arrangement similar to that offered by the direct placers. Dealers will generally do this, however, only when a good customer relationship is involved, and when they are positive that the investor is not playing rates. Some dealers will re-inventory paper only in cases where the repurchase agreement is stipulated at the time of original sale of the paper. In such situations, the dealer often gets a promise from the issuer, usually in this case a finance company, to buy back the paper from the dealer in the event that it is turned in before maturity. Dealers, like direct sellers, continue to emphasize, however, that habitual repurchases will not be allowed.

Investors with uncertain needs are encouraged to buy very short paper or marketable securities.

In addition to buyback arrangements, certain gimmicks have evolved to increase the desirability of commercial paper in the absence of a secondary market. These devices are offered by the direct placers and negotiated with the individual investor.

One such arrangement, known as a "hole-in-the-middle" note, allows the investor to get his money back for a specified few days during the holding period of the note, and to receive the rate of return for the full number of days he is lending the money. For example, an investor may get a 90-day rate on a note which he holds for 30 days, is repaid for 5 days, and then holds for an additional 60 days. This device, which is desirable because of the generally upward sloping yield curve and which is especially attractive when investors expect interest rates to fall, allows firms who anticipate heavy cash needs for a few days to specify these days in advance and commit their investment funds for a longer period.² The use of this procedure is especially common among firms who must prepare a balance sheet on a particular day within an investing period and want to show a good cash position, and also among firms who have large specific payments to meet and expect to be short of cash for just a few days.³

² Generally direct placers will offer a "hole" up to 5 days on a 90-day note and one up to 10 days on a 180-day note.

³ "Holes" are especially common around December 31 because of the reluctance of many firms to hold paper over the year-end. See Chapter VII.

A second gimmick, termed "accumulating days," is also of value to investors when there is an upward-sloping yield curve. Assume an investor is sure that he can hold paper for only 20 days and purchases a note of that maturity. If he picks up the paper on the day of maturity and goes into a 40-day note, he then gets credit for the original 20 days and will earn the 60-day rate on his investment. In any event, the investor is assured of his ability to disinvest after 20 days. In effect, the liquidity of the 60-day note is enhanced and the yield remains unchanged.

Attitudes of Issuers and Dealers

Direct placers and commercial-paper dealers are generally opposed to the development of a secondary market in commercial paper. Issuers using dealers, on the other hand, appear to be divided into three roughly equal groups. One group opposes a secondary market because these issuers prefer not to have their paper traded. A second group favors the idea of a secondary market because these firms feel that such a development would increase the saleability of paper. The third group is indifferent toward a secondary market and feels it would have little effect on their operations. These results appear in Table VI-1.

Part of the opposition of the dealers and direct placers to a secondary market in paper rests on the fact that such a development would necessitate considerable technical changes in their marketing operations. For example, the primary issuers would have to check secondary-market

Table VI-1

Attitudes of Commercial-Paper Issuers Toward the Development
of a Secondary Market in Commercial Paper
(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer Industrial</u>	<u>Direct Placers</u>	<u>Total</u>
<u>Favor</u> the development of a secondary market as it would increase saleability of our paper	33	31	23	30
<u>Oppose</u> the development of a secondary market as prefer not to have our paper traded	33	33	77	40
<u>Indifferent</u> or express no opinion	34	36	0	30

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

rates constantly before quoting offering rates. The present system of quoting a rate structure and relying somewhat on field representatives to peddle paper would thus prove impractical since rates would constantly be in a state of flux. Of more substantive importance, however, is the argument that a secondary market would make it harder for the primary issuers to ascertain, at any time, who is holding their paper. Since it would then be more difficult to gauge where funds are available, selling efforts would be complicated. The sum of both these arguments

is that the direct placers and dealers feel that a secondary market would make it more expensive to sell primary issues.

Additional opposition to a secondary market rests on the opinion that such a development would reduce the importance of a "personal relationship" between the primary issuers and investors. Dealers argue that this, in turn, would introduce the possibility of fraud. Since commercial paper is not registered with the SEC, and since there is a large number of issuers, it might be very difficult to tell if notes traded on the secondary market are valid, in the absence of a personal relationship between buyer and seller.⁴ Dealers emphasize that when they sell primary notes they can assume responsibility for the authenticity of the paper which they issue. They state, however, that they could not assume similar responsibility for paper traded on the secondary market. Dealers fear that any slight scandal which might develop in the secondary market would seriously hurt the entire commercial-paper business.⁵

Still another argument against a secondary market offered by the direct placers is that such a development might alter the yield curve

⁴The fact that there is a secondary market in certificates of deposit, which are also not registered, is not sufficient evidence to convince dealers that fraud would not develop in a secondary market for commercial paper. Dealers argue that CD's are bank instruments which are specifically exempt from registration, and that there are many fewer banks large enough to have their notes traded, than there are issuers of commercial paper.

⁵Direct placers also emphasize the importance of a personal relationship between borrower and investor which facilitates mutually advantageous extensions to other phases of business operations. For example, a finance company could develop contacts through the sale of paper to a corporate investor which would give it an inside track to lend to the corporation to finance equipment, inventories or receivables.

for paper, forcing short rates higher and long rates lower. This could occur if more investors decided to buy long-term issues directly and dispose of them in the secondary market before maturity. The supply of short notes in the secondary market could be large and offering rates in this maturity range would have to be increased. Since the direct placers have been relying increasingly on short-term paper because of its added flexibility and generally lower cost, such a development might prove disadvantageous.

Despite all the objections raised--increased difficulty of marketing paper, possibility of fraud, etc., it appears that the main reason why both direct placers and dealers are opposing a secondary market is that such a development would endanger the primary-placement spread which they are now able to earn. Dealer commissions, which have been discussed in Chapter II, are substantially higher than spreads between bid and ask in secondary markets for competing instruments.⁶ If direct placers have similar marketing costs to those of dealers, and the interest-rate differential between direct and dealer paper is determined by investors' evaluation of the two assets, it follows that the direct placers are earning a similar "imputed" spread. Keen competition in a well-functioning secondary market might seriously reduce this earning power.

⁶ Dealer commissions in commercial paper are usually 1/4 percent per annum; the spread in the bankers' acceptance market averages about 1/8 percent per annum, and in the CD market the spread is generally 10 basis points for certificates under 30 days and under 5 basis points over 30 days.

Attitudes of Investors

The evidence gathered from attitudes of both banks and corporate investors indicates that there is not very widespread demand for a secondary market in commercial paper. The introduction of a secondary market could therefore be expected to have only marginal initial impact in expanding the size of the market. There are indications, however, that the existence of such a market could change the attitude of many investors toward the commercial-paper instrument, which could, in time, substantially broaden the sources of funds flowing into paper. This, in turn, could lower the commercial-paper rate relative to the rates of other money-market instruments.

Only 9 percent of corporations not presently purchasing commercial paper indicated that a primary reason for this decision is that paper is considered illiquid because of the lack of a secondary market. This group, however, included one-fourth of the firms in the largest manufacturing category who are potential suppliers of vast sums of money to the paper market.⁷ In addition, although the majority of corporate investors prefer commercial paper to substitute assets such as CD's and bankers' acceptances, the added flexibility provided in a secondary market is an important consideration for those investors favoring the substitutes. In fact, several firms noted that they presently limit their paper purchases to funds earmarked for specific outpayments. If there were a secondary

⁷See Table V-9.

market, however, they would increase the portion of their portfolios held in commercial paper.

There is additional evidence to support the hypothesis that flexibility is important to many corporate investors. Almost two-fifths of firms buying commercial paper prefer directly-placed notes because of the willingness of the direct issuers to prepay.⁸ And the recent growth in short maturities indicates the desire of investors to remain liquid. In sum, several factors point to an increased corporate demand for commercial paper, if it could be sold before maturity on a secondary market.

The same conclusion appears to hold true in the case of bank demand for commercial paper. It will be recalled that the great majority of banks buying commercial paper treat it not as a secondary reserve, but instead as a bolster to inadequate loan demand. In this light, the lack of a secondary market is hardly relevant. Hence, it is not surprising that only 17 percent of banks not buying paper indicated that illiquidity (absence of a secondary market) is a major consideration.⁹ Many banks noted, however, that were a secondary market in commercial paper to develop, they would consider buying paper as a secondary reserve. These included some larger institutions who are especially conscious of maintaining flexibility in their portfolios. A secondary market could therefore expand bank demand for commercial paper.

⁸See Table V-7.

⁹See Table IV-7.

Is a Secondary Market Needed?

The possible attributes of a secondary market are 1) widening the range of available securities for potential investors, 2) enhancing the liquidity of an instrument for investors who wish to dispose of their holdings before maturity. In securities such as Treasury bills and CD's, the secondary market serves both purposes. Since Treasury bills are issued only in three maturities (90 days, 180 days and occasionally one year), an investor desiring to obtain a bill with some other maturity must resort to the secondary market. Similarly, since primary issues of CD's under 90 days are effectively precluded by Regulation Q, an investor desiring a very short maturity must again go to the secondary market.¹⁰ Commercial paper, on the other hand, is issued for any specified maturity under 270 days and thus there is no incentive to purchase paper in the secondary market. A secondary market in paper would therefore serve only one function, that of providing a way for holders of paper to disinvest before maturity.

In light of this discussion, if a secondary market were to develop in commercial paper, all transactions costs should fall on investors who are disposing of paper, since the buying firms are presumably indifferent between purchasing a primary or secondary-market offering of the same maturity. For a secondary market to be profitable, therefore, it would have to be worthwhile for potential disinvestors to pay the entire dealer's spread, which might be expected to be similar to the 1/8 percent per annum generally prevailing on bankers' acceptances. Since this

¹⁰See Chapter II.

spread is usually smaller than the added cost of a bank loan, even at the prime rate, it might be expected that investors in need of funds would often prefer selling commercial paper in the secondary market to borrowing from banks. This is the main rationale for a secondary market in paper.

Insofar as the best-efforts system operates well and direct placers continue to repurchase paper, there is no real "need" for a secondary market to enable commercial paper to maintain its present position among money-market instruments. Such a development would increase the attractiveness of paper to investors, however. In fact, some firms who now hold Treasury bills in the volatile section of their portfolios, might find it practical to switch in part to commercial paper. This could lower the spread between the commercial-paper rate and the Treasury-bill rate and, in turn, benefit the paper-issuers. This possibility is generally discounted by dealers and direct placers in stating their opposition to a secondary market. It appears likely that they are underestimating the long-run effect of such a development on investors' preferences since there appears to be sufficient evidence that a secondary market would broaden the demand for commercial paper. Dealers and direct placers must weigh this against the difficulties that would have to be overcome--new marketing problems, the possibility of fraud and the loss of the primary-placement spread. Whether a secondary market will actually result in the near future will depend in large part on their decision.

CHAPTER VII

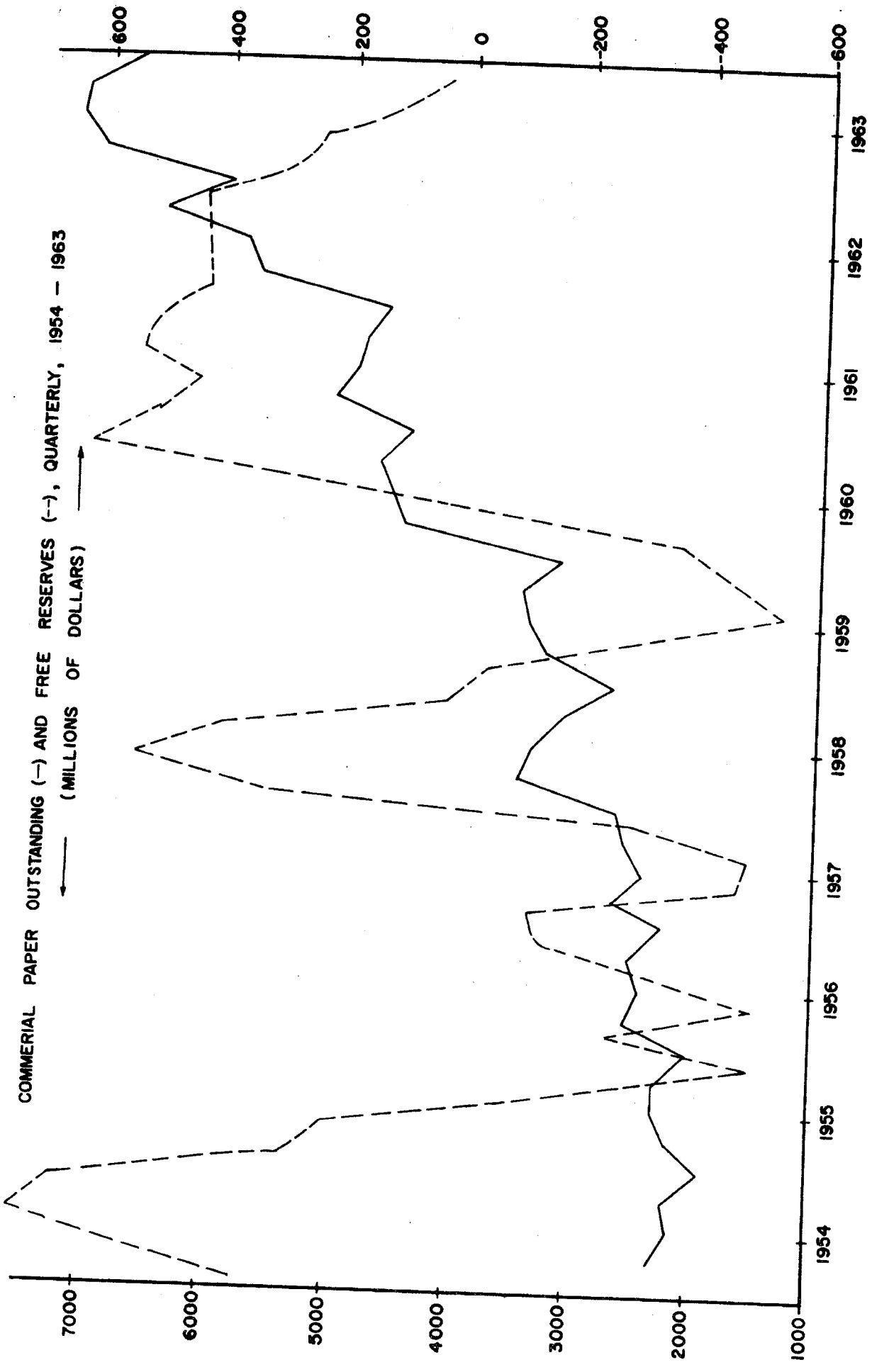
THE RELIABILITY OF THE COMMERCIAL-PAPER MARKET: TIGHT-MONEY PERIODS AND THE YEAR-END

Participants in the commercial-paper market often suggest that although paper is a generally-reliable source of funds, this market appears to "dry up" in periods of monetary restraint and at the end of each calendar year. The present chapter attempts to explain the behavior of commercial paper outstanding by analyzing considerations which affect the decisions of both issuers and investors. It concludes with a discussion of whether or not a boost in the rate of interest offered on commercial paper can be expected to increase the flow of funds to this market, especially in periods of monetary restraint and at the year-end.

Examination of the Data

Quarterly data on total commercial paper outstanding and on free reserves appear in Appendix D and are charted on the following page. The chart reveals a sharp upward trend in paper outstanding which seems to have accelerated since 1960. There is also an apparent seasonal pattern, featuring a sharp rise in the first quarter of the year and a sharp decline in the fourth quarter. In fact, outstandings have fallen in the last quarter of each of the last ten years but 1957, and drops in excess of 10 percent have not been uncommon. This so-called

COMMERCIAL PAPER OUTSTANDING (—) AND FREE RESERVES (- -), QUARTERLY, 1954 - 1963
 (MILLIONS OF DOLLARS)



SOURCE: APPENDIX D.

1922 P2
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"year-end runoff" has occurred in both directly-placed paper and paper issued through dealers, and will be discussed in detail below.

The cyclical behavior of commercial paper is harder to discern from the chart. The change in paper outstanding was correlated with the change in free reserves. A slight positive relationship ($r = .26$) was revealed, indicating that outstandings tend to rise most rapidly in periods when credit is being eased, but this relationship is not statistically significant.¹ Total outstandings were correlated with the level of free reserves and here, however, a high positive correlation ($r = .85$) exists and is statistically significant. This factor indicates that outstandings are highest when credit is easiest, though no causality is implied. The discussion which follows will attempt to uncover any relationships which may exist which might lead paper to expand more slowly in periods of monetary restraint.²

¹This is not to say that free reserves are synonymous with the degree of monetary restraint. On the contrary, serious difficulties exist with using a free-reserves target to determine monetary policy. (See, for example, A. J. Meigs, Free Reserves and the Money Supply, Chicago, 1962.) Because, however, the Federal Reserve has in the past relied so heavily on the free-reserves concept, its use in this study as an index of credit conditions is defended.

²Relying on National Bureau of Economic Research business-cycle turning points, Selden arrived at the conclusion that total outstandings rise in recession (Selden, op. cit., Chapter 6). This observation is consistent with the above correlation result. Selden advanced several hypotheses to explain this behavior but has not supplied satisfactory evidence to uncover their relative importance. Since the timing of business-cycle turning points is rather dubious, the present study focuses on the behavior of commercial paper in changing money and credit conditions, rather than over the business cycle.

Commercial Paper in Tight Money

In Chapter III the sensitivity of issuers in shifting between commercial paper and bank loans in response to changes in relative interest rates was discussed. It was concluded that commercial paper is relatively more important when the interest-rate saving is highest. Only part of this shift, however, could be attributed to interest-rate sensitivity. The interest-rate saving is generally highest when credit is easy, and factors associated with business and credit conditions may well affect the usage of commercial paper. In particular, the demand for commercial paper as an asset may well decline in periods of monetary restraint and with it the ability to market paper. The present section addresses itself to this hypothesis.³

More than two-thirds of commercial-paper issuers indicated that the percentage of commercial paper to debt does not change significantly in periods of monetary restraint. Many of these noted, however, that they try to limit their outstandings so that paper is a source of funds which is reliable and steady over the cycle, and some expressed fears

³The result that the absolute importance of paper (as opposed to its importance relative to bank loans) declines in periods of monetary restraint is a much stronger statement, which, of course, cannot be explained by differentials. Tight money is usually associated with good business conditions when it would be expected that the total short-term borrowing needs of paper issuers would expand. The direct placers, whose receivables have relatively sharp cyclical movements, do increase their share of the commercial-paper market in tight money. But, the general decline in the open market in such periods seems to be in substantial part associated with factors affecting the demand for paper which will be explored below.

that if they were to increase their reliance on paper, they might find the open market "drying up" for them in periods of monetary restraint. All but one of the issuers who indicated that their paper outstandings are affected by monetary restraint reported that percentages decreased. Some of these firms explained this phenomenon by sensitivity to the interest-rate spread, but most of them noted that demand for their paper drops and at the usual differential above the Treasury-bill rate, they cannot obtain all the funds they want in the open market in such periods.⁴

About one-quarter of the issuers indicated that the supply of funds in the commercial-paper market seems to dry up in periods of monetary restraint. However, more than half of the finance companies using dealers indicated this alternative, indicating that smaller finance names are the first to feel the effects of tight money. This is not surprising if we assume that the paper of these issuers is the "riskiest." In periods when commercial paper is relatively hard to sell, the cost of open-market funds to dealer finance companies may approach their bank-borrowing costs, thus excluding them from the commercial-paper market. Very few industrial issuers, on the other hand, believe that the open

⁴The cost of borrowing from banks serves as a natural ceiling to the cost at which most issuers will sell commercial paper. As was mentioned in Chapter III, the true cost differential considers transactions costs and differences in compensating balances, as well as the spread between the prime rate and the commercial-paper rate. In the statistical analysis of this study, however, the interest-rate spread is used to represent the cost differential. The extent to which issuers expect a boost in the interest rate will increase the demand for their paper will be discussed below.

market seems to dry up in tight money. This fact is consistent with the low percentage of these firms who show a drop in commercial paper usage in such periods. Industrial borrowers generally stressed that commercial paper is a purely seasonal phenomenon and cyclical fluctuations are hardly noticeable. These results appear in Table VII-1.

In light of the comments of some issuers about the unreliability of the commercial-paper market in times of monetary restraint, investors were questioned about what happens to their paper holdings in such periods. The majority (56 percent) of commercial banks who normally purchase paper indicated that their portfolios decline in tight money, and many noted that their paper holdings disappear entirely in such periods. Only a handful of banks (5 percent) said that their paper holdings increase and some 30 percent stated that their holdings remain the same. The general decline in bank purchases of paper in tight money is apparent for banks of all deposit sizes and in all areas of the country. This phenomenon is explained by the fact that most banks purchase paper when the demand for direct loans is insufficient. In tight-money periods, local loan demand in most areas is brisk and the desire for commercial paper declines. Since banks are relatively important in the dealer sector of the market, a drop in demand for paper by commercial banks is felt especially by issuers who utilize dealers.

The withdrawal of corporate investors from the commercial-paper market in periods of monetary restraint is not nearly as marked as that of the banks. About half of corporate buyers indicated that their holdings

Table VII-1

Issuers' Appraisal of the Commercial-Paper Market
in Tight-Money Periods

(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct Placers</u>	<u>Total</u>
Percentage of Paper to Debt in Tight Money:				
Generally increases	0	0	8	1
Generally decreases	33	12	38	22
Generally remains the same	67	71	54	67
Ability to Obtain Funds in Open Market in Tight Money:				
Can obtain all funds needed at the going interest rate	29	69	62	58
Can't Not obtain needed funds; open market appears to dry up	57	8	23	23

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

do not change in tight money; many of these firms noted that their cash flow is not perceptibly affected by credit conditions and their investment policy with respect to paper is not influenced. About twice as many firms indicated a decrease in paper holdings in tight money as indicated an increase. The chief reason advanced by those investors reporting a

decrease is that in periods of monetary restraint, cash flow is used to finance increases in inventories and receivables. The most important factor for those firms reporting an increase in paper holdings is that the commercial-paper rate is high in such periods making paper investment attractive. No interesting differences in behavior are apparent among corporations in the different categories. Data appear in Table VII-2.

Because monetary restraint appears to curtail the ability to market paper of some issuers, if only a minority of them, it is interesting to investigate whether issuers feel that they can get all the funds they need from their banks in such periods. The vast majority of firms indicated that they can, provided that they are careful to maintain good bank relations. About a quarter of the issuers qualified their answers by stating that they can obtain bank funds only up to their open credit lines; this group is in large part composed of finance companies. Only 5 percent of issuers indicated that their banks encourage them to seek funds in the open market in tight-money periods, and strikingly enough, no respondents said that they are directly rationed by their banks. This result is not as surprising as it would at first appear to be. Since all issuers maintain substantial unused credit lines, the fact that they have never experienced rationing implies little more than that their lines have never been "pulled" in tight-money periods. Moreover, industrial commercial-paper issuers are prime bank customers and these would be among the last borrowers to be rationed under any circumstances. These responses are summarized in Table VII-3.

Table VII-2

Corporate Holdings of Commercial Paper in Tight-Money Periods
(Percent of corporations purchasing paper)

In a period of monetary restraint,
commercial-paper holdings generally:

Increase	9
Decrease	19
Remain the same	47

If holdings DECREASE,
important explanation is:

Ample commercial paper not available for investment	3
Cash flow used to finance increase in inventories and receivables	12
Larger cash balances needed for day-to-day business	4
Compensating-balance requirements increased by banks	1
Yield on Treasury bills makes them relatively more attractive	5

If holdings INCREASE,
important explanation is:

Larger investable cash flow exists	1
Commercial-paper rate is high	7

Source: Response to questionnaire, "Commercial Paper as a
Short-Term Investment", Appendix C.

Table VII-3

Ability to Borrow from Banks in Tight Money
(Percent of total respondents in category)

	<u>Dealer- Finance</u>	<u>Dealer- Industrial</u>	<u>Direct- Placers</u>	<u>Total</u>
<u>Can Obtain at Banks</u>				
All funds needed at going interest rate	62	86	54	75
All funds up to open credit lines	38	16	38	25
All funds, but are encouraged to obtain funds in commercial-paper market if possible	10	2	8	5
<u>Cannot Obtain Bank Funds</u>	0	0	0	0

Source: Response to questionnaire, "Commercial Paper as a Source of Funds", Appendix C.

Banks were also asked if they encourage customers who are issuers of commercial paper to borrow in the open market in periods of monetary restraint. No banks responded affirmatively. The most important reason cited is that banks "try to satisfy the needs of their customers at all times to maintain the relationship." Some banks indicated that they do not want to encourage commercial-paper financing, especially in a temporary situation, because it is a source of funds competitive to bank loans. Only a few respondents, however, refrain from sending customers

into the open market because they feel it is difficult to obtain commercial funds in tight money. All these explanations appear more important for the larger banks than for the smaller ones because the latter institutions often do not have any customers capable of borrowing on commercial paper. These results for banks in major financial centers, other urban areas and rural districts appear in Table VII-4.

Table VII-4

Bankers' Attitudes Toward Encouraging Customers to Issue
Commercial Paper in Tight Money

(Percent of respondents in category)

	<u>Major Financial Centers</u>	<u>Other Urban Areas</u>	<u>Rural Districts</u>	<u>All Respondents</u>
We ENCOURAGE issuers to sell paper in tight money	0	0	0	0
We DON'T ENCOURAGE issuers to sell paper in tight money because:				
It is difficult for them to sell paper in such periods	6	2	2	3
We try to satisfy needs of our customers at all times	68	30	12	33
We don't want to encourage commercial paper financing in this temporary situation	17	8	2	8

Source: Response to questionnaire, "The Role of the Banks in the
Commercial-Paper Market", Appendix C.

In summary, falling investors' demand is a factor, which along with issuer sensitivity to relative interest rates, helps explain the weakness of commercial paper outstanding in times of tight money. To say that the commercial-paper market "dries up", however, appears to be an overstatement. Small finance companies, in particular, may find it somewhat more difficult to market their paper, but if they have maintained adequate lines of credit, they generally will find their banks willing to take up any temporary slack they may experience in the open market. Ability to extend their lines in such periods may, however, be severely restricted.

The Year-End Problem

The major explanation for the year-end runoff in commercial paper outstanding is the decline in the willingness of corporate investors to hold paper at these times. This phenomenon is partially offset by the increase in bank demand for paper at the year-end, but, on balance, the supply of funds to the commercial-paper market declines rapidly. This occurs despite a higher prevailing yield on paper maturing on January 2nd compared to December 31st, and presents a sizeable problem to many commercial-paper issuers and dealers.

Slightly over 10 percent of corporations purchasing paper indicated that they are reluctant to hold paper over the year-end. (See Table VII-5.) Many of these firms are located in states which have

Table VII-5

Corporate Willingness to Hold Paper over the Year-End
 (Percent of corporations in category purchasing paper)

	<u>RELUCTANT to hold paper over year-end</u>	<u>NOT RELUCTANT to hold paper over year-end</u>	<u>No Opinion</u>
Manufacturing I	11	73	16
II	11	58	31
III	5	79	16
Insurance	15	54	31
Merchandising	33	33	33
Transportation	13	75	12
Utilities	<u>0</u>	<u>33</u>	<u>67</u>
Total	11	65	24

Source: Response to questionnaire, "Commercial Paper as a Short-Term Investment", Appendix C.

a tax on intangible assets levied on property held on December 31st.⁵ Since Treasury bills are always exempt from such taxes, and usually bank deposits are similarly excluded, investors in these states find it more profitable to hold bills or CD's rather than paper.

⁵ Indiana and Ohio are important examples of states which have such taxes.

Another factor leading some corporations not to hold paper at the year-end is the desire to show cash on their balance sheets.⁶ There are two reasons for this: "window dressing" on corporate annual reports, and a desire to please banks who are anxious to increase their deposit figures for the December 31st call report. As stockholders and suppliers become more sophisticated, the desire for window dressing will probably decrease somewhat, but at the present time most participants believe that it remains a factor in explaining the drop-off in commercial paper.

Commercial banks take up the year-end slack in the commercial-paper market in two ways: first, they provide direct loans to paper-issuers; second, they purchase commercial paper for their own accounts. Banks are interested in buying paper over the year-end because it is shown on their balances as loans. Since the tax-deductible additions to loss reserves which banks are allowed to make are a percentage of loans outstanding at the year-end, there is an incentive for many banks to build up their loan totals through purchase of commercial paper.⁷ This increased bank demand, however, only partially offsets the decline in corporate paper investment, and hence the December fall in outstandings.

⁶Since certificates of deposit are grouped under "cash and due from banks" they are an ideal substitute for commercial paper at the year-end.

⁷Additions to loss reserve are computed as follows: 1) the average loss rates on loans is computed for the worst consecutive 20-year period since 1928; 2) this figure is tripled; 3) the result is multiplied by loans outstanding at the end of the year.

Interest Elasticity of Demand for Commercial Paper

Given the seasonal and cyclical drops in commercial paper outstanding which this chapter has discussed, it is interesting to question how much a boost in the interest rate relative to that on substitute investments would succeed in increasing the flow of funds into commercial paper. Economic theory tells us that the demand for the paper of any given issuer will be much more interest-elastic than that for commercial paper as a whole. This makes good sense; if GMAC raises its rate relative to CIT, the former issuer will be able to increase its outstandings rapidly, whereas few firms will be willing to buy CIT paper. In short, the commercial paper of the two firms are very good substitutes. If, however, the commercial-paper rate is raised relative to the Treasury-bill rate, it cannot be concluded that few firms will buy bills. On balance there will be some shifts to commercial paper; the shifts will be larger, the better the substitutes are paper and bills.

Consistent with this analysis, dealers and direct placers both express the feeling that the flow of funds to any given paper-issuer will increase in response to a rate boost, providing that competitors do not follow. This device can be used only for temporary situations, however. It is generally believed that once all issuers boost their offering rates, the supply of funds to the commercial-paper market as a whole will not increase substantially.

The average spread between the commercial-paper rate and the Treasury-bill rate does not appear to move in any systematic way with

changing money-and-credit conditions.⁸ In other words, although some issuers claim that the open market appears to "dry up" for them in periods of monetary restraint, they have not attempted to increase the flow of funds into commercial paper in such periods by boosting the spread over Treasury bills. This is in line with the feeling that such an increase would have only small effect on expanding the flow of funds into commercial paper. Dealers prefer not to raise the offering rate on notes of individual issues which they are having trouble marketing because they feel it is a poor precedent which may represent weakness in the credit worthiness of the issuer. They very often try to keep a constant spread over bills as a guideline, and look upon the prime rate as a natural ceiling in terms of issuers' willingness to sell paper.

There is some evidence, however, that participants in the market might be underestimating the degree of substitutability between paper and Treasury bills in the eyes of investors. First, the direct placers have experimented with higher offering rates for paper maturing on January 2nd. This has been partially successful in reducing year-end maturities. Although, for a short-range movement such as to the year-end, the elasticity of demand for paper is expected to be relatively high, the experience seems to indicate that a boost in the spread for Treasury bills might increase the amount of paper demanded for a longer period. Survey results support this contention.

⁸ The correlation coefficient between free reserves and the spread between the Treasury-bill rate and commercial-paper rate is $-.08$, which is not significant. Data appear in Appendix D.

About nine-tenths of corporate investors consider an attractive interest rate as a most important factor in the decision to buy commercial paper. In addition, almost half of the corporations consider a spread over bills of 1/8 percent per annum sufficient to induce them to buy paper.⁹ This very low spread is evidence to support the hypothesis that paper and bills are relatively good substitutes. Increasing the spread over bills might induce corporations who are rate-conscious and who consider paper a good substitute for Governments, to shift into paper. Bank investors are also likely to expand their paper holdings in response to an increased spread.¹⁰

In short, although the evidence is by no means conclusive, issuers who find it difficult to sell their paper in tight money should consider raising their spreads over Treasury bills. Such a move need not indicate any weakness of credit standing. Rather it is a recognition that in such periods, investors may demand a higher premium to accept some degree of illiquidity, and that a greater spread over Treasury bills would induce them to purchase commercial paper.

⁹See Tables V-8 and V-9.

¹⁰See Table IV-8 and accompanying discussion.

CHAPTER VIII

CONCLUSION

The previous chapters have raised many interesting questions about the workings of the commercial-paper market. Some of these have been answered satisfactorily, but for others the analysis could only lead to tentative conclusions. The present chapter summarizes the major findings of the study and indicates some of the areas where future research might be directed.

Before the Great Depression, commercial paper was issued by a large number of industrial firms which had seasonal needs for funds. Virtually all paper was sold through brokers, and the lion's share found its way into the portfolios of commercial banks. Banks found commercial paper to be an attractive investment on which expected losses were negligible. Paper allowed bank investors to diversify their loan portfolios by industry and geographical area. The functioning of the commercial-paper market apparently facilitated the flow of funds to areas of the country where money was temporarily tight, in response to interest-rate differentials.

In the twenties and thirties the volume of paper outstanding declined sharply. This phenomenon is associated with the stock-market boom and later with the Great Depression. During this period, however, finance companies became much more important as issuers, and, for the first time, nonbank investors provided a substantial volume of funds to

the commercial-paper market. These developments were sharply accelerated during the nineteen fifties and help explain the almost spectacular rise in the importance of commercial paper in the last decade. Spurred on by the rapid expansion of consumer credit, large finance companies, who place their paper directly, now account for almost three-quarters of commercial paper outstanding. Business corporations, who have become increasingly conscious of opportunities to put idle cash to work at attractive yields, presently supply the bulk of funds to the commercial-paper market.

At the present time, because of the selectivity of investors, only large well-known firms borrow in the open market. There is an interesting distinction between the use made of this form of financing by industrial issuers and by finance companies. For the former group, commercial paper is an instrument to meet well-defined and anticipated seasonal needs for funds. On the other hand, finance companies, who are always in debt, continually roll-over their paper outstanding as a permanent source of finance.

The major reason why firms sell commercial paper is that the cost of funds obtained in this manner is typically less than that of bank loans. The degree of reliance on paper, however, is limited by two important factors. First, banks grant paper-issuers lines of credit to provide insurance against fluctuations in paper outstanding. Banks, in turn, expect line usage, and if an issuer were to rely completely on commercial paper, he would be straining bank relations. Second, bank loans are more flexible than commercial paper because they can be expanded

and prepaid rapidly. Since much short-term borrowing is unforeseen, most issuers must use bank loans for a substantial portion of their needs. The direct placers are able to rely on commercial paper for a much greater proportion of their borrowings than are issuers who sell paper through dealers. This is to be explained by the powerful bargaining position with banks which the direct placers enjoy, and also by their ability to sell paper of short maturities economically, and obtain necessary flexibility thereby.

In periods when the interest savings is highest, commercial-paper issuers raise a higher percentage of their short-term funds in the open market. This suggests that these issuers are somewhat sensitive to cost differentials in shifting from bank loans to commercial paper. Additional evidence, however, implies that interest-cost sensitivity explains only part of this shift. The interest savings obtained by using commercial paper is smallest during periods of tight money. Therefore, what appears to be cost sensitivity may be in part the result of monetary restraint. In fact, the demand for commercial paper as an asset, especially by bank investors, does decline somewhat in tight money. Thus, a shift to bank loans during such periods may well reflect an inability of some issuers to sell their notes, in addition to their sensitivity to relative costs. There is evidence, however, that increasing the spread between the commercial-paper rate and the Treasury-bill rate would alleviate the difficulty of selling paper in tight money.

Turning to the consideration of commercial paper as a short-term investment, the study reveals that less than one-third of commercial banks purchase paper for their own portfolios, even occasionally. Banks who do buy paper generally consider it a temporary outlet for funds to bolster inadequate local loan demand, be it seasonal, cyclical or chronic. Where loan demand is sufficient, banks usually prefer to confine their secondary reserves to Treasury bills and other marketable securities.

It is interesting that banks with deposits between \$20 million and \$100 million are more frequently commercial-paper investors than are either larger or smaller banking institutions. Big banks may avoid paper because of sufficient direct lending opportunities, but the smallest banks are more likely either unaware of the opportunities of paper or overcome by the inertia of their present investment policies. As long as such attitudes persist, dealers and direct placers have a fertile field toward which to intensify their selling efforts.

Well over half of the corporations sampled are presently investors in commercial paper. This fraction has increased substantially in recent years reflecting expanded corporate cash flow and more "sophisticated" cash-management policies. In fact, there is strong evidence that directors are giving treasurers increasingly more authority to manage their investment portfolios.

For most corporations, commercial paper is an ideal instrument for funds needed to meet large and foreseen outpayments such as for dividends or taxes. The direct placers will tailor-make notes in the

exact amount and with the exact maturity date to match investors' specification. Corporations can thus set aside funds for a planned expenditure and be free from the market risk which investing in Treasury bills might subject them to.

Because there is no secondary market for commercial paper, this asset is bought with the intention of being held to maturity. The availability of notes of short maturities from the direct issuers is thus important to many corporate investors. In addition, some firms prefer directly-placed paper because these issuers abide by a "gentlemen's agreement" to buy back their notes before maturity from investors who are faced with a "valid emergency." Since dealers usually take back paper only when they are successful at reselling it, direct paper is deemed somewhat more liquid.

The question why no secondary market has developed in commercial paper is interesting. Dealers and direct placers oppose such a possibility because they fear it would make it more difficult for the primary issuers to market paper and it might lead to fraud. And, largely because commercial paper is always available with the specifications desired, many investors appear to compare paper favorably with substitute assets despite the fact that it is non-marketable. However, there is evidence to support the contention that the development of a secondary market would increase the demand for commercial paper, both from firms which are presently buyers and from those who are nonbuyers. In addition, commercial banks might consider buying paper as a secondary reserve if it were a marketable

instrument. In the long-run, this could lead to a fall in the commercial-paper rate relative to other money-market rates. The possibility that a secondary market for commercial paper will develop in the near future and the ultimate consequences of such a development remains an important problem for participants in this market.

In retrospect, the present study has attempted to provide an understanding of the workings of the commercial-paper market. The emphasis has been on analyzing the behavior of participants in this market, with an idea toward explaining their everyday business decisions. Granted some degree of success in this task, this work could well serve as a basis for an econometric analysis of the money markets. Such a project would involve specifying formal supply-and-demand relationships in order to explain the level of commercial paper outstanding and the commercial-paper rate at any given time. The choice of explanatory variables for these relationships would be largely influenced by the knowledge of the market obtained in the present study. In turn, the degree of success in estimating such a model would offer evidence about the reliability of the assumptions and conclusions herein. If an econometric model could be formulated with a reasonable degree of explanatory power, it would be an important step in providing quantitative information about the financial system.

APPENDICES
AND
BIBLIOGRAPHY

APPENDIX A

DESCRIPTION OF INTERVIEW PROCEDURES AND LIST OF INTERVIEWS

Because the present study relies heavily on personal interviews, the procedure used in this regard is quite important. Firms and individuals visited were carefully selected. The sessions often lasted several hours and some of the firms were interviewed on two or more occasions.

The early interviews centered around a set of thirty or forty preliminary topics which had been prepared in advance. It soon became apparent that some of the questions were very interesting and were worthy of further investigation, whereas others had "easy" answers, on which there was little disagreement. The interviews were thus helpful in pinpointing what information could be fruitfully derived from questionnaires. In fact, the later interviews were used in part to pretest the questionnaires by ascertaining that questions were not ambiguous and that responses would be neither trivial nor uninteresting.

The individuals interviewed were selected so as to include a comprehensive cross-section of the participants in the commercial-paper market. Since market transactions involve two or more participants, it is necessary to obtain the views of both sides in order to paint a comprehensive picture. For example, questioning banks alone would give an unbalanced account of the bank-finance company relationship. By asking the same questions of several banks and several finance companies, the

interviewer is in a much better position to form his own assessment of actual practices and to develop his theory of market behavior.

Four commercial-paper dealers were visited. Though no exact figures are public, together they probably account for well over three-quarters of the total dealer business. Goldman-Sachs, reputed to be much the largest commercial-paper dealer, and Lehman Brothers are both investment-banking firms which maintain special commercial-paper departments. Weil-Pearson and Ashwell, on the other hand, are both exclusively commercial-paper houses. All these brokers were interviewed so as to assess where differences in practices might occur between the larger and smaller dealers whose operations and customers differ in several ways.

The sixteen commercial banks which were interviewed can be divided into three groups. The first group includes the major money-market institutions in New York and Chicago. These banks are important intermediaries in commercial paper. They maintain large investment-advisory services, perform important credit-checking functions, extend large lines of credit to finance-company borrowers, and actually purchase a large volume of commercial paper for corporate customers and correspondent banks. The second group includes medium-size banks in such cities as Philadelphia, Boston, Winston-Salem, Wilmington, and Trenton. Such institutions are involved in the commercial-paper market mainly as purchasers of paper for their correspondents and corporate customers, though their views of the market often may be differently-oriented from those of New York and Chicago banks. The third group of banks interviewed consisted of small banks in basically rural areas which are still major commercial-paper purchasers for their own accounts.

There are basically three types of commercial-paper issuers, all of whom were interviewed. First, five direct placers were visited; these include the three largest such institutions. Three of the five are captive finance companies and two are independent. These five companies also cover the scope of the type of transactions which are financed by the direct placers--automobiles, heavy equipment, and retail goods. Together, they account for over half of the directly-placed paper outstanding.

The second type of issuers is finance companies who sell their paper through dealers. Here three firms were visited: a large personal-loan company, a smaller personal-loan company, and a captive which deals in insurance credit. Finally, three industrial issuers were interviewed. These included one of the largest industrial borrowers, a medium-size firm, and a smaller borrower which has resorted to the market for many years to finance its seasonal needs.

The fourth group of individuals interviewed are commercial-paper investors, both actual and potential. The investment-portfolio managers of three large industrial corporations were visited. These firms have substantial cash flow which they invest in various liquid instruments to derive some return over what they could earn on Treasury bills. The benefits of commercial paper, as well as alternate investments, were discussed at length with these investors. In addition, a life insurance company and a small college were also visited because these types of investors are also involved in the commercial-paper market.

Finally, some of the ideas contained in this study were discussed at the Federal Reserve Bank of New York and at the Board of Governors in Washington and very valuable suggestions were obtained from Mr. Allen Rogers of the National Credit Office, an institution which rates commercial-paper borrowers.

Virtually without exception, the individuals interviewed were extremely cooperative and spoke openly and frankly about their operations. A full listing of the interviews held follows. My sincere thanks to all the individuals involved.

LIST OF INTERVIEWS

COMMERCIAL-PAPER STUDY

I. Commercial-Paper Dealers

Mr. Lewis Glucksman
Lehman Brothers
New York, New York

Mr. Ralph Hill
Mr. Roger Morton
Weil, Pearson and Company
New York, New York

Mr. Donald G. Reid
Mr. Fred Trier
Ashwell and Company
Chicago, Illinois

Mr. John Rhodes
Mr. Richard Verdu
Goldman Sachs and Co.
New York, New York

II. Commercial Banks

Mr. Richard Cornwall
The Philadelphia National Bank
Philadelphia, Pennsylvania

Mr. John J. Corrigan
Bank of Delaware
Wilmington, Delaware

Mr. L. Warren Elwell
Mr. James Stewart III
Mr. Andrew Hunter
Girard Trust Corn Exchange Bank
Philadelphia, Pennsylvania

Mr. Jack Garman
Mr. Caren Reed
Mr. David Taylor
Continental Illinois National Bank
and Trust Company
Chicago, Illinois

Mr. John Gray
Mr. Robert P. Kelsey, Jr.
The First National Bank of Boston
Boston, Massachusetts

Mr. Martin Griffin
Mr. Jack Sowarby
Morgan Guaranty Trust Company
New York, New York

Miss Katherine Herzog
Bankers Trust Company
New York, New York

Mr. Richard G. Macgill
First Trenton National Bank
Trenton, New Jersey

Mr. Ray H. Matson
Mr. Tilford C. Gaines
Mr. Ed Thurn
First National Bank of Chicago
Chicago, Illinois

Mr. Earl K. Mueller
Central-Penn National Bank
Philadelphia, Pennsylvania

Mr. Howard J. Poduska
The Bank of New York
New York, New York

Mr. John Poplos
Farmers Bank of the State of Delaware
Wilmington, Delaware

Mr. Robert Smith
First National City Bank
New York, New York

Mr. James H. Styers
Mr. Claude Higginbotham
Wachovia Bank and Trust Company
Winston-Salem, North Carolina

Mr. Charles T. Treadway, Jr.
Mr. Robert Ballantine
Bristol Bank and Trust Company
Bristol, Connecticut

Mr. S. B. Whiteley
The Lambertville National Bank
Lambertville, New Jersey

III. Commercial Paper Issuers

Mr. Norman Cameron
Commercial Credit Corporation
New York, New York

Mr. Curry
Libby, McNeil and Libby
Chicago, Illinois

Mr. George Faunce, III
Afco Credit Corporation
New York, New York

Mr. Donald Freudenheim
Mr. A. DeSalvo
C.I.T. Financial Corporation
New York, New York

Mr. Benjamin P. Frye
Mr. Charles Bower
Beneficial Finance Company
Wilmington, Delaware

Mr. Leon Ridgway
Asgrow Seed Company
New Haven, Connecticut

Mr. Harry Shuttleworth
General Electric Credit Corporation
New York, New York

Mr. Zachary Smith
Mr. Charles Benbow
R. J. Reynolds Tobacco Company
Winston-Salem, North Carolina

Mr. Paul Wallen
Montgomery Ward Credit Corporation
New York, New York

Mr. Karl E. Wenk, Jr.
Ritter Finance Company, Inc.
Wyncote, Pennsylvania

Mr. Dann Westcott
Mr. James Van Wagner
Mr. G. Thomas Patton, Jr.
General Motors Acceptance Corporation
New York, New York

IV. Commercial Paper Investors, Actual and Potential

Mr. Edgar Bunce
Mr. Hugh Devine
E. I. DuPont de Nemours
Wilmington, Delaware

Mr. Richard Crowl
American Metal Climax Corporation
New York, New York

Mr. Carl E. Glans
Upsala College
East Orange, New Jersey

Mr. Jay R. Olson
Continental Can Company
New York, New York

Mr. Jack Saylor
Prudential Insurance Company of America
Newark, New Jersey

V. Miscellaneous

Mr. James B. Eckert
Board of Governors of the
Federal Reserve System
Washington 25, D. C.

Mr. John Griffin
Federal Reserve Bank of New York
New York, New York

Mr. Allen Rogers
National Credit Office
New York, New York

APPENDIX B

DESIGN OF THE SAMPLES, SURVEY PROCEDURES AND PERCENTAGE RESPONSE*

In order to gather information concerning actual practices from participants in the commercial-paper market, three groups were sampled: 1) commercial-paper issuers; 2) corporate investors; 3) commercial banks. After extensive pretesting by means of personal interviews, separate multiple choice questionnaires were designed for each group. The questionnaires were mailed out and six weeks afterward, follow-ups were sent to those firms which had not as yet responded. The results of the questionnaires were transferred to data cards and were compiled by IBM 7094 computer. Copies of the three questionnaires appear in Appendix C.

The Sample of Commercial-Paper Issuers

At present there are some 400 firms selling commercial paper as a source of short-term funds. Somewhat under half of these are finance companies--sales finance, small loan and commercial factors. The remainder are industrial firms who borrow in the open market largely for seasonal purposes. The sample was designed to cover the entire spectrum of firms using the market.

* The design of the samples and questionnaires was performed in collaboration with Harold T. Shapiro as part of our Banking Research Project. We jointly assume credit and take responsibility for this aspect of the present study. The exposition herein, however, is my own. We are indebted for research assistance to Charles Bloom and John Neely, and are especially grateful to Peter A. Tinsley, who wrote the computer program necessary to compile the results of the questionnaires.

A list of all firms issuing commercial paper was provided by Mr. Allen Rogers of the National Credit Office. In addition, a list of the eighteen direct placers was obtained from the Federal Reserve Bank of New York. Because of the predominance of the direct placers in terms of total commercial paper outstandings, and because of the desire to draw statistically valid distinctions between them and issuers utilizing dealers, it was decided to include all eighteen direct issuers in the sample.

The remainder of the sample was chosen to give approximately even weight to finance companies and industrial firms. Included are sales-finance, business-finance and small-loan companies and industrial issuers representing virtually every industry using the market. Large, medium and small borrowers and firms with head offices in different areas of the country were chosen.

The total sample size is 102. Of these, 51 responded to the initial mailing, and an additional 32 to the follow-up, giving a total response of 83 percent. The breakdown of percentage response shows 72 percent of direct issuers, 100 percent of finance companies using dealers, and 78 percent of industrial borrowers.

The Sample of Corporate Investors

So as to gather information about the position of commercial paper in corporate short-term investment portfolios, a sample was selected from the Fortune 500 listing. The sample includes 140 manufacturing

firms, 16 insurance companies, 12 merchandising businesses, 16 transportation firms and 16 utilities, giving a total sample size of 200. For analytical purposes, the manufacturing firms are divided, on the basis of size, into three roughly equal groups. Group I includes those companies ranked between 1 and 100 on the Fortune list, group II between 101 and 250, and group III between 251 and 500. The choice of the firms was essentially random, although when most had been selected, additional companies were added in order that all major industries would be represented. No account was taken of the internal cash flow of those companies selected. Firms were asked about their short-term investment practices, specifically those involving commercial paper, without, in most cases, any prior knowledge whether they had ever purchased paper.

The initial mailing yielded 128 responses and the follow-up an additional 50, giving a total response of 89 percent. The breakdown of percentage response is shown below.

<u>Category</u>	<u>Percent Response</u>
Manufacturing I	92%
Manufacturing II	89
Manufacturing III	<u>85</u>
Total Manufacturing	89%
Insurance	100%
Merchandising	67
Transportation	94
Utilities	94
Total Investor Sample	89%

The Sample of Commercial Banks

The sample of commercial banks employed in this study was originally designed for a previous survey, involving compensating-balance requirements. The sample was updated to replace most of those banks which did not respond to the previous questionnaire.

The sample takes account of the fact that there is little correlation between the volume of deposits and the number of banks (independent decision units) from state to state. A target sample size of 500 was allocated among the states on the following basis. The percentage of the total banks in the nation located in a given state was averaged with the total percentage of deposits in that state. The resulting figure was multiplied by 500, thus giving the preliminary "quota" sample size in each state. The "quotas" were modified in two respects. First, in general, a minimum of five banks was chosen from each state. Second, the quotas were often slightly altered when it seemed appropriate to do so in view of the actual banking structure of the state. Care was taken to insure adequate representation of both rural and urban areas, and of large, medium and small banks. The fifty largest banks in the country and the largest bank in each state were automatically included. The sample covers approximately 4 percent of the banks in the country, but includes well over half of all deposits in the nation.

Each bank is classified according to deposit size, geographic location, and character of urban area, so as to distinguish whether differences in practices exist in various areas of the country, among

banks of different sizes, and between urban and rural districts. Banks are placed into one of eight geographic areas and seven deposit groups, and are also differentiated on the basis of whether their head office is located in a major financial center, in other urban areas, or in rural districts.*

The total sample size is 521 banks. Of these, 303 responded to the initial mailing and an additional 142 to the follow-up, giving a total response of 85 percent. The breakdown of percentage response is shown below.

Geographic Area	Percent Response	Deposit Size of Bank (\$ millions)	Percent Response
Northeast	88%	Under 20	80%
Middle Atlantic	96	21-50	86
South	71	51-100	83
Midwest	89	101-200	84
Great Plains	82	201-500	95
Texas	78	501-1000	97
Mountain	85	Over 1000	96
Pacific	88		
Major Financial Centers	87		
Other Urban Areas	88		
Rural Districts	83		
Total Bank Sample	85%		

* Major financial centers include reserve cities and cities containing at least one bank with deposits in excess of \$400 million. Urban areas are those cities with over 50,000 population which do not qualify as major financial centers.

APPENDIX C

QUESTIONNAIRES

Commercial Paper as a Source of Funds

Commercial Paper as a Short-Term Investment

The Role of Banks in the Commercial-Paper Market

QUESTIONNAIRE ON COMMERCIAL PAPER AS A SOURCE OF FUNDS

Instructions: Questions are to be answered by checking as many choices as are appropriate. In the event that any elaboration would seem desirable, you are invited to do so.

1. Which of the following best describes the position of commercial paper in your over-all debt picture?

_____ commercial paper outstanding is continually rolled over and is a permanent source of finance

_____ commercial paper is an instrument to meet well-defined seasonal demands for funds

_____ commercial paper is an almost perfect substitute for virtually all our borrowing from commercial banks

_____ other, please specify

2. (a) Roughly what percentage, on the average, is commercial paper of your

short-term debt _____%

total debt _____%

- (b) How do these percentages vary in times of monetary restraint?

_____ percentages generally increase

_____ percentages generally decrease

_____ percentages generally remain the same

- (c) What factors explain why these percentages are not higher?

_____ higher commercial-paper borrowings would strain our bank relations

_____ demand for our paper is not sufficiently strong to increase our outstandings at the going interest rate

_____ we do not desire to increase our outstandings. Please specify reasons.

(d) Does the ratio of commercial paper to short-term debt rise when the cost of commercial-paper funds falls relative to that of bank loans?

_____ yes, the proportion of commercial paper is responsive to changes in cost

_____ yes, but we are constrained by a maximum ratio of commercial paper to short-term debt

_____ no, fluctuations in relative costs are not generally important

3. If the costs of borrowing directly from banks and of obtaining funds in the commercial-paper market were the same, would you sell any commercial paper?

_____ yes, we would want to keep a supplementary source of finance available

_____ yes, a nationwide distribution of our paper is desirable

_____ no, borrowing on commercial paper in these circumstances would strain our bank relations

_____ no, we would prefer bank loans because of their greater flexibility

_____ other, please specify

4. (a) For what percentage of your commercial paper outstanding do you maintain unused lines of credit at your banks?

_____ 100% or greater

_____ greater than 75% but under 100%

_____ greater than 50% but under 75%

_____ 50% or under

(b) What considerations are most important in determining the extent of your unused credit lines relative to your commercial paper outstanding?

_____ our dealers insist that we have these lines before they are willing to sell our paper

_____ we keep these lines to maintain favorable bank relations

_____ we feel we genuinely need these lines because commercial paper is an unreliable source of funds

_____ other, please specify

5. (a) In times of monetary restraint, can you obtain all the funds you need from your banks, at the going interest rate?

_____ yes

_____ yes, up to our open credit lines

_____ yes, but we are encouraged to obtain funds in the commercial-paper market, if possible

_____ no, we are rationed

- (b) In times of monetary restraint, can you obtain all the funds you need from the commercial-paper market, at the going interest rate?

_____ yes

_____ no, the supply of funds in the open market seems to dry up in such periods

6. Do you favor the development of a secondary market in commercial paper?

_____ yes, this would increase the saleability of our paper

_____ no, we prefer not to have our paper traded

_____ other, please specify

QUESTIONNAIRE ON COMMERCIAL PAPER AS A SHORT-TERM INVESTMENT

Instructions: Questions are to be answered by checking as many choices as are appropriate. In the event that any elaboration would seem desirable, you are invited to do so.

1. Do you buy commercial paper as a short-term investment?

_____ yes

_____ no, we have never bought commercial paper

_____ no, we have not bought commercial paper since _____

QUESTION 2 IS TO BE ANSWERED BY ONLY THOSE FIRMS WHO DO NOT AT PRESENT INVEST IN COMMERCIAL PAPER.

2. Investment in commercial paper has been discontinued or rejected because

_____ commercial paper is relatively illiquid (no secondary market)

_____ the commercial-paper rate is relatively unattractive as compared to that on other short-term investments

_____ investment in commercial paper is more trouble than it is worth

_____ directors prefer to confine short-term investments to Treasury bills

_____ other, please specify

3. What factors are most important in influencing the decision to buy commercial paper?

_____ the commercial-paper rate is attractive

_____ commercial paper can be obtained in the exact amount and maturity required

_____ commercial paper can be obtained in very short maturities

_____ other, please specify

4. (a) What percentage of your commercial-paper portfolio, on the average, consists of finance company paper?

_____ percent

- (b) Does this percentage vary widely from month to month?

_____ yes

_____ no

- (c) What percentage of your commercial-paper portfolio can be classified under each of the following headings?

_____ "prime" (best-known companies, lowest yield)

_____ "desirable" (good quality, slightly higher yield)

_____ "satisfactory" (lesser-known companies, highest yield)

- (d) What percentage of the commercial paper which you buy is initially

_____ under 30 days maturity

_____ 31 to 90 days

_____ 91 days or over

5. Which of the following factors are important in influencing your choice between purchasing directly-placed finance company paper and commercial paper issued through dealers?

- (a) DIRECTLY-PLACED paper is preferred because.

_____ directly-placed paper can be more easily "tailormade" with respect to maturity and amount

_____ direct placers will generally repurchase paper if requested to do so, whereas dealer paper is harder to liquidate

_____ direct paper is available in very short maturities

_____ the direct placers are large well-known finance companies

_____ direct paper of any specific issuer is always in ample supply

(b) DEALER paper is preferred because

_____ it generally offers a higher yield

_____ paper of many different issuers can be obtained by one contact

6. Check the yield differential necessary to induce you, as of today, to substitute each of the following 90-day assets for Treasury bills of the same maturity.

	Percent per annum					
	1/16	1/8	1/4	3/8	1/2	greater than 1/2
Prime Commercial Paper						
Certificates of Deposit						
Tax-exempt notes (effective yield)						
Eurodollar balances						
Canadian Commercial Paper (net of hedge)						
Bankers' acceptances						

7. (a) IN A PERIOD OF MONETARY RESTRAINT do your holdings of commercial paper generally

_____ increase

_____ decrease

_____ remain the same

(b) IF YOUR HOLDINGS GENERALLY DECREASE, check those explanations which are most important

_____ ample commercial paper is not available for investment

_____ in tight money, cash flow is used to finance increase in inventories and receivables

_____ in such periods larger cash balances are needed for day-to-day business

_____ compensating-balance requirements are increased by the banks
_____ high yield on Treasury bills makes them relatively more attractive
_____ other, please specify

(c) IF YOUR HOLDINGS GENERALLY INCREASE, check those explanations which are most important

_____ in times of monetary restraint, larger investible cash flow exists
_____ the commercial-paper rate is high
_____ other, please specify

8. Do you feel reluctant to hold commercial paper over the year-end?

_____ yes
_____ no

9. (a) Roughly what percentage of commercial paper to total short-term investments have you held in the last two years? _____

(b) How does this percentage compare with your average holdings over the last decade?

_____ higher
_____ lower
_____ about the same

QUESTIONNAIRE ON THE ROLE OF BANKS IN THE COMMERCIAL-PAPER MARKET

Instructions: Questions are to be answered by checking as many choices as are appropriate. In the event that any elaboration would seem desirable, you are invited to do so.

1. Do you buy commercial paper for your own portfolio?

_____ yes

_____ no, we have never bought commercial paper

_____ no, we have not bought commercial paper since 19__

QUESTION 2 IS TO BE ANSWERED BY ONLY THOSE BANKS WHO DO NOT AT PRESENT INVEST IN COMMERCIAL PAPER.

2. Investment in commercial paper has been discontinued or rejected because (check those reasons which are most important)

_____ there are sufficient direct-lending opportunities at more attractive interest rates

_____ as compared with other secondary reserves, commercial paper is relatively illiquid, because there is no well-established secondary market

_____ commercial-paper issuers are usually large credit-line customers and legal lending limits prevent buying their paper

_____ other, please specify

3. Do you buy commercial paper for the account of your customers?

_____ yes, for the account of correspondent banks

_____ yes, for the account of nonbank customers

_____ no, but we arrange such purchases through our correspondents

_____ no, we generally are not asked to perform services of this nature

4. What factors are most important in influencing the decision to buy commercial paper?

- _____ the commercial-paper rate is attractive
- _____ allows diversification of loans by industry or geographical area
- _____ can be obtained in exact amount and with exact maturity desired
- _____ provides a temporary outlet for funds
- _____ other, please specify

5. (a) If you buy commercial paper for your own portfolio, what percentage of your total purchases, on the average, consists of finance company paper? _____%

(b) Does this percentage vary widely from month to month?

- _____ yes
- _____ no

(c) What percentages of your commercial-paper portfolio can be classified under each of the following headings?

- _____ "prime" (best-known companies, lowest yield)
- _____ "desirable" (good quality, slightly higher yield)
- _____ "satisfactory" (lesser-known companies, most attractive yield)

6. Check the yield differential necessary to induce you, as of today, to substitute each of the following 90-day assets for Treasury bills of the same maturity.

	Percent per annum					
	1/16	1/8	1/4	3/8	1/2	greater than 1/2
Prime Commercial Paper						
Federal Agency Securities						
Certificates of Deposit						
Tax-exempt Notes (effective yield)						
Bankers' acceptances						

7. If you have any customers who borrow or are capable of borrowing in the open market, do you encourage them to issue commercial paper in times of monetary restraint?

_____ yes, because we cannot adequately meet their demand for funds in these times

_____ no, because it is very difficult for them to sell commercial paper in such a period at rates which are comparable to the prime rate

_____ no, because we try to satisfy the needs of our customers at all times to maintain the relationship

_____ no, we don't want to encourage commercial-paper financing in this temporary situation

_____ we have no such customers

_____ other, please specify

8. (a) Roughly what percentage of commercial paper to total assets have you held in the last two years? _____%

(b) How does this percentage compare with your average holdings over the last decade?

_____ higher

_____ lower

_____ about the same

(c) If we were to experience another period of severe monetary restraint, what effect would you expect this to have on your commercial-paper holdings?

_____ holdings would probably increase

_____ holdings would probably decrease

_____ holdings would probably remain the same

APPENDIX D

DATA FOR CORRELATIONS

Series*

1. Total commercial paper outstanding
2. Bank borrowings of finance companies
3. Directly-placed paper outstanding
4. Prime rate less commercial-paper rate
5. Free reserves
6. Commercial-paper rate less Treasury-bill rate

*Series 1, 2, 3, 5 are in millions of dollars.

Series 4, 6 are interest rates.

Series 1, 2, 3 are end-of-quarter observations.

Series 4, 5, 6 are mid-quarter observations.

Source: Series 1,3: Federal Reserve Bank of New York release.

Series 2: Unpublished data, courtesy of Board of
Governors of the Federal Reserve System.

Series 4,5,6: Federal Reserve Bulletin; the commercial-
paper rate is that on directly-placed finance
paper, 3 to 6 months.

Series Number

		1	2	3	4	5	6
1953	I	1914	2932	1396	0.88	-682	0.15
	II	1762	2948	1345	0.87	-125	0.22
	III	1993	2895	1506	0.87	- 7	0.34
	IV	1973	2810	1409	1.12	198	0.69
1954	I	2301	2591	1566	1.47	339	0.81
	II	2159	2636	1480	1.62	561	0.62
	III	2201	2494	1398	1.75	724	0.33
	IV	1933	2667	1200	1.75	650	0.32
1955	I	2202	2773	1521	1.50	271	0.33
	II	2311	3256	1739	1.12	212	0.43
	III	2269	3368	1705	1.23	-188	0.12
	IV	2035	3960	1525	0.97	-491	0.28
1956	I	2584	3640	2024	0.62	-266	0.58
	II	2465	3639	1989	0.75	-504	0.39
	III	2515	3465	1966	0.99	-339	0.41
	IV	2183	3737	1677	0.62	-154	0.39
1957	I	2696	3872	2207	0.62	-126	0.27
	II	2463	4103	2009	0.62	-444	0.32
	III	2568	4010	2067	0.87	-471	0.26
	IV	2672	3994	2121	0.71	-293	0.50
1958	I	3496	3485	2634	1.82	324	0.64
	II	3384	3141	2419	2.12	547	0.47
	III	3158	2988	2200	1.98	383	-.17
	IV	2739	3435	1821	1.25	20	0.08
1959	I	3279	3311	2339	1.00	- 47	0.30
	II	3418	3756	2635	1.06	-318	0.60
	III	3448	4005	2536	0.63	-535	0.49
	IV	3202	4497	2437	0.62	-433	0.23
1960	I	4495	4123	3466	0.50	-361	0.54
	II	4627	4631	3402	1.12	- 33	0.59
	III	4728	4172	3243	1.56	247	0.64
	IV	4497	4299	3039	1.59	614	0.54
1961	I	5078	3414	3450	1.85	517	0.23
	II	4936	3366	3395	2.00	453	0.21
	III	4875	3493	3080	1.86	537	0.25
	IV	4686	3802	2925	1.76	517	0.26
1962	I	5715	3391	3761	1.50	434	0.27
	II	5865	3589	3874	1.55	434	0.27
	III	6577	3570	4225	1.38	436	0.30
	IV	6000	4277	3791	1.42	473	0.25
1963	I	7076	4050	4693	1.37	300	0.21
	II	7239	4218	5091	1.35	248	0.23
	III	7161	4243	4958	0.93	137	0.25
	IV	6747	4901	4714	0.75	39	0.23

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