

The Money Market in Canada *

Canada provides one of the leading examples of a country in which the development of a money market has been officially encouraged and assisted. In particular, the Canadian experience emphasises what can be achieved in quite a short space of years, given the necessary underlying conditions that favour the emergence of such a market, plus the support both of the Government and of the central bank.

Although the establishment of a money market in Canada is essentially a post-World War II phenomenon, one of the essential steps was taken as far back as 1934 (which was the year before the Bank of Canada opened for business), when arrangements were first made to sell Treasury bills by tender. Gradually, both the number of issues and the total volume outstanding were increased, though trading in Treasury bills was at that stage largely between the chartered banks and the Bank of Canada. Dealers may have done a little business in bills, but only on a commission basis for customers. In pre-war days, they never carried inventories.

It was during the Second World War that dealers began to take Treasury bills more seriously and only towards the end of the war that they even thought of carrying a small inventory. The big step forward came in January 1953, with the introduction of a weekly tender and the granting of "limits" to certain dealers by the Bank of Canada. This permitted them to secure accommodation on the basis of a sale of short-dated Government securities (including but not confined to Treasury bills), subject to an agreement to repurchase within a specified period of time and at rates

* The author desires to express his appreciation to the Trustees of the Houlton-Norman Fund for their generosity in making it possible for him to re-visit the money market centres of Canada in September 1969. He also wishes to acknowledge his indebtedness both to the staff of the Bank of Canada and to the dealers and bankers who assisted him then and subsequently in assembling the necessary information. For particular interpretations of the facts, however, the author alone is responsible.

cheaper than those charged by the chartered banks. By this means, it was hoped to increase non-bank holdings of Treasury bills and to build up dealer experience of the relevant techniques.

By April, 1954, the Bank of Canada felt the dealers were ready for the next step. The way was prepared by a revision of the *Bank Act* in 1954 that replaced the traditional 10 per cent (and legal 5 per cent) cash ratio with a legal 8 per cent minimum based on monthly averaging. This made it easier for the banks to adjust their cash positions and also freed a large volume of reserves for lending to dealers on a day-to-day basis, in amounts and at rates that enabled the latter to carry inventory at a profit. From the banks' point of view, day-to-day loans were a highly liquid earning asset, which facilitated the fullest possible employment of their funds, since they were committed for no more than a day at a time.

In order to encourage the dealers to carry as much inventory as was consistent with the available supply of day-to-day money, and as a means of underwriting the experiment, the Bank of Canada stood prepared to act as the lender of last resort. Not being specifically authorised to lend to dealers, the Bank arranged to make accommodation available to certain dealers as a privilege, up to negotiated limits, on the basis of a sale and repurchase agreement, whenever it proved impossible to raise sufficient money elsewhere with which to carry inventory, the cost of this accommodation being calculated as the difference between the prices at sale and repurchase. Since initially the rate charged was equivalent to Bank rate, it was in the nature of a penalty.

In the early days, the dealers' chief difficulty was to find customers for the bills they carried in inventory. But gradually they established retail outlets by selling bills to business corporations (often on a "buy-back" basis, in some instances terminable by either party on demand). They were further assisted by the Bank of Canada's wire transfer arrangements that ensured speedy delivery of securities at whichever of the Bank's nine agencies (i.e., branches) might be stipulated and, if necessary, in separate parcels.

After February 1957, it was also possible to borrow securities from the Bank.¹ The chartered banks, too, were tending to use

¹ After the chartered banks entered the field of securities lending, the Bank of Canada withdrew these services.

the dealers to an increasing extent, in order to sell or buy money market assets with appropriate maturities. At the same time, since the banks remained in the Treasury bill tender, often they could adjust their bill portfolios without resorting to the dealers — simply by varying their intake of new bills. Moreover, a big barrier to the stimulation of greater dealer interest was partially removed when the chartered banks first reduced and, in March 1957, modified the over-certification charge² made on "daylight overdrafts", thereby encouraging an increase in the turnover of loanable funds. Although it no longer applies to certain money market transactions (there are "free" over-certification arrangements when a day-to-day loan is moved from one bank to another, provided the original lending bank called the loan), this charge is still levied on other transactions. Moreover, the chartered banks, despite the arguments of the dealers, are never likely to give it up altogether (because it adds to their profits), but over the years the dealers have learnt to live with it and it is no longer regarded as quite the important matter it once was.

It was on these bases that both the tender and the market for Treasury bills and bonds were steadily expanded. Latterly, a number of other instruments became established and were traded in increasing volume. Today, the Canadian money market has become very much broader and much more sophisticated than it used to be.

There are 16 dealers in the market, of which seven or eight are regarded as really important,³ though some of the other dealers are strong in particular aspects of money market business (the leading houses are active over the full range of money market activity). All but two of the former dealers are still in the market and there are several new ones. However, one important change that has taken place is the increase in the relative importance of Toronto as a money market centre. Montreal is still active, but considerably less so than in earlier years. Meanwhile, Vancouver

² See "The Canadian Money Market Experiment" in this *Review*, March 1958 and in J. S. G. Wilson, *Monetary Policy and the Development of Money Markets* (London, 1966), pp. 281-4.

³ The big dealers include A. E. Ames & Company Limited, Dominion Securities Corporation Limited, Fry Mills Spence & Company Limited, Greenshields Incorporated, Harris & Partners Limited, Nesbitt, Thomson Securities Limited, Merrill Lynch, Royal Securities Limited and Wood Gundy Limited.

is increasing in importance and now boasts a growing subsidiary market. Also there are much better communications between the Bank of Canada offices themselves and between them and the market houses, so that the market as a whole has become much more integrated.

In terms of market activity, too, Treasury bill transactions contribute much less significantly than in the earlier years, though there is still an active market in bills, mainly in 91-day bills. Tender arrangements for Treasury bills have remained substantially similar over the years and have become very much a matter of routine. Issues of three months Treasury bills are now of the order of \$190 million per week, with a further \$40 million of six months bills. Occasionally, nine months and twelve months bills are offered. The Bank of Canada, the chartered banks, and the dealers (including occasionally non-money market dealers) all tender for bills, with the banks providing the main ultimate market. The banks in fact tender very competitively, with the dealers occasionally only getting a small proportion of the bills issued. (Actually, the percentage of the tender that goes to the dealers varies quite a lot, depending on market sentiment). In addition, in the "after market" on Thursday⁴ and on Friday, the dealers might well sell one-half to three-quarters of their bills to the banks, only retaining in inventory the remainder. In any event, the dealers tend to carry relatively modest residual inventories of bills. Latterly, the total Treasury bill holdings of the banks have been of the order of \$2,600 to \$2,900 million, which clearly demonstrates the dominance of their demand, though much of this is necessitated by the requirement to maintain a secondary reserve (see below). "Others" (which include the dealers⁵) account for only about 5 per cent of the total outstanding.

The relative decline in the significance of Treasury bill transactions has also been due to the introduction (in addition to required cash ratios) of a minimum secondary reserve ratio (first introduced formally in 1956), which the banks must maintain at a stipulated level that may be varied between 6 and 12 per cent. On April 1, 1967 it was set at 7 per cent, but it was raised to 8 per

⁴ Results are released at 2.00 of p.m. E.S.T. on the day of tender.

⁵ The remainder would be taken up by other financial institutions and corporate treasurers.

cent as from June 1, 1969 and to 9 per cent as from July 1, 1970. It was reduced to 8.5 per cent in December 1971 and to 8 per cent in January 1972. This left the banks free to sell Government of Canada Treasury bill holdings and to invest the proceeds in higher yielding assets. The secondary reserve consists of surplus cash (and the banks have tended to run excess balances⁶) + day-to-day loans + Treasury bills. Since the required cash reserve ratio (for demand and time deposits combined) is approximately 6 per cent, the two reserves together add up to about 14 per cent.⁷ It should be noted that while the cash reserve is based on twice-monthly averaging, secondary reserves are based on monthly averaging.

In addition to Treasury bills, there is something over \$14 billion of Government of Canada bonds outstanding, with an average term to maturity of about 5 years (this excludes something less than \$10 billion of non-marketable securities). If we take Government of Canada direct and guaranteed securities as a whole (which includes Treasury bills and the non-marketable items and which towards the end of 1971 totalled over \$28 billion), \$4.9 billion was held by the Bank of Canada, up to \$1 billion by Government of Canada Accounts, \$7.3 billion by the chartered banks, and \$5.4 billion by the general public.⁸ Canadian Savings Bonds accounted for \$9.8 billion. The remainder is distributed fairly widely, between insurance companies (life and other), trustee pension funds, provincial governments, and non-financial corporations. But only slightly more than \$9 billion of this was eligible at the Bank of Canada and, in fact, because of the unwillingness of dealers to

⁶ This can be explained at least in part by the national scope of bank clearings (because of the nationwide branch banking system). Hence, clearings outside the core area of Toronto and Montreal have to be estimated and, on a day to day basis, this can never be very accurate.

⁷ Both the banks and the authorities also pay some attention to the "More Liquid Assets Ratio", though there is no statutory requirement in this context. This is calculated on the basis of total assets and includes Bank of Canada deposits and notes, day-to-day loans, Treasury bills, other Government securities (both under and over 3 years) and call loans to stock brokers and to investment dealers. It also includes net foreign assets (foreign assets less foreign liabilities). (This inclusion can be significant, since Canadian banks are heavily engaged in foreign activities and often convert U.S. funds for use in their Canadian operations). In normal times, the banks reckon to maintain a More Liquid Assets Ratio of 30 per cent but, at times when loan demand has been high, it has been well below that. There also tend to be wide disparities between the More Liquid Assets Ratios of the several individual chartered banks.

⁸ A small proportion of which would be held by the dealers (in 1971, it fluctuated between \$200 and \$300 million).

carry other than relatively light positions, the market, at times, lacks depth, though this is more particularly true in the non-money market area, i.e., securities of 3 years and longer. Government of Canada securities are always available in fully registered form and may usually be obtained in either principally registered or bearer form. Normal settlement on Treasury bill transactions is the next business day; for other Government of Canada securities, with a term of 3 years or less, the second business day following the transaction; and for securities with a term longer than 3 years on the third business day following the transaction, but in many cases delivery can be arranged against payment on other dates (bills are frequently traded for same day settlement).

Because of the growth of other markets (and other factors), the secondary market in Government of Canada bonds is probably relatively less active than it was, though there is a wide range of holders. In addition, dealers do continue to hold Government of Canada bonds in inventory, with maturities of up to 3 years, and in reasonable amounts. In other words, it is necessary to satisfy the expectation that this kind of paper will be available both in the form of basic inventory and, where desired, for sale. Not that a dealer will always have available precisely what is required and there are occasions when securities such as Treasury bills and Government of Canada bonds of up to 3 years have to be borrowed. Normally, the dealers borrow Treasury bills on a weekly (but callable) basis and other securities for a 30-day period against the lodgement of other Government of Canada securities.

But the big expansion in the Canadian money market has taken place elsewhere. For example, there has been a significant growth over recent years in the amounts of sales finance and consumer loan company paper outstanding, though it is questionable to what extent there is much more than a primary market in these instruments. Paper of this type outstanding amounted by end-1971 to about \$1.2 billion, commercial paper to over \$1 billion and Provincial and Municipal paper (which might also be considered in this context) to more than \$500 million.

Canadian acceptance and finance companies raise a substantial percentage of their cash requirements by borrowing against the issue of finance paper in the money market and several have money desks. The proceeds are used primarily for financing the distribution of a wide range of durable consumer goods. In addition, a limited

number of large Canadian manufacturing and merchandising corporations have formed their own sales finance subsidiaries. Arrangements vary and the short-term promissory notes that are issued may be secured, unsecured, and/or guaranteed by a parent organization. It should also be noted that in Ontario — under *The Securities Act* 1966 and other voluntary regulations (e.g. of the Investment Dealers' Association) — a high degree of financial disclosure is insisted upon for acceptance and finance companies that are concerned to raise funds through the market. In addition, the short-term notes of many of these companies are legal investments for banks, life insurance and trust companies. Investment may be for terms ranging from demand up to 5 years, even longer. The notes are issued without coupon and may be either in bearer form or registered in the name of the purchaser. Notes may be re-sold on the market to some extent, but no proper secondary market has as yet developed and the liquidity of this paper is therefore still somewhat limited. On the other hand, the wide variety of maturities available, combined (in some cases) with 24-hour call features, provides a relatively high degree of liquidity for the investor.

Prime commercial paper is a somewhat similar instrument. It consists of unsecured promissory notes issued in minimum denominations of \$50,000 by some of the larger well-known Canadian corporations (also the Canadian subsidiaries of U.S. corporations). The notes are backed by the general credit of the issuing corporation. Sometimes, where these are subsidiaries of United States companies, the paper is issued with the guarantee of the United States company. There has been a big growth in this market in recent years both in the number of issuers and in the amounts that are issued. It is usual for the outstanding commercial paper of corporate borrowers to be covered by unused credit lines with their bankers, so that if the lender "called" the loan, i.e. requested repayment, the borrower could fall back on his line of credit at his bank. In some cases, a firm's outstanding paper may be backed 100 per cent by an unused credit line; in others, it is less than this. Banks may charge a standby fee on such credit lines.

The usual maturity of commercial paper is under 90 days; the demand for 6 to 12 months paper varies according to anticipated trends in interest rates. Frequently, there is a 24-hour call arrange-

ment, so that the lender can withdraw his money, though subject to a penalty which diminishes with the length of time for which money has actually been lent. Paper is placed through dealers, though in this context the Canadian dealers operate primarily on a commission basis — the purchasers would include individual investors, chartered banks, the trust companies, insurance companies, and other business corporations with liquid funds to invest. Larger dealers often buy this paper for their own account and act as principals, or (if they are dealing with a good customer) they may be prepared to buy paper back, which is absorbed in their portfolios. While the banks are willing to lend against it, the rate is often prohibitive. Hence, the dealer looks for alternative sources of finance and, for the most part, he is able to finance this part of his portfolio through "call loans" from the trust companies and non-financial corporations (i.e., "country banks"). Alternatively, a dealer may borrow securities from a trust company against the lodgement of commercial paper (subject to quite heavy margins) and then use these securities as the basis of a day-to-day loan from a bank.

The key to a dealer's success in the commercial paper field (and this is likewise true of finance paper) is his ability to carry a broad inventory of paper combined with the number and extent of his "fiscal agencies". Many of the important borrowers either issue their paper directly or through one dealer as fiscal agent, or they operate through a dealer group (which might be comprised of from 2 to 8 dealers). The dealer's ability to carry paper in inventory is a function of his capitalisation. The regulations of the Investment Dealers' Association require that, for every \$1 million of paper held in inventory, a certain portion of capital must be allocated, free of any encumbrances. The amount varies with the term of the paper held in inventory.

In addition to the issue of finance and commercial paper, most Canadian provinces and a growing number of major Canadian municipalities, either directly or through their various guaranteed authorities, make use of the money market for short-term financing. Repayment of provincial and provincially-guaranteed borrowings — and the same applies to municipal government securities — rests not only on the general credit of the issuing government but on its taxing powers as well. Funds may be required to meet current expenditures prior to tax receipts, or

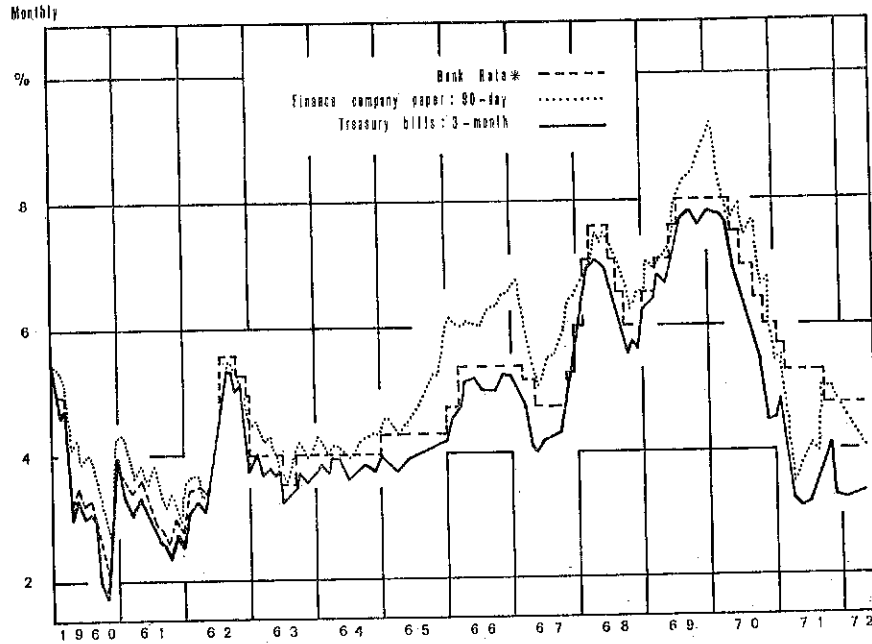
to finance capital expenditures for which long-term debt will subsequently be issued. There are several types of provincial treasury bills or promissory notes. Some are sold at a discount; others bear a fixed rate of interest; a few combine both of these features. Certain provinces normally stand ready to issue notes on a tap basis, which are tailored to meet the specific maturity required by the lender. Other provinces issue bills in a manner similar to Government of Canada Treasury bills. Although issuing procedures differ, generally speaking \$100,000 denominations are available in either bearer or registered form. It should also be remembered that as the term of outstanding provincial debentures diminishes with the effluxion of time to less than 3 years, they likewise become similar to money market instruments⁹ and where (as in Ontario) short-term paper is not issued to dealers to hold as inventory (some is placed directly instead) there can still be a market in provincial securities on a buy-back basis. Municipal promissory notes are issued in the same forms as provincial paper, though liquidity is more limited. Terms vary considerably, but most are less than 90 days. Often these can be arranged to meet the lender's requirements. Denominations of \$100,000 or more in either fully registered or bearer form are the norm. Certain municipalities will also issue their notes on a demand or call basis.

Bankers' acceptances as a money market instrument go back to June 1962, but became a market factor only in mid-1965. Essentially, the instrument is a commercial draft issued in multiples of \$100,000, drawn by a borrower for payment on a specified date and accepted by his bank, which affixes a bank signature in evidence thereof. Bankers' acceptances, which are usually issued for terms of between 30 and 90 days (excluding days of grace), relate only to prime credit risks, should be based on a *bona fide* commercial transaction,¹⁰ and are highly liquid, being eligible (albeit in limited quantities) for rediscount at the Bank of Canada and, to a limited extent, as security for day-to-day loans from the chartered banks. In addition to the rate of discount charged by the purchaser

⁹ It is not unusual for the chartered banks in their "posted" rates for call loan accommodation to charge a lower rate where short-term provincial securities have been lodged, but such loans may be called on little or no advance notice.

¹⁰ Some operators, however, maintained that the bankers' acceptance in Canada is not necessarily tied to specific commercial transactions and that it is rather similar to a commercial paper note, but with a bank guarantee.

SELECTED SHORT-TERM INTEREST RATES **



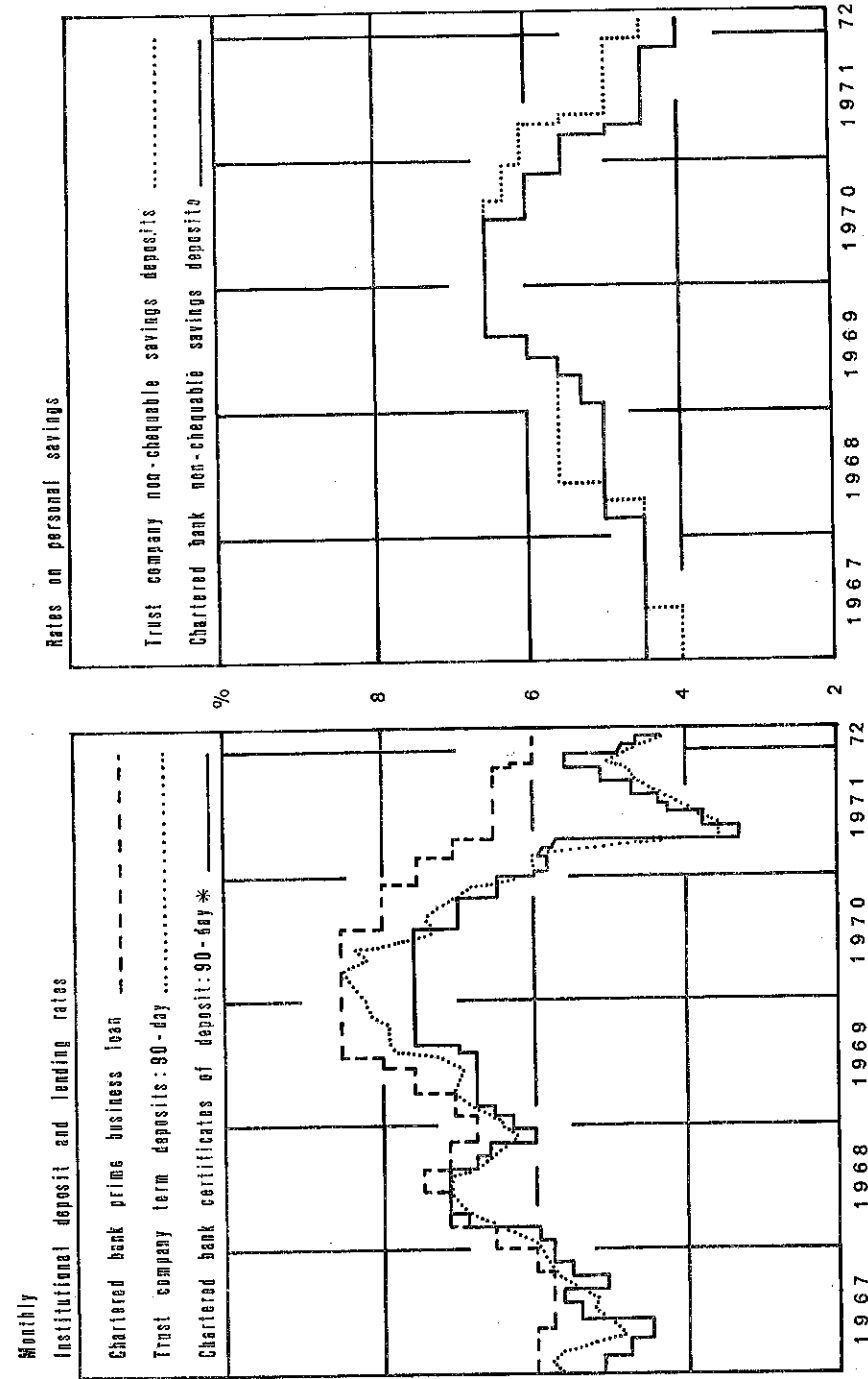
* From 1 November 1956 to 24 June 1962 the Bank rate was $\frac{1}{4}$ of one percentage point above the weekly average tender rate of 3-month treasury bills.

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(a dealer who will carry it in inventory), there will be a stamping fee charged by the bank, which may vary between $\frac{1}{2}$ and $1\frac{1}{4}$ per cent but which for prime risks usually amounts to $\frac{1}{2}$ or $\frac{3}{4}$ per cent per annum. There is a relatively limited but growing market in bankers' acceptances. Some banks buy them for very short dates and space them out by days, in order to acquire additional liquidity (although bankers' acceptances are not part of the required secondary ratio, they can quickly be converted — when short-dated — into "official liquidity" by allowing them to mature and putting the money out into the market as day loans; alternatively, the money could be retained as cash). Likewise, some of the trust companies and non-financial corporations are occasional buyers.

Another source of market paper that has assumed much greater importance in recent years is chartered bank paper. The decennial revision of the *Bank Act* in 1967, which removed certain restrictions

OTHER CANADIAN INTEREST RATES **



* Prior to November 1970 average of typical posted rates, thereafter average of actual rates paid.
 ** Reproduced by courtesy of the Bank of Canada from an article entitled "Recent Interest Rate Developments in Canada" which appeared in the *Bank of Canada Review*, February 1972.

on interest rates, enabled the chartered banks to compete openly and effectively for short-term funds.¹¹ The instrument that probably had greatest marketability in the first instance was the Bearer Deposit Note. This was first issued about 1965. Latterly, there seems to have been a greater emphasis on issuing Deposit Receipts and wholesale Certificates of Deposit. In the early stages, a number of corporations and individuals that traditionally had large low-interest demand deposits with the banks shifted these into chartered bank paper in order to obtain the higher rates of return and, at the time, these new instruments and the relatively high rates available seem to have made potential market customers more aware of the scope for investing short-term funds in other forms as well, thereby accelerating the general development of the money market. Although dealers bought up chartered bank paper for inventory and borrowed against it, there was never a good trading market in it. Deposit Receipts and Certificates of Deposit are still issued, though Bearer Deposit Notes have at some times been less important than at others. The conditions that apply to these instruments vary considerably and so does their liquidity. It is not strictly speaking market paper,¹² but dealers come into the picture by standing prepared to advise on and to assist in placing funds in these ways. Unlike their United States counterparts, which are frequently negotiable, Certificates of Deposit in Canada are usually non-negotiable; also the rates on bank bearer deposits and Certificates of Deposit became uncompetitive with the rates available on other instruments due to the Bank of Canada's continuing moral suasion. For this reason, the placement of moneys in this way has usually been confined to individuals or to the less sophisticated institutions investing in small amounts.

The area in which the chartered banks most obviously have expanded their money market activities relates to international paper. Indeed, over recent years, there has been a most marked extension of the Canadian money market beyond its own borders.

¹¹ The subsequent rapid rise in the rates available on bank paper tended to distort the structure of money market interest rates as a whole, since other borrowers — in order to remain competitive — had to match the rates offered by the banks. After October 1967, the Bank of Canada for a time applied "moral suasion" restraints on the level of rates the banks could offer on their deposits but this informal restraint ceased in late 1970.

¹² However, the chartered banks will usually buy back their own Term Deposit Receipts or Notes subject to a penalty determined by the keenness of the competition.

For example, although unable themselves to accept deposits (as a result of which the Regulation Q rate ceilings on deposits did not apply), the New York agencies of the Canadian chartered banks were nevertheless able actively to seek out dollar deposits in the United States, provided these deposits represented obligations of their respective Canadian head offices. This rapidly became an expanding business, because United States lenders — both corporate and institutional — often found that fixed term United States dollar deposits with Canadian banks offered higher yields than equivalent domestic transactions. Moreover, when purchased by Americans, these deposits were not subject to either the 15 per cent Canadian non-resident withholding tax nor to the United States interest equalization tax and, when purchased by Canadians, the 15 per cent United States non-resident withholding tax did not apply.

Again under certain conditions, the chartered banks can offer the short-term investor holding Canadian dollars attractive rates on "swapped" deposits. This is also known as a "bank swap". It is non-liquid and consists essentially of a United States dollar deposit with the Canadian investor enjoying protection from exchange rate fluctuations. The 15 per cent United States withholding tax does not apply. To obtain a rate equivalent to a bank swap deposit, the investor with Canadian dollars would have to first convert them into United States dollars, so that he could create the deposit and, in order to obtain protection against the risk of exchange rate fluctuations during the life of the investment, simultaneous arrangements would have to be made to convert the United States proceeds back into Canadian dollars at the pre-determined maturity date. The double conversion process is known as a "swap" or "hedge" and takes place at the outset. The exchange rates at which these two simultaneous transactions would take place form an integral part of the all-in yield of the investment. In practice, the chartered banks quote an all-in yield (in terms of Canadian dollars), which includes both the United States dollar deposit rate and the effect of the swap, so that the prospective investor is able to avoid going through the step by step process just described. Quoted rates may vary widely, depending on both the term required, current forward exchange rates, and the chartered bank concerned.

Finally, in this context, Canadian organizations may, under certain specified conditions, invest in Euro-dollar Negotiable Certificates of Deposit denominated in United States dollars. These

certificates will be issued by the London branch of a Canadian chartered bank, or a United States bank, and are subject to the laws of the United Kingdom. They are issued in bearer form, with interest accruing on a 360-day basis. While these CDs are not redeemable prior to maturity, a substantial secondary market in London assures their liquidity, subject of course to the market conditions obtaining there from time to time. Payment at settlement or at maturity may be arranged via Toronto or Montreal.

Dealers likewise have their contacts with other markets. For example, a lot of Canadian commercial paper is sold in the United States, fully hedged, on the dealer's recommendation. They also have European clients and some of the dealers have established contacts with the large English clearing (and other) banks, as well as with the merchant banks, which from time to time themselves may hold Canadian paper.

Trust companies, too, compete actively for deposit funds. There are some 50 Canadian trust companies with over 500 offices across the country. The majority are provincially incorporated, though several of the larger ones are federally licensed under the *Trust Companies Act*, but in either case, because of the restricting nature of the provisions under which they are incorporated, they enjoy a prime credit rating. In late 1971, trust company deposits totalled approximately \$6.5 billion (of which about \$1.8 billion were demand and savings deposits and \$4.7 billion were term deposits and guaranteed investment certificates). Because of the great diversity in the nature of their business and laws of incorporation, it is not easy to summarise the characteristics of trust company securities and they have a variety of names.¹³ They vary in term from 24 hour demand usually up to 5 years. Normally, their rates lie between those on prime finance company paper and similar chartered bank instruments. For fixed term instruments, liquidity is limited, since they are neither redeemable nor transferable. But the issuing trust company may sometimes waive these restrictions after negotiation with the holder or his agent.

We have now discussed in some detail the several sectors of the Canadian money market and the instruments in which the

¹³ The term deposits usually carry the prefix "guaranteed" (e.g. Guaranteed Investment Receipts, or Guaranteed Investment Certificates). The "guarantee" refers to the fact that, in the event of bankruptcy or default, the holder of the trust company's paper has first recourse on the assets of that particular trust company.

dealers operate or upon the use of which they advise. Although in some respects they act more as brokers than as principals, the dealers by definition carry an inventory and, although only the largest dealers would operate over the whole field, all dealers in the market will have some inventory to finance. Since capital and reserves provide no more than a basis for their operations, the bulk of what they require must be borrowed. It is to the sources of this borrowing that we must now turn.

In terms of the lines of development outlined at the beginning of this article, the day-to-day loans of the chartered banks may be considered the primary and traditional source. Funds may be lent in this way to the 16 investment dealers that have purchase and resale arrangements with the Bank of Canada against the security of Government of Canada Treasury bills and bonds maturing within three years, and to a limited extent against bankers' acceptances. Day loans are only negotiated in multiples of \$100,000. This is done by telephone and confirmed by letter. The rate of interest paid on these loans is known as the "day rate" and authorised investment dealers may borrow at this rate from the chartered banks against the security indicated. The day-to-day loan rate is normally (though not always) below the 91-day Treasury bill yield, and as a result dealers may usually finance their inventories without loss. Any change in the daily loan rate is advised by telephone and day-to-day loans may be terminated in whole or in part by a telephone call, by either party up to 12 noon for value that day, but the chartered banks may advance money on day-to-day loans up to 3.00 p.m. for value that day.

Rules as to margin are now laid down by the Investment Dealers' Association¹⁴ and, to this end, each house sets aside a certain amount of capital to provide a basis for the margin required in the money market. For day-to-day loans, the dealers maintain an agreed minimum margin of between 1/10 and 1/2 per cent of the market value of the collateral (the precise amount will be as agreed between the parties). The margin is in the form of additional securities, or a certified cheque payable to the lender and which remains attached to the securities. But this cheque would not be cashed unless the dealer failed to fulfill his obligations to pay off the loan when

¹⁴ Originally, they were agreed between the Bank of Canada, the eligible money market dealers, and the banks when day-to-day loans were introduced in 1954.

called upon to do so. However, because normal daily business may involve the selling of some of the securities pledged as collateral, a dealer usually reserves the right to substitute other securities acceptable to the lender.

The chartered banks also make extensive use of "collateral" or call loans, which are also made by off-street lenders like non-financial corporations and the trust companies (sometimes referred to as the "country banks"¹⁵). The mechanics of "collateral" or call loans are similar to those of day loans. The big difference is the variety of collateral used and the varying (and higher) rates charged. Also, while call loans are theoretically for 24 hours, in practice they extend for longer periods, whereas day loans are usually overnight loans.¹⁶

Safekeeping arrangements for collateral may be made to suit a lender's particular requirements. Indeed, on the basis of a Collateral Loan Safekeeping Agreement, the larger dealers will hold the collateral safely in a vault on behalf of the client. In all cases, letters are sent out under corporate seal confirming the origin, adjustment, or termination of any particular loan. Since securities are pledged and there is no actual change of ownership, contracts are not normally drawn up nor sent out.

The chartered banks charge either side of the Prime Rate for call loans, but rates would be negotiated with the off-street lenders and, where commercial paper is pledged, also with the chartered banks. Collateral ranges from Government of Canada medium- and long-term bonds, provincial treasury bills and debentures, the paper of the larger municipalities, Canadian chartered bank bearer deposit notes, corporate bonds and debentures, and top-grade short-term finance and commercial paper.¹⁷ Many of the off-street loans are made against commercial paper; some banks, though they accept it now more readily than in the past, are still highly conservative in this area. Some chartered banks prefer not to accept paper of issuers who are also their customers (otherwise, it would be a substitute for a loan) and they place a dollar limit on the total they will accept at any time.

¹⁵ This term would also comprehend provinces (and some of the bodies that come under them) as well as certain of the larger municipalities, which also make call loans.

¹⁶ Some call loans are arranged on an overnight basis as is done with day loans.

¹⁷ But the banks are by no means uniform in what they consider to be approved collateral.

The other main way in which the dealers finance inventory is by means of "buy-backs". But this is more than a means of financing inventory; indeed, it is primarily a means of accommodating a customer by providing him with a particular maturity that he might otherwise have been unable to obtain (sometimes, it is even done on a basis that permits the client, subject to a penalty, to withdraw from the arrangement). Formally, the buy-back involves the purchase by the investor of Treasury bills or, quite often, commercial paper, which will mature somewhat later than the date specifically required. At the same time, the dealer undertakes to buy back or repurchase the bills, or other paper, prior to their maturity on the specific date that funds are required by the investor. There will be a pre-determined differential between the purchase and sale prices, such that the investor will receive a fixed yield on the amount invested for the desired term. Customers include non-financial corporations, trust companies, provincial governments, and — sometimes — finance companies. The transactions may arise in a variety of ways, since they are undertaken as a means of absorbing temporarily surplus funds, but on occasion they are linked to other aspects of the dealer's business. Thus, an investment dealer may also be responsible for managing the capital issues being made by a non-financial corporation or by a provincial government, but the moneys from the issue may not be required immediately; the proceeds may therefore be reinvested with the dealer in question on the basis of a buy-back.

Nevertheless, and despite all these facilities, there will be occasions when the dealers may have difficulty in raising all the funds necessary to carry their inventory. Hence the need for a lender of last resort. This is the Bank of Canada, with which each of the authorised dealers has a line of credit up to which it can obtain accommodation on the basis of purchase and resale agreements (PRAs) in short-term Government of Canada and bankers' acceptances,¹⁸ but the dealer can only borrow from the Bank of Canada to the extent that he is not borrowing by way of day-to-day loans from the chartered banks. Also, only 15 per cent

¹⁸ Nothing else is acceptable as collateral for Bank of Canada advances to the dealers. However, the dealers can frequently borrow money market collateral (for a fee) against the substitution of non-money market collateral, including finance company and commercial paper. It is believed that some of the trust companies will lend securities on this basis.

of these lines of credit is available for use against bankers' acceptances. Lines of credit with the Bank of Canada are of course reconsidered from time to time and may be revised. Application for such accommodation from the central bank is at the initiative of the dealer. He also has the choice of two rates — either he can borrow at Bank rate or at the most recent average 91-day Treasury bill rate + 0.25 per cent., whichever is the less. There were times when Bank rate and the Treasury bill rate were far apart. The average bill rate + 0.25 per cent was also likely to be much nearer the market. But this choice only applied to two-thirds of the dealer's line with the Bank of Canada; for the remaining third, rates had to be negotiated. This arrangement followed a general increase in dealers' lines (towards the end of 1968), which had been agreed in order to accommodate their increased needs. The chartered banks had their lines increased at the same time. On November 12, 1970, a minimum rate was established for PRAs which was Bank rate minus 0.75 per cent. Bank rate remains the maximum rate.

Another way in which the Bank of Canada assists the market is by providing information. The Bank itself assembles market intelligence and obviously the more information it has the more expert are likely to be its interventions. Quite apparently, it is in the long-term interests of the market that the Bank of Canada should be well and fully informed. But there needs to be a reciprocal flow of information and what the Bank of Canada now publishes is much more complete than it used to be.¹⁹ As a result, the market is statistically much better informed. In addition, dealers call regularly to see senior officials at the Bank of Canada. The discussions are sometimes frank and the questions, it is said, have become increasingly sophisticated. Finally, and this must make for a more efficient market, the speed of communication has increased and responses to bids and offers are quicker.

In summary, the Canadian money market is a much more sophisticated market than it used to be. Big changes began to emerge about 1958, associated with the increased borrowing

¹⁹ The *Weekly Financial Statistics* now cover the Bank of Canada's statement of assets and liabilities, a par list of Government of Canada securities outstanding, statistics relating to the chartered banks, and money market statistics. There are also numerous graphs, summarising the run of experience over recent months or years.

requirements of the public sector. The Federal Government has now achieved a degree of balance, but the provinces are still heavily in the market. Of even greater importance is the considerable increase in the diversity of instruments. Initially, there was virtually only one borrower — the Government; now there is a host of borrowers employing a variety of instruments. This has enabled corporation treasurers — and others — to manage their money positions more tightly and, to alleviate the relative shortage of corporate liquidity, to use the market also as borrowers (e.g. by issuing commercial paper). At the same time, there was the growing emphasis in the banking system on liability management and the offer by the banks of a whole range of investment media, some of which have become money market paper. There has also been a tremendous growth in interest arbitrage between international financial centres. This arose in Canada partly because of its proximity to the United States and also because it has few restrictions on flows of capital²⁰ and an open economy that is directly influenced by the ebb and flow of financial forces originating elsewhere. By way of example, important links have been developed in recent years with the Euro-dollar market. Finally, credit for much of the development that has taken place must go to the personnel in the market. A lot of it has been due to young people who came into the market during the early post-war years and who are now largely in control of the situation, forming a well educated and sophisticated group.

Men, money, and markets — each has a role to play. All three have interacted to produce the money market that obtains in Canada today and which will undoubtedly continue to develop, to some extent in directions that have already been indicated (e.g. more "intermediation" and an increasing diversity of instruments and techniques). Indeed, nowadays a man can go into the Canadian money market with any amount of available money and obtain an investment for it for any term he desires.

²⁰ As a result of an agreement between the U.S.A. and Canada, certain guidelines are in fact applied to capital transactions (see Bank of Canada *Annual Report* 1968, pp. 69-73). These concern the chartered banks, financial institutions, and major corporations.