

THE CANADIAN CORPORATION AND THE MONEY MARKET

by

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## ABSTRACT

The Canadian money market dates back to 1935 when Government of Canada treasury bills were first sold and the main impetus to its present status came with the introduction of day-to-day loans in 1954. Until 1954, the money market was used principally by the chartered banks and the Federal Government, and the main functions were to provide the former with liquid assets and the latter with a relatively inexpensive method of financing its activities. In the last decade many other institutions have started to participate in the market. On the borrowing side, provincial and municipal governments, and financial institutions including trust companies, finance companies, investment dealers and commercial banks have joined the Federal Government, and finally in 1958 non-financial corporations began to issue substantial sums of short-term notes. On the lending side are financial institutions wishing to keep a certain portion of their funds liquid and non-financial corporations with temporary excess cash. The last of these borrowers and lenders mentioned, the non-financial corporation, is the concern of this thesis which examines potentiality and use of securities with maturity from one day to three years.

To appreciate the potentiality of the money market, the bond market, of which it is part, is first described and pertinent characteristics of bonds in general are discussed.

The specific instruments pertaining to the money market are the following: Government of Canada treasury bills and short term bonds; short term provincial and municipal issues; finance company paper; chartered bank deposit receipts, U.S. swaps and acceptances; trust company guaranteed investment certificates; investment dealer loans and buy backs; and international instruments including letters of credit and Euro-dollars. The potentiality of the money market for the non-financial corporation is further enhanced when such activity is integrated with the cash flow of the company. The cash flow itself is affected by peculiarities of the industry such as seasonal peaks and troughs, and by factors related to individual firms, such as capital structure.

From published statistical data and 298 responses to the questionnaires circulated by the author, the most pertinent findings were the predominance of Federal Government, bank, and trust company paper, the small difference in yields between different qualities of paper, and that rather than formalized rules for money market activity, corporate dealings were influenced mainly by intangible factors including attitudes of the treasurer regarding safety and yields of the instruments, bargaining between buyers and sellers, limitations imposed by boards of directors and banker relationships.

While the factors mentioned above must continue to affect money market decisions a formalized approach is recommended and discussed. This approach can be geared to the limitations

established by the intangible factors and industry and firm peculiarities, and it objectively examines the remaining alternatives.

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## CHAPTER I

### INTRODUCTION

The chief financial officer of the non-financial corporation has always been confronted with the problem of liquidity; he has wanted to know that his working capital position was a safe one as were those of firms with which he dealt. The prime prerequisite of a safe working capital position is enough cash on hand or available by borrowing to cover any and all payments as they come due.

Cash in the current account of the bank, like receivables, does not earn anything for the business and is thus a necessary evil for the purpose of ensuring liquidity. In recent years, however, a mechanism known as the money market has developed in Canada to the point where the corporate treasurer has been able to remain liquid and still ameliorate his company's profits by investing surplus cash for short periods or borrowing at a lower rate than that charged by the chartered banks.

This mechanism has only come of age in the country within the last decade. Even as recently as 1958 it was estimated that fewer than one hundred Canadians fully understood the workings of the money market.<sup>1</sup> People are reluctant to enter a venture they do not comprehend and lack of knowledge also hides the possible opportunities.

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<sup>1</sup>Brian Land, "How Canada's Money Market Keeps Idle Cash at Work," Canadian Business, XXXI (February, 1958), 26.

Statement of the Problem. In light of the above considerations the author's primary purpose is to examine the Canadian money market from the point of view of the non-financial corporation. More specifically the objectives of the thesis are:

- (1) To note the workings of the Canadian money market within the broader context of the Canadian bond market;
- (2) To examine how and why funds are invested into, and borrowed from, the money market;
- (3) To illustrate those factors which conduce a particular firm to money market activity; and
- (4) To illustrate by example how some Canadian firms are taking advantage of this media and thus setting examples for others to follow.

Scope and Methodology of the Study. There has been relatively little written on the Canadian money market. Even less has been written on the opportunities for the corporate investor or borrower, and the few articles the author has found have been of a cursory nature. Therefore, the Canadian literature is used here mainly to discuss the bond market and the history and instruments of the Canadian money market.

Techniques for investment and borrowing are taken principally from United States sources and applied to the Canadian scene. Where substantial differences exist they are noted in the text. To examine the opportunities that the techniques present, hypothetical examples are devised. The figures used in the examples will not likely fit into any particular com-

pany's situation, but the emphasis is on the method and model established, to which most companies can orientate.

The author did some primary research by use of questionnaires to a wide variety of sizes and types of firms, and by interviews. Many responses are noted in the text to show attitudes concerning various aspects of the money market, how certain factors affect activity in the market, and the composition of several security portfolios. The questionnaire and tabulations of replies are presented in the Appendix.

A final method used in the analysis is the collection of statistical information, mainly from Taxation Statistics and the Dominion Bureau of Statistics. Other sources, such as the Investment Dealers Association of Canada, were tapped for estimates.

Plan of Thesis. This thesis is divided into six chapters including an introductory and a concluding chapter, and an Appendix.

Chapter II discusses the Canadian bond market as a background and broader context for subsequent discussion of the money market. Since money market securities are bonds it is necessary to know the general considerations of prudent bond buying and selling, and the workings of, and influences upon, the bond market.

Chapter III discusses the Canadian money market and the opportunities it presents for the non-financial corporation. The history is briefly outlined and emphasis is upon the instruments. The international money market is also review-

ed because any exporter or importer has constant dealings with its instruments in his normal course of business.

Techniques of money market investment and borrowing are the topics of Chapter IV. Methods of increasing profits through money market dealings are outlined and a procedure for analysis is recommended. Some examples of current policies and the reasoning behind them are presented at the conclusion of the chapter.

Chapter V examines characteristics of individual firms and industries to determine which factors may possibly contribute to large peaks and troughs in the cash account, and thus enhance the opportunity for money market activity.

Finally, Chapter VI summarizes the findings and states the conclusions of the study, and the Appendix tabulates the relevant data from responses to the questionnaire.

## CHAPTER II

### THE CANADIAN BOND MARKET

The money market is but one segment of the broader bond market and to understand the workings of the former one must first gain an appreciation of the nature and scope of the latter.

The bond market, in turn, is a part of the still broader market for financial assets, including equities, and all must compete with each other for investor favor. This chapter is basically concerned with fixed income securities and, in particular, with the factors which will form the background for relative investor preferences between long- and short-term issues. Included are considerations of risks, interest and yields, the influence of the Bank of Canada and the secondary bond market.

#### I. GENERAL CONSIDERATIONS OF BOND BUYING

Risks in Fixed Income Securities. Whether the point of view is that of an insurance company, bank, individual, or a non-financial corporation, considerations for investment in bonds differ substantially from those of equities. Capital gains are often the major consideration when one buys equities, especially because of growth possibilities, the current inflationary trend, and the low yearly yield on many regularly traded common stocks. Investment in bonds for

either temporary or long term purposes, however, is mainly for the purpose of a guaranteed regular yield. Therefore the speculative factor falls far behind that of risk when making the investment decision.

In view of the paramount importance of the risk factor it is worthwhile to apply four basic principles of fixed income security investment.<sup>1</sup> The first states that safety is measured not by specific lien or other contractual rights, but by the ability of the issuer to meet all its obligations. Especially from the point of view of a corporation investing temporarily idle funds as a marginal aspect of cash management, one does not want the worry or frustration of bankruptcy proceedings in which delays in partial recovery and difficulties in the determination of legal rights are common. Thus the quality of the issuer is the first consideration, and once that is established its highest yielding bond of the desired maturity is the most attractive, regardless of lien.

The second principle is actually an extension of the first and it dictates that the ability of the issuer to pay should be measured on recession or depression conditions rather than those of prosperity. No industry is completely depression proof but some, such as food, are moreso than others, such as jewellery. A useful standard to apply is the margin of safety which is the ratio of earnings to interest due. The higher the stability of the industry the lower the margin of safety

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<sup>1</sup>Benjamin Graham, David L. Dodd, and Sidney Cottle, Security Analysis (New York: McGraw-Hill Book Company, Inc., 1962), Chapters 22, 23, 24 and 25).

required. It should be noted that this principle is not as important in the more foreseeable short-term market and it would take a rather severe and sudden downturn to place an otherwise safe thirty-day note in jeopardy.

The third principle, also an extension of the first, is that safety should not be sacrificed for yield. Minimum standards should be established and no yield concessions should allow the investor to violate these standards.

The fourth principle states that selection of all senior securities for investment should be subject to rules of exclusion and specific quantitative tests. These tests include nature and location of the business, size of the issue and the provisions of the issue. The latter mainly concerns security, interest payments and maturity date where the short side of the market is considered. Furthermore, one looks at the past record of interest and dividend payments of the issuer and the total earnings picture. The current earnings are important but even moreso are the trends and fluctuations. These factors lose some significance in the shorter issues with which this thesis shall be concerned, but quite often a firm will make a short-term investment in a long-term issue with the hope of selling it on the market in the near future.

All of the principles stated above relate to safety of principal and continuity of yield, but most gains and losses in the bond market occur as a result of changes in market yields and prices. The precise relationship of yield and price shall be discussed subsequently, but for the moment it shall be accepted that for a particular issue, they vary inversely to one another.

The movement of the business cycle and deliberate policies of the Bank of Canada can greatly affect bond prices. If the securities are held to maturity, of course, no loss or gain will occur, but buying securities - even government - for the purpose of sale before maturity can involve substantial risks. In an expansionary phase of the cycle, where tight money policies are likely to be enforced, short term prices should show a substantial decrease as increased working capital needs of business push the interest rate up. Holders of existing securities therefore would only be able to sell at a loss in the face of this increased competition. If the expansion is expected to continue the same pattern will follow with long term issues. With the great variety of money market instruments, however, the temporary investor can diminish this risk by purchasing a security which will mature at the exact time he requires the funds.

Types of Instruments. There is an extremely wide choice of fixed income securities which differ in risk, as well as yield and maturity. Governments at all levels issue bonds of varying yields and maturities. Federal government bonds are regarded as riskless from the point of view of safety of principal at maturity, although the interest rate risk is as important as in all others. Provincial issues are next in safety with the larger provinces able to offer the lowest yield, reflecting their greater safety. For example, Ontario's usually sell at the lowest yield while Newfoundland's sell at the highest. However, when a "better quality" province sells

a large issue it may lose ground and be forced to offer a higher yield than some others. For example, between 1955 and 1959, Quebec bonds were sometimes selling at a lower yield than those of Ontario. Then, in 1960 and 1961, Quebec borrowing increased sharply and caused its bonds to become relatively unattractive.<sup>2</sup>

Provincial issues are usually long maturity bonds with the shortest generally in the five-year range. They also guarantee bonds of crown corporations and one province, British Columbia, does all its borrowing by guaranteed issues. The short-term investor may be interested in parity issues which can be redeemed any time at par. The safety of these has been doubted, however, especially in the June 1962 financial crisis when interest rates penetrated the 5% yield of the B.C. Electric parity issue. A run developed and there was some concern as to the province's ability to meet payment.<sup>3</sup> Several provinces also issue treasury bills.

Municipal issues rank below those of provinces although provincial legislation and scrutiny do prevent the marketing of excessive amounts in relation to ability to meet payments.

Corporate issues vary widely in maturity, lien and safety. Examples are first mortgage bonds, second mortgage bonds, collateral trust bonds, debentures and subordinate debentures.

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<sup>2</sup>Douglas H. Fullerton, The Bond Market in Canada (Toronto: The Carswell Company Limited, 1962), p.68.

<sup>3</sup>Ibid., p.180.

The first three have some form of security while the latter two are bought on the basis of the general quality of the corporation. The shortest term issue of the non-financial corporation is the promissory note, commonly referred to as "corporate paper," and it is of the debenture type with usual maturities of thirty or ninety days.

To indicate the relative importance of each of these classes of issuers, Table I presents the amounts outstanding as of December 31, 1962. These include direct and guaranteed issues and those issues held outside as well as within the country.

Bonds are marketed by investment dealers and banks, although direct placements are becoming more common. Dealers may either undertake to sell the issue for the government or firm, or underwrite it themselves; that is, buy up the issue and thus take full responsibility for its marketing. Often syndicates are formed when a large amount is involved and the ultimate in this type of arrangement was the Conversion Loan of 1958, in which every investment dealer in the country except one (whose partners indicated little faith in the Loan's success) was brought in.<sup>4</sup> The interested buyer would thus contact these sources to examine what they have to offer in terms of his needs.

A disadvantage to the buyer is the speed with which a new issue is disbursed once it comes out on the market. Some potential purchasers never hear of a new issue or must make their decision within hours and often without even the benefit of a

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<sup>4</sup>Ibid., p.244.

TABLE I

## BONDS OUTSTANDING, DECEMBER 31, 1962

(Dollar figures in millions)

	<u>Amount</u>	<u>%</u>
Government of Canada	\$19448	48.3
Provincial	8983	22.3
Municipal	4100	10.2
Corporate	7724	19.2
	<u>\$40255</u>	<u>100.0</u>

Source: Bank of Canada, Statistical Summary,  
Financial Supplement, 1962.

prospectus. The Royal Commission on Banking and Finance recommended the practice of the "red herring" prospectus which is used in the United States.<sup>5</sup> This is a draft prospectus giving all information of the ordinary prospectus except maturity and yield, and is circulated in advance of the issuing date. Even the "red herring", however, would be impractical where short term obligations are concerned. A corporation issuing notes every thirty or sixty days would find it neither feasible nor necessary to publish a prospectus each time. The investor can examine the company's credit worthiness from a recent prospectus and current reports by such agencies as Dun and Bradstreet.

## II. THE SECONDARY BOND MARKET

Bond dealing is not confined to simply buying at date of issue and selling at maturity. Much trading is done between these two dates in the secondary market which performs several useful functions.<sup>6</sup>

- (1) It improves the mobility of funds by giving bonds liquidity, thereby making them more attractive to savers and reducing borrowing costs.
- (2) It establishes relative price and yield levels, which provide the yardsticks for setting the terms of new issues.
- (3) It facilitates the monetary operation of the Bank of Canada and the operations of sinking and purchase funds.

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<sup>5</sup>Canada, Report of The Royal Commission on Banking and Finance (Ottawa: Queen's Printer, 1964), pp.313-14.

<sup>6</sup>Fullerton, op.cit., p.163

Non-financial corporations have a keen interest in the secondary market especially because they are often not positive when they will wish to sell the bonds to redeem the cash needed for other corporate purposes. The treasurer is therefore concerned with several factors determining the marketability of a bond.<sup>7</sup>

First, large issues with a widespread distribution are more likely to have a good and continuing market than small issues. Second, the existence of a sinking fund aids marketability not only through its own operations but also because others will be more willing to trade in the belief that there will always be some support for the issue. Thirdly, the willingness of the dealers to carry inventories and take short positions enables them to meet client orders when there is a temporary imbalance of supply and demand. Finally, perhaps the most important determinants are the attitudes and motives of the holders. Besides the low risk of capital loss, the fact that holders regard short-term bonds as liquid investments causes them to be traded more actively.

These considerations indicate that there is an inverse relationship between the length of term to maturity and activity in the secondary market and that money market securities would therefore be traded most actively. Furthermore, one would expect the larger issues of the virtually riskless federal government to be traded most actively. Table II, showing secondary market sales as estimated by the Investment

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<sup>7</sup>Canada, op.cit, pp.315 - 317.

TABLE II

SECONDARY MARKET SALES<sup>a</sup>

	Amount out- standing <sup>b</sup>	Secondary market sales	Relationship of market sales to bonds outstanding	Distribution of secondary market sales
	\$ millions	\$ millions	%	%
Government of Canada				
Treasury Bills	\$2165	\$6507	301	36.3
3 years and under	4176	5532	132	30.9
3 years to 10 years	3249	742	23	4.1
Over 10 years	4856	1212	25	6.8
Provincial Bonds	7156	1225	17	6.8
Municipal Bonds	3096	388	13	2.2
Corporate & Other Bonds	5958	1663	20	9.3
Finance Company and Commercial Paper	1510 <sup>c</sup>	654	43	3.6
		<u>\$17923</u>		<u>100%</u>

<sup>a</sup>Table based on secondary sales made only by members of I.D.A. during their 1962 fiscal years.

<sup>b</sup>Gross amounts outstanding as of December 31, 1962, direct and guaranteed market issues payable in Canadian dollars.

<sup>c</sup>Includes both short- and long-term finance company paper.

Sources: Submission of the I.D.A., Bank of Canada Statistical Summary and Corporate Paper Survey of the Royal Commission on Banking and Finance.

Dealers Association, demonstrates that such is, in fact, the case. Eighty percent of total transactions were in Government of Canada obligations and seventy percent were in treasury bills.

### III. YIELDS, PRICES, AND MATURITY

Bonds are sold at par, discount, or premium. Par is the price at which it is to be redeemed, and if one buys a bond at that price and sells it at maturity, he need not be concerned with price fluctuations. However, if he intends to trade in the secondary market, the price at which he will buy or sell will not likely be the same as the stated par value. One reason is that the longer the term to maturity, the larger should be the yield, because one would ordinarily desire more compensation for the use of funds for a longer period of time.

Other factors affect the price of the bond and an investor should be aware of the various relationships involved.

Relationship of Price and Yield. As the price of a bond increases, its yield decreases. The converse, of course, is true if the price decreases. The relationship is a mathematical one and can best be illustrated by an example.<sup>8</sup> Suppose that ten years ago a corporation sold at par value of \$100 a twenty-year bond with a 4% coupon. Suppose further that this company now wishes to float a ten-year issue but that the general level of interest rates has increased and they must pay 6%.

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<sup>8</sup>A.N. Mcleod, "What Management Should Know About Interest Rates," The Business Quarterly, XXV (Spring, 1960), 19.

If someone holding a \$100 unit of the old issue wishes to sell it now he could only obtain \$85.12, which is the sum that, with a 4% coupon, will give the buyer a net yield to maturity of 6%. He would not pay more because this would decrease his net yield to maturity below the 6% he could obtain if he buys a unit of the new issue.<sup>9</sup> The relationships between the yields and prices for the various terms to maturity are set forth in bond value tables and the computations are based upon the following formula:

$$P.V. = \frac{1}{\left(1 + \frac{i}{2}\right)^{2n}} + \frac{C}{i} \left[ 1 - \frac{1}{\left(1 + \frac{i}{2}\right)^{2n}} \right]$$

Where:

P.V. = Present Value of principal at maturity compounded on a half-yearly basis, plus Present Value of interest instalments paid through the life of the issue.

C = Coupon rate, payable semi-annually.

i = Yield.

n = Number of years to maturity.

Causes of Bond Price Fluctuations. There are a number of factors which affect the price of long-term bonds.<sup>10</sup> The first is the level of capital expenditures and new borrowing. When increased substantially more bonds will be placed on the market and, as in any supply and demand situation, a greater price in the form of higher interest rates must be paid. However, there

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<sup>9</sup>When market rates change, the longer an outstanding issue has to go to maturity, the greater will be the effect on the price at which it will be bought. This is because the yield difference affects the return to the holder for a longer period of time.

<sup>10</sup>Fullerton, op.cit., Chapter 12.

is the myriad of alternative sources of funds for potential borrowers. These include equity offerings, short-term issues, depreciation reserves, leasing arrangements, retained earnings, trade credit, and bank borrowing. These sources act as a safety valve for the Canadian long-term market and in the past have set a ceiling on bond interest rates in periods of heavy investment.

A second influence is the debt management policy of the federal government. A vivid example of the extent of this influence can be seen in the Conversion Loan of 1958, where, in spite of Bank of Canada efforts to support the market, yields rose substantially.

The general level of economic activity is probably the most important influence, not only in its own right, but more significantly, because of the expectational factor. When business expands and demands for investor savings increase, interest rates will rise, as explained above. Expectations of a continuity of the expansion will cause investors to postpone long-term security purchases as they can later obtain them at a higher yield. Thus they will shift into shorter term obligations. The decreasing demand for long-term securities will in itself be a cause of increasing interest rates. Monetary policies of the Bank of Canada can accelerate or retard these influences and its activities will be discussed more fully below.

A final influence is the substantial source of funds from the United States. To the extent that American investors can

be induced to place their funds in Canadian bonds, interest rate increases will be retarded. In this sense, Canadian outlets for investment are in competition with American, so the general level of United States interest rates affects the Canadian.

There are many factors to examine when attempting to predict the movement of long-term interest rates. The following conditions generally indicate a fall in long-term yields:<sup>11</sup>

- (1) The economy is not expanding and credit conditions are easing so the demand for bonds should increase while the supply decreases.
- (2) Bank loans are stable or decreasing.
- (3) Construction and capital expenditures are decreasing.
- (4) Corporate cash flow is strong so less borrowing is required.
- (5) Bank of Canada monetary policy is one of ease.
- (6) The federal budget is close to balance.
- (7) Interest rates in the United States and elsewhere are declining.
- (8) The Canadian dollar exchange rate is falling. This may, however, cause lack of confidence and retard the flow of investible funds to Canada because of fears of a further decline.
- (9) Dealer bond inventories are low.

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<sup>11</sup>Ibid., Chapter 12.

(10) There is a general bearish tone in the market; that is, expectations are dim for the foreseeable future.

It should be noted that rarely will these economic trends all be in the same direction, so their relative importance must be weighed.

The Yield Curve. The relationship between price and maturity may be expressed graphically by the yield curve.<sup>12</sup> Figure I presents examples of a rising, flat, and a declining yield curve.

The rising yield curve reflects an investor preference for cash or near-cash securities and they are only willing to accept longer term issues at a higher yield. This situation is common with generally low yields and expectations of the same; that is, situations reflecting the conditions listed at the end of the previous section.

The flat yield curve indicates an even distribution in investor preference between money and investments and there is no discernible direction to business activity.

The declining yield curve reflects an investor preference for investments and the supply of funds for longer term issues exceeds the demand. The opposite is true for short-term securities. The market thus indicates the expectation of declining bond yields and that these yields have reached their peaks.

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<sup>12</sup>Roger A. Lyon, Investment Portfolio Management in the Commercial Bank (New Brunswick, New Jersey, Rutgers University Press, 1960), pp. 66-79.

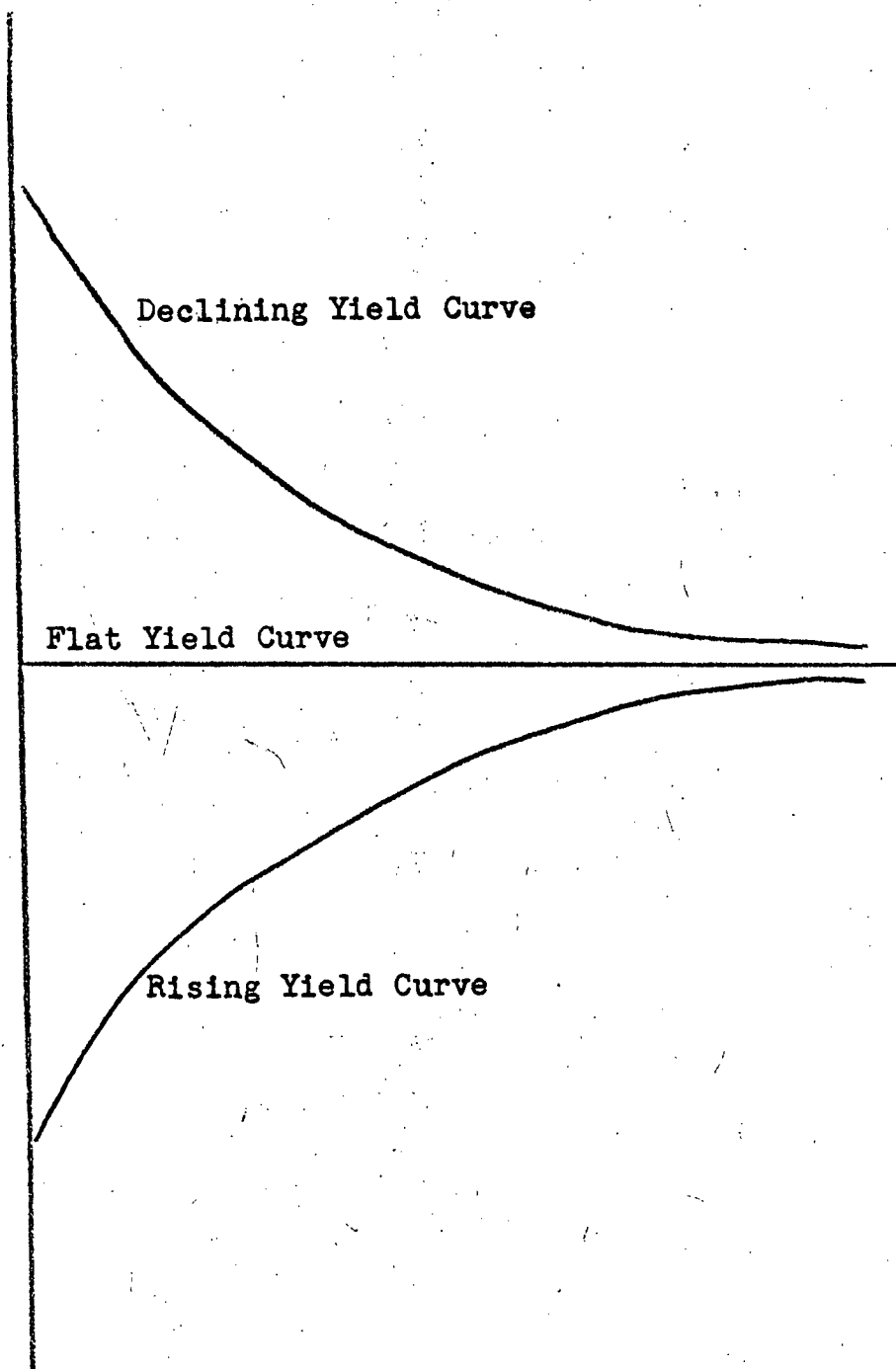


FIGURE 1  
YIELD CURVES

When deciding upon the relative merits of various maturities and yields the investor should be aware of two prime considerations. The first is that the longer the maturity, the greater the price volatility for a given change in yield. For example, if interest rates generally rise, the holder of a bond must accept the lower relative yield for the full time to maturity. Thus an outstanding bond with one year to maturity will be affected to a much lesser extent than a bond with fifteen years before it may be redeemed. As explained in a previous section of this chapter, the mathematical relationship between price and yield will cause the market price of the latter to fall much more steeply.

The second consideration, working in the opposite direction, is that short-term rates are generally much more volatile than long-term rates. Expectations extending a long time into the future are less erratic than short-term expectations and this tends to dampen the relative fluctuations of long-term rates. Furthermore, a better secondary market exists for near-term issues, which allows supply and demand conditions to manifest themselves sooner.

One may conclude, therefore, that short- and long-term rates generally move in the same direction but changing economic conditions or government policies are felt more quickly in the short-term market. It takes a much larger adverse change in the short-term market, however, to cause equal losses as in the long-term market.

The yield curve may be an extremely useful tool for an investor who can derive the cyclical fluctuations in bond prices and profitably vary the maturity of his portfolio. For example, when long-term rates are low, one should try to invest in short-term bonds until the trend changes. Others will try to do the same, however, and the increase in demand for short-term bonds will decrease their relative attractiveness. Nevertheless, there is still much room for substantial profits if good judgment is exercised:

...If the Conversion Loan  $4\frac{1}{2}\%$  bonds of September, 1983, are taken as a bench-mark, any one who called the main turns could have sold this bond at par or close to it in September, 1958, just after the issue came out (or sold it short), bought at 83 a year later, sold at 95 in September, 1960, bought back at 89 in December, sold again at 94 in August, 1961, and bought back in July, 1962, at 88, a total movement of 46 points in four years.<sup>13</sup>

Further implications of the yield curve shall be discussed in Chapter IV.

Yields and Taxes. Tax considerations play an important role and investment in lower coupon discount bonds can substantially increase the net return to the corporate lender. In the words of one treasurer who responded to a questionnaire circulated by the writer:

...A matter of some general interest is the choice by the corporate investor of "discount" versus "non-discount" securities of equivalent quality. Usually, the choice of the tax-paying corporate buyer is elementary - he seeks the highest after-tax yield, other market factors

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<sup>13</sup>Fullerton, op.cit., p.216.

being in balance. However, under the existing Federal Income Tax arrangements, which provide higher incentive-type Capital Cost Allowance aimed at inducing the rapid expansion of Capital Expenditures, there may be times when a company has very large deductions and its taxable income is greatly reduced, over the short term. In such circumstances, the company could maximize its cash flow by concentrating on "discount" securities. Practice indicates that a capital gain in "discount" securities is free of tax when the securities are issued by Governmental bodies and when the gross yield, including capital gain, does not exceed the coupon rate by more than one-third.

If the discount is not so high as to make the full yield taxable there are further implications for dealing in the secondary market. The tax is based on the coupon rate rather than the yield, so when interest rates rise causing outstanding bonds to be bought at a discount, the market will act to diminish this discount because of the tax advantage so gained.

#### IV. INFLUENCE OF THE GOVERNMENT AND THE BANK OF CANADA

The Bank of Canada. In general, monetary policy reinforces the natural tendencies that produce cyclical swings in interest rates. The Bank of Canada will normally promote low yields in recession to stimulate new investment and higher rates if an expansionary tendency appears to be too great. On the other hand, monetary policy may be used to offset rather than reinforce normal market forces if it appears to the authorities that the market is acting inappropriately.

The most important techniques of monetary policy are the Bank of Canada's open market operations. For example, if the

authorities wish to ease credit and lower interest rates, they will buy securities and thus place more cash in the hands of the chartered banks. Because the latter have an 8% cash reserve, there will be a multiple expansion of the money supply by 12.5 times if all the new cash is spent and no hoarding occurs. The increased amount of investible funds in the hands of the public will have the effect of increasing demand and thus lowering yields; the same effect will, of course, be augmented by the Bank's own original purchases. Financial intermediaries also play a large role in this process, and as a portion of the increased cash is invested in them, they will increase their own loans and investments.

If the market seems to be acting in an inappropriate manner, the Bank of Canada's judicious use of open market operations can have a stabilizing force.<sup>14</sup> For example, a buyer's "strike" appeared to develop in September, 1961, and long-term rates rose. The Bank thus bought a large number of bonds and the tendency to hold prices firm gave confidence to the market and induced buying.

The Bank's reserve bid on the weekly treasury bill auction can substantially influence the short-term market. If tight money is the object, the Bank will bid high, thus forcing short-term rates up.

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<sup>14</sup>Ibid., pp.108-9.

Another form of control is the Bank Rate at which the Bank of Canada will lend to chartered banks or enter sale and repurchase contracts with money market dealers, in its function as lender of last resort. By altering the Rate it becomes more or less expensive for banks and dealers to obtain funds from the Bank of Canada and this cost can be transmitted throughout the market. Of greater significance regarding the Bank Rate is its use as a transmission of the authorities' intentions regarding policy. The Bank Rate lost much significance in this respect between 1956 and 1962, when it was fixed at  $1/4$  of 1% above the average weekly treasury bill tender, although the latter may also be influenced by the Bank's open market operations. Since June, 1962, the Bank Rate has once again been fixed although dealers can obtain funds at the lower of the prevailing rate or  $1/4$  of 1% above the average weekly treasury bill tender.

A third method of Bank of Canada influence is moral suasion. For example, by "gentlemen's agreement" the chartered banks hold 7% of their assets in the form of liquid investments (treasury bills and day-to-day loans) in addition to their statutory eight percent cash reserve ratio. Finally, the Bank is empowered to alter the Chartered Banks' statutory reserve ratio from 8% to 12% by the amount of 1% per month, although this authority has yet to be exercised.

A group working for the Royal Commission on Banking and Finance made a study of the effects of monetary policy on the corporation. One of their conclusions was the following:

...In short, changes in short-term interest rates do not pass unnoticed even though firms may rightly judge on the basis of past experience that not too much significance should be read into every week-to-week change in the treasury bill rate.

If the change in short-term rates persists, or if the initial change is a decisive one, the effect will be felt in the market for long-term securities. Corporations planning new issues are quickly made aware of any development in the bond market which will raise the price they must pay in order to obtain accommodation. Similarly, if rates fall, even firms which do not have an immediate need for funds may have the favourable conditions drawn to their attention.<sup>15</sup>

Government Debt Management Policy. There are several opposing views regarding the federal government's debt management policies.<sup>16</sup> The first is that the debt policy should be counter cyclical. For example, when the monetary conditions indicate a need for restraint, a large long-term issue should be floated. An opposing view is that the debt service charges should be kept as low as possible, so emphasis should be more on shorter term issues. A third argument is that the flows of government debts should be regular in amounts and dates of issuance, and of a variety of maturities, so as not to cause violent disturbances in the bond market.

Because the actual policy should logically follow the theory the Minister of Finance and/or the Governor of the

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<sup>15</sup>J.M. Young, J.F. Helliwell, and W.A. McKay, "The Response of Corporations to Monetary Policy," A Study Prepared for the Royal Commission on Banking and Finance, December, 1962. (Unnumbered reprint), p.IV-7.

<sup>16</sup>Canada, op.cit., p.450.

Bank of Canada may hold at the time, one can perceive a great deal of confusion in the minds of participants in the bond market, which is greatly influenced by government issues. No one clear policy has predominated in recent years and the disastrous effects of the 1958 Conversion Loan are witness to the implications of such a confusion of policies. When the issue was floated the Minister had announced a large government deficit three months previously, in view of recessionary conditions. This would indicate the need for monetary expansion and short, as opposed to longer, term borrowing. The Loan, however, extended the term of the Government's debt. Interest rates soon penetrated the  $4\frac{1}{2}\%$  on the the \$2152 million of 1983's and when the Bank of Canada withdrew its support in November, their prices fell sharply. Such an event greatly reduced confidence in the bond market and showed lack of sophistication even at the level of the Minister of Finance and the Governor of the Bank of Canada.<sup>17</sup>

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<sup>17</sup>For a full discussion on the Conversion Loan of 1958, see Fullerton, op.cit., Chapter 15.

## CHAPTER III

### THE CANADIAN MONEY MARKET

The section of the bond market which includes instruments from maturity of one day to three years, is known as the money market. This chapter shall concern itself with the money market as a vehicle for investment and borrowing by the non-financial corporation. Its history shall first be considered, followed by a description of the instruments and institutions involved.

#### I. HISTORY OF THE CANADIAN MONEY MARKET

The birth of the Canadian money market actually took place as early as March, 1934, when Government of Canada 91-day treasury bills were first sold. Some foresight at that time could have predicted the evolution of the Canadian money market of today, as within these treasury bills lay a major aspect of money market philosophy: The Government benefited by "rolling over" a portion of its debt in short-term securities, thus paying a lower interest rate, and the buyers gained a safe, liquid investment. These bills were sold almost exclusively to the chartered banks. There was no need to trade amongst themselves as the Bank of Canada maintained a very narrow spread between its buying and selling prices. Thus the chartered banks could deal directly with the Bank with assurance of liquidity and little risk of loss. A major

benefit this brought to the banks, then, was an ability to adjust their cash positions easily. By 1937 tenders were called every two weeks and in 1953 a weekly tender was started.

Toward the end of World War II some investment dealers began to show interest in bills, and on rare occasion, bought them on behalf of clients. They were discouraged from carrying an inventory, however, when the Bank of Canada increased its spread between buying and selling prices, so as much as  $1/4$  of 1% in yield per annum could be lost by selling to the Bank before maturity. The market for treasury bills was still extremely thin and the returns were not worth the risk of loss when the need for cash arose. Another development in the same period was the entrance into the market of installment finance companies, which followed the Government's lead by carrying some debt in short maturities, but at the start this was on a very minor scale.

In 1953 the authorities in the Bank of Canada saw the advantages of widening the market by facilitating the ability of investment dealers to carry inventories of treasury bills. Therefore, they instituted purchase and resale agreements with bond dealers who would take a jobbing position in the short-term Government of Canada market. Under these arrangements a dealer could, within established, negotiable limits, sell treasury bills and short-term Government of Canada bonds to the Bank of Canada with the promise to repurchase after a short period - usually thirty days - at a predetermined yield

to the bank. The objectives of this ruling were related by Mr. Coyne as follows:

These arrangements offer jobbers an alternative method of financing inventories of such securities so that they are at all times able to meet the requirements of their customers, including other bond dealers who only occasionally have transactions in short-term securities. A further effect of this arrangement is the relieving of the market from excessive pressure in the event of a temporary shortage of cash on the part of the chartered banks. Development of a broader market in treasury bills and short bonds is of value to chartered banks wishing to adjust their cash positions either by increasing or reducing their portfolios.<sup>1</sup>

In April 1954 a development took place which many regard as the major stimulus to a truly effective money market. As an item in the revision of the Bank Act, the chartered banks were invited to make day-to-day loans to the jobbers. The reasoning behind this action and the workings of the day-to-day loan market were outlined by the Governor of the Bank of Canada in his 1954 Annual Report:

The introduction in mid-June of what are known as day-to-day loans was an important development affecting both banking practices and the short-term securities market or "money market". These loans are made by chartered banks against the pledge of treasury bills and Government of Canada bonds maturing within three years. The borrowers are those bond dealers who are prepared to act as jobbers in the short-term market and who have entered into purchase and re-sale agreements with the Bank of Canada. Day-to-day loans may be called for payment at any time and the willingness of the Bank of Canada

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<sup>1</sup>Bank of Canada, Annual Report, 1953. p.8.

to purchase securities under resale agreements provides an underlying assurance of liquidity.

From January 1953 to June 1954 the Bank of Canada had made a considerable amount of funds available for the financing of dealers' inventories of treasury bills and short-term Government bonds through purchase and resale agreements. The total provided in this way reached a maximum of \$73 million in June. Subsequently, day-to-day loans from the chartered banks provided the financing in amounts which, as at the close of business on Wednesdays, varied between a low of \$44 million and a high of \$135 million, and Bank of Canada facilities were infrequently used.<sup>2</sup>

The introduction of day-to-day loans has had the further advantage of facilitating adjustment of cash reserve positions of the chartered banks. Under this arrangement, when their minimum cash reserve ratios were strained, they could call some of these loans before noon and the dealers were obliged to repay on the same day.<sup>3</sup> When a loan was called, the dealer would try other banks before entering the more expensive purchase-and-resale contract with the Bank of Canada. It was actually quite likely that the dealer could find accommodation at another bank as the bank which called for repayment of the loan probably lost in the Clearing House. Those which had gained would presumably have this surplus cash on hand for the dealer.

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<sup>2</sup>Bank of Canada, Annual Report, 1954. p.11.

<sup>3</sup>When adjusting liquidity positions with the Bank of Canada there was between one and four-days' delay. See Ibid., p.12.

One of the main advantages to the introduction of day-to-day loans was the broadening of the market for treasury bills. This led to a closer trading on prices and tended to narrow the spread between buying and selling rates. In effect, it increased the liquidity of treasury bills by reducing the loss on selling them before maturity, and indeed, gave the needed confidence to corporations to invest temporarily idle cash.<sup>4</sup> This widening of the market is evidenced by the fact that the treasury bill holdings of the general public increased from \$24 million in 1953 to \$208 million in 1954.<sup>5</sup>

To start the market in an orderly manner, the day-to-day loan rate was agreed at 1 1/2% and thereafter determined competitively in response to monetary conditions. It has usually been slightly below the tender rate on 91-day treasury bills, but has, especially in conditions of extreme credit stringency, risen above the treasury bill rate. Under normal conditions, when the day-loan rate has been lower, dealers could make a small profit just by using these loans to finance their treasury bill inventory. To give further assurance to the jobbers the Bank lowered its yield on sale and repurchase contracts to equal the Bank Rate. This penalty charge had previously been approximately 1/4 of 1% above the Bank Rate.

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<sup>4</sup>R.N. MacIntosh, "Broadening the Money Market," The Canadian Banker, LXI (Autumn, 1954), 67.

<sup>5</sup>Bank of Canada, Statistical Summary, Financial Supplement, 1962, p.51.

Another item of the Bank Act revision of 1954 increased the cash reserve requirements of the chartered banks from 5% to 8%. Previously, however, the 5% had to be maintained throughout the month so, to allow themselves the necessary leeway, the banks generally maintained a reserve of about 10%. The revision demanded only that the 8% minimum was a monthly average. Thus there was less risk in reducing to an amount very close to this minimum and, in fact, by December, 1954, the average reserve for the banks was 8.7% with several much closer to the 8% minimum.<sup>6</sup> The net effect was to add further liquidity to the system and thus add to the success of day-loans in their function of increasing short-term security dealing. A further stimulus to the same end was given by generally declining interest rates at the time day-loans were introduced.

In 1955 an agreement took place between the Bank of Canada and the chartered banks whereby the latter would thereafter maintain an average monthly 7% ratio of liquid reserves to total deposits in addition to the 8% statutory cash reserve. The stated purpose of the agreement was to "...make for a financial system which will respond more quickly, smoothly and predictably to measures of monetary restraint when these are required..."<sup>7</sup>, but because the reserve consisted of day-to-day loans and treasury bills, a further advantage was

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<sup>6</sup>Bank of Canada, Annual Report, 1954, p.11.

<sup>7</sup>Bank of Canada, Annual Report, 1955, p.17.

an expansion of their markets. Thus, with greater day-to-day loans the dealers could carry larger treasury-bill inventories.

When a jobber received an order for a security not in stock and had to purchase it, he usually did not have the cash available. He therefore had to obtain a certified cheque from his bank on the understanding that he would cover it immediately upon sale of the security. He might also need a certified cheque to repay a bank loan in order to release a security (used as collateral for the loan) for sale, or to employ it as security for a loan from another bank. In 1954, the charge for the "over-certification" service was 1/100 of 1% per diem. This was burdensome so the banks reduced the charge to 1/250 of 1% per diem, but even the reduced rate was regarded as excessive and impeded the free flow of funds in the money market.

In 1957, the banks agreed to eliminate the charge for bona fide money market transactions; that is, movement of inventory from one bank to another or to the Bank of Canada on a repurchase agreement. The "over-certification" charge still had to be paid when the loan was for the purposes of withdrawing securities for sale, buying securities, or borrowing money outside the banking system.<sup>8</sup> The result of the partial elimination of the onerous charge was a further stimulus to quick and active dealer operations.

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<sup>8</sup>J.S.G. Wilson, "The Canadian Money Market Experiment," Banca Nazionale del Lavoro Quarterly Review, Rome, No.44, March, 1958, p.34.

A final milestone in the development of the Canadian money market took place in 1957 when the Bank of Canada decided to make better use of its own facilities. Since then, any investment firm could deposit securities at any Bank of Canada agency across the country and have them released at any other.

In summary, the Canadian money market has basically been the product of the last ten years. Its major accomplishments have been better monetary control by the Bank of Canada and increased use of otherwise idle funds. The former resulted from quicker reactions by the chartered banks, especially regarding their liquid asset reserves, while the latter has been the effect of the creation of near-cash securities in place of cash. Their mobility and trading possibilities have greatly increased as has the general confidence in their liquidity.

The above discussion related mainly to treasury bills and day-loans but the benefits of the money market were not limited to those securities. Many other instruments have become well known to the investor of short-term funds since 1954 and within these instruments lies the key to non-financial corporation participation.

## II. CANADIAN MONEY MARKET INSTRUMENTS

The criterion commonly used to delineate a money market instrument is maturity from date of issue of one day to three years. These securities have varying characteristics and those deserving emphasis for investment decisions are maturity,

yield, liquidity and risk.

### Government of Canada Treasury Bill

The treasury bill is the shortest term obligation of the federal government. Rather than carry interest coupons, they are sold at a discount. The yield, however, may not be treated as a capital gain, and is fully taxable. The chartered banks and investment dealers submit bids at an auction every Thursday, either on their own behalf or on a customer's order. The bills are allocated the next day on the basis of the highest offers until the weekly allotment is bought. Quite often banks and dealers will submit several bids at different prices to ensure that they at least obtain some bills, but at the same time do not pay an excessive price for a large amount. Maturities from date of issue are generally 91 and 182 days and denominations range from \$1000 to \$1,000,000.

The chartered banks and the investment dealers must also compete with the Bank of Canada, which holds a sizable amount of treasury bills maturing each week. Through its own offered price the Bank can have a substantial influence on the amount of bills held within and outside its own accounts and, in this way, help mitigate its monetary policy. Furthermore, the Bank submits a reserve bid for the full amount of the issue to prevent a boycott by other participants from unreasonably increasing the yield.<sup>9</sup> The Bank of Canada also deals in treasury

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<sup>9</sup>Bank of Canada, Annual Report, 1956, p.48.

bills on the open market, and will do so especially if it receives more or less than expected at the auction. To follow a neutral policy means that the bank attempts to win an amount equal to that maturing in its own portfolio each week. From the point of view of monetary policy, then, a decrease in the treasury-bill rate has the same effect as a decrease in the bank rate or an increase in chartered bank cash reserves.

Holdings of this security by the general public<sup>10</sup> climbed from \$24 million on December 31, 1953, to \$208 million on the same date in 1954, and this increase can be attributed mainly to the development described in the previous section of this chapter. In the last half of 1959, a peak was reached when the general public held as much as \$786 million, although by the last half of 1963, the general public's holdings were between \$500 million and \$600 million.<sup>11</sup> Fullerton attributes this downward trend to several possible causes.<sup>12</sup>

- (1) The rate on treasury bills establishes the level for the whole market with those of other money market securities just high enough to attract buyers away from them. It should be noted that treasury bills and short-term Government of Canada bonds are the

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<sup>10</sup>The Bank of Canada Statistical Summary uses the categories of Government, Bank of Canada, Chartered Banks and the General Public.

<sup>11</sup>Bank of Canada, Statistical Summary, January, 1964, p.19.

<sup>12</sup>Fullerton, op.cit., pp.178-9.

safest and most highly liquid money market instruments, but with greater sophistication, investors are more able to judge the safety of other securities and gain a greater yield.

- (2) As noted above, the discount on treasury bills is fully taxable, so there is a movement to short-term discount bonds which can partially avoid the tax.
- (3) The introduction in 1961 of the 15% withholding tax on treasury bill discount reduced the sale to non-residents.
- (4) Bills mature only on Fridays and each maturity is not always available, so these securities are less flexible than some others.

Holdings by the chartered banks, on the other hand, have increased substantially, especially in the year 1956, when they agreed to hold a 15% liquid reserve. Between the 1955 and 1956 year ends, the chartered banks increased their portfolio of treasury bills from \$430 million to \$743 million.

Table III shows the distribution of holdings on December 31, 1955 and January 1, 1964. It becomes evident from an observation of these figures that the treasury bill has evolved from a major vehicle of money market investment to an instrument mainly for the support of chartered bank liquidity.

While corporate interest in treasury bills is declining, the liquidity feature still continues to be an incentive. The Investment Dealers Association reported that at the end of

TABLE III

## DISTRIBUTION OF TREASURY BILL HOLDINGS

(Dollar figures in millions)

	December 31, 1955		January 1, 1964	
	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>
Bank of Canada	264	21.2	469	20.9
Chartered Banks	430	35.1	1291	57.1
Government	36	3.4	51	2.9
General Public	494	40.3	430	19.1
	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
Total	1224	100.0	2241	100.0
	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>

Source: Bank of Canada, Statistical Summery, January, 1964, pp.18-19.

1961 the dealers had 9.1% of the general public's holdings<sup>13</sup> and this, together with the chartered banks' share, provides a good market for the security. Further evidence of trading activity is given in Table II of the previous chapter.

#### Short Term Government of Canada Direct and Guaranteed Bonds

Table II also shows extensive market trading of short-term Government bonds. While they are traded actively, however, their risk of loss through interest rate fluctuation is greater than that on treasury bills because of their longer term to maturity. As of January 1, 1964, the general public held \$1472 million,<sup>14</sup> or 41% of the total outstanding of maturity up to two years. This is substantially larger than their holdings of treasury bills, which were \$430 million on the same date. The incentive to corporate investors is the low coupon discount feature which gives a net yield greater than that on treasury bills and the securities are particularly attractive when it is known that the temporarily idle funds will not be needed for a longer time.

It should be noted that long-term government bonds are occasionally bought as a short-term investment, and if not purchased at date of issue, there is an active market for them. A major criticism of the 1958 Conversion Loan was that

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<sup>13</sup>Investment Dealers Association, Brief to the Royal Commission on Banking and Finance. Appendix G, p.5.

<sup>14</sup>Bank of Canada, Statistical Summary, January 1964, p.18.

in their enthusiasm to sell the entire issue, dealers convinced their customers to buy longer term bonds in exchange for those of near maturity they held at the time. When the market broke, of course, a severe loss on sale was the unfortunate result.

### Provincial and Municipal Issues

In 1958, British Columbia pioneered the provincial treasury bill market and several other provinces followed in the early sixties. In early 1962, Manitoba and Saskatchewan each began to hold regular weekly tenders for \$1 million of three-month treasury bills with the intention, in each case, to bring the total amount up to \$13 million. Some of the weekly offerings were subsequently withdrawn, and because of the thin market, the bid has occasionally been refused. Nevertheless, the experiment, on the whole, seems to have been a successful one.<sup>15</sup>

Provinces have, in addition, borrowed heavily by the short-term discount bond of under two-year maturity, and the parity bond. Table IV shows the distribution by provinces of short-term direct debt as of March 31, 1962.

Secondary market sales were only 17% of the total amount outstanding (see Table II) and this indicates a narrow market after the original issue. As in the bond market generally, yields vary with the size and debt capacity of the province.

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<sup>15</sup>Canada, The Royal Commission on Banking and Finance (Ottawa: The Queen's Printer, 1964), p.321.

TABLE IV

## PROVINCIAL DIRECT DEBT - SELECTED ISSUES OUTSTANDING , MARCH 31, 1962

(Dollar figures in thousands)

	New found- land	P.E.I.	N.S.	N.B.	Que- bec	Onta- rio	Mani- toba	Sask.	Alta.	B.C.	Total
<u>Bonds of Maturity:</u>											
1 year	-	-	-	-	-	28000	-	8000	-	-	36000
1 1/2 years	-	-	-	-	-	-	2500	-	-	-	2500
2 years	-	1350	7500	-	-	24000	14000	1450	-	-	48300
2 1/2 years	-	-	-	-	-	1000	-	1000	-	-	2000
3 years	-	-	5000	-	-	21500	-	7950	-	-	34450
Sub Total	-	1350	12500	-	-	74500	16500	18400	-	-	123250
Treasury Bills of maturity of less than two years	-	-	-	-	19500	-	40562	8000	-	-	68062
TOTAL	-	1350	12500	-	19500	74500	57062	26400	-	-	191312

Source: Dominion Bureau of Statistics, Financial Statistics of Provincial Governments, 1961, Direct and Indirect Debt, Year Ended March 31, 1962, pp.10-11.

Many of the larger municipalities have entered the treasury bill market with repayments to come from tax receipts. It was estimated that approximately \$60 million of short-term paper was outstanding in mid-1962, about half of which was issued by Metropolitan Toronto.<sup>16</sup> The market for these issues is generally thin although corporate treasurers would ordinarily buy municipal treasury bills with the intention of holding them until maturity.

#### Finance Company Paper

The sales finance companies have grown considerably since World War II through the great upsurge in durable consumer buying, manifest principally in the automobile. These institutions finance the installment sales of durable goods by dealers and distributors to individual consumers, business, and industry. The largest is Industrial Acceptance Corporation with assets as of March, 1963, of \$742 million, and it is followed by Traders' Finance Corporation and General Motors Acceptance Corporation of Canada.

By keeping some of their debt in the money market, finance companies obtain the advantage of lower rates of interest normally available on short-term borrowings, and are able to reduce their debt quickly if the requirement for funds diminishes because of a decline in their receivables. Too much reliance here, however, would make their financial position

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<sup>16</sup>Ibid.

vulnerable during periods when short-term funds are in small supply. Such a case occurred at the end of December, 1963, when Industrial Acceptance Corporation raised their rate to 4% even for ten-day money. Previously, in December, ten-day paper had been issued by that company for rates varying from 3 1/8% to 3 1/2%.<sup>17</sup>

Fluctuations in the sales of automobiles cause their demand for short-term funds to vary widely, but even when they find they have enough notes outstanding, they will renew some of them to accommodate their regular purchasers. The rate of growth of finance companies has been huge and they present much opportunity for investment. As of December 31, 1963 their estimated demand and short-term notes payable in Canadian dollars amounted to \$731 million and this shows a substantial increase from the \$493 million at the same date in 1960.<sup>18</sup>

Of particular interest to the investor is the safety of these instruments, as he is now out of the realm of government obligations. The security is generally the company's own volume of installment notes receivable, having a face value in excess of the principal amount of its own liabilities.<sup>19</sup> The

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<sup>17</sup>Financial Post, December 28, 1963, p.3.

<sup>18</sup>Dominion Bureau of Statistics, Business Financial Statistics; Selected Financial Institutions, March, 1964.

<sup>19</sup>For example, all of I.A.C.'s notes (short- and long-term) are required by its trust deed to be secured by notes receivable to the extent of 112%.

backing these receivables offer, then, is of utmost importance and one is encouraged to note that losses of the largest finance companies are less than 1%. They also have substantial lines of credit at the banks, and because of the risk of large redemptions without sufficient new buyers, maturity dates are staggered. Furthermore, there is a constant inflow of cash from receivables.

The secondary market is relatively inactive, and a participant in the money market stated to the writer that a few dealers attempt to help out their clients if they find themselves needing cash, but that there is no guarantee of liquidity. Nevertheless, when a corporate treasurer has surplus funds available for which he knows the exact date on which they will be required, he can generally tailor the maturity date accordingly.

Rates offered by the different finance companies are normally in relation to their size, but the difference is minimal between the largest ones. Furthermore, interest rates can also differ between companies according to supply and demand conditions; for example, Traders' rates may be less than I.A.C.'s when the latter has more notes on the market or substantially increases its issue in a short space of time. This situation is analogous to the long-term rates of Quebec and Ontario bonds described in the previous chapter. Table V shows some of the companies involved and their rates as of December 31, 1963.

TABLE V

## FINANCE COMPANY RATES, DECEMBER 31, 1963

	<u>30 - 89 days</u>	<u>90 - 179 days</u>
Traders Finance Corporation	4 - 4 1/4%	4 3/8%
Industrial Acceptance Corp.	4 - 4 1/8%	4 1/4%
General Motors Acceptance Corporation of Canada	4 - 4 1/8%	4 1/4%
Laurentide Financial Corp.	4 1/8- 4 1/4%	4 1/2%
Pacific Finance Corporation	4 - 4 1/8%	4 1/4%
United Dominions Corporation	4 - 4 1/4%	4 3/8%

Source: McLeod, Young, Wier and Co., "Weekly Money Market Quotations".

## Commercial Paper

Commercial paper was first used in Canada in the early 1940's although its major stimulus came in 1958 when the demand for automobiles - and thus the supply of finance paper - was depressed and the treasury bill rate was very low. Also, since 1958, the prime rate on bank loans has seldom been below 5 3/4% and large corporate borrowers found that they could save about 2% per annum by issuing their own notes. Table VI gives evidence of the growth of this market since 1954.

Corporate paper usually bears a maturity from 30 to 90 days. It is often negotiated on a demand basis so the investor can obtain a liquid investment at a fixed rate of return. The instrument thus becomes especially attractive when the outlook for short-term rates is uncertain.

Those who have written on the subject express widely divergent views regarding the safety of corporate paper. Fullerton,<sup>20</sup> for example, expresses apprehension that few companies offer a prospectus defining the terms of the issue or provide any other security than the general assets of the company. Furthermore, there is often a minimum of investigation by the investment dealer or lending company. Sarpkaya,<sup>21</sup> on the other hand, emphasizes the large size of the issuing corporations and the trend toward greater

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<sup>20</sup>Fullerton, op.cit., p.181.

<sup>21</sup>S. Sarpkaya, "The Commercial Paper Market in Canada," The Canadian Banker, LXX (Winter, 1963), 110.

TABLE VI  
CORPORATE PAPER  
(Dollar figures in millions)

		<u>Number of Borrowers<sup>a)</sup></u>	<u>Outstanding Amounts</u> <u>Canadian</u> <u>dollars</u>	<u>Other</u> <u>currencies<sup>b)</sup></u>	<u>Canadian</u> <u>bank</u> <u>loans<sup>c)</sup></u>
December	31, 1954	7	20.8	6.8	215.5
	1955	8	27.7	4.0	230.3
	1956	9	28.6	3.3	299.8
	1957	9	24.0	2.3	355.7
	1958	22	98.5	-	279.6
	1959	17	92.9	1.8	366.2
	1960	33	162.8	3.0	338.1
	1961	45	226.8	4.4	262.9
	1962	47	267.1	22.4	291.1
June	30, 1963	51	306.8	9.6	229.9

Notes:

- a) The number of companies having paper outstanding on the date shown.
- b) Canadian dollar equivalents.
- c) Bank borrowing by all companies which have issued corporate paper. There is an understatement in earlier years because some companies only reported bank loans from the date of their first corporate paper borrowings.

Source: Royal Commission on Banking and Finance, Corporate Paper Survey, (Unnumbered Reprint).

scrutiny on the part of the investment dealer. The latter wrote more than a year later than the former, which would indicate the change in the meantime and more attention given by the dealers. The paper is supposedly backed by a bank line of credit although a banker expressed the opinion to the author that corporations often issue notes beyond this amount. There is yet to be a default by an issuer but fears of such have been expressed to the writer even by money market dealers. They rank corporate paper well below finance paper where safety is concerned unless they are well acquainted with the issuing firm.

One controller expressed surprise to the writer at the willingness of corporations to invest in each other and the dangers of the commercial paper market are substantiated by the following statement by a financial vice-president:

...From the lender point of view I am concerned that one of these days a borrower will default in payment. I do not think the investment community is doing an adequate job of following up on credit worthiness of a borrower. For example, I have never had an investment dealer enquire as to our "Total short-term and bank borrowings." This being the case, what control is there to ensure that a borrower does not borrow several times his bank credit line and then make an assignment in bankruptcy?

At the time this statement was made, the firm was doing one-half of its short-term borrowing by issuance of corporate paper and the other half through the bank.

One must conclude from the above remarks that a company contemplating investments in corporate paper should define specific standards of safety and carefully investigate the

borrowing firm in light of the standards established.

Corporate paper is one of two Canadian money market instruments of interest to the treasurer as a borrower. One of the chief advantages is that it provides him with expanded credit facilities at a cheaper rate than that offered by banks. He can compete quite effectively with finance companies and offer yields only slightly higher. In fact, when finance company supply is low, the notes of the better corporations can often be sold at the finance company rate. Judging by the commission paid to dealers (as low as  $1/8$  of 1% per annum), this market is an extremely competitive one; dealers even lose money on some transactions as their service and transferring costs exceed their compensation. Nevertheless, they are anxious to maintain their relationship with the borrower so they can handle the more profitable long-term bond or stock issue.

A second major advantage to the borrower is that it enables him to defer borrowing in the bond market by means of long-term obligations. The same gains from "rolling over" a portion of its debt in lower yielding short-term obligations accrue to the non-financial corporation as to governments and finance companies. A third advantage is that the corporation becomes better known to the dealers and investors who may later be of considerable importance to the distribution and placement of its securities.<sup>22</sup>

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<sup>22</sup>Ibid., p.112.

A major disadvantage to the borrower is that he must still maintain bank credit lines in order to maintain his credit standing vis-a-vis the dealer or lender. As noted above, these lines of credit are sometimes exceeded, but even that which is granted is not guaranteed; that is, banks are under no legal obligation to honor the line of credit. In a period of tight money, when banks must restrain their lending activities, they will reduce their lines of credit offered, and if conditions become particularly stringent, it is likely that they would be more anxious to accommodate their better customers who deal exclusively with them.

#### Chartered Bank Paper

The one institution that has suffered because of the development of the money market has been the chartered bank. Corporate lending has shifted somewhat from the current bank account to short-term investments while the development of the commercial paper market has been at the expense of bank loans. They do not even charge for the lines of credit that support corporate paper because to do so would create a legal obligation to honor them. To answer these developments, the banks have introduced three main instruments.

Deposit Receipts. Since 1961, deposit receipts have been offered for terms of 30 to 364 days in amounts of \$25,000 and over. Rates have tended to be about  $1/4$  of 1% below those on finance paper, although on occasion they have been as high. One bank, the Bank of Nova Scotia, began to take term deposits

in 1960 for periods of one to six years. This may be an attractive investment for a company which depends greatly on other services offered by the chartered banks. One retailer commented as follows in response to the questionnaire circulated by the author:

Our investments in the short-term market (bank deposit receipts) have been influenced by a very good corporate policy of always being on the best of possible terms with your bankers and creditors.

United States Bank Swaps. Banks compete among themselves by offering Canadian companies fully hedged United States dollar deposits. In this way a Canadian account can purchase American dollars and leave them on deposit with the New York branch of a Canadian bank. This mechanism often offers a rate of return greater than that paid by Canadian finance companies. The Canadian branches in the United States can pay the higher rate because they are not subject to Federal Reserve regulations or the 8% cash reserve required in Canada. Furthermore, the United States dollar deposits are not subject to the 15% withholding tax. This investment outlet is as safe as any other deposit with a chartered bank and with the hedging feature, is not subject to loss from foreign exchange fluctuations.

Banker's Acceptance. This latest development in the money market started in June, 1962, as an opening for the chartered banks into the commercial paper market. The chartered bank assesses the creditworthiness of the drawer and provides him

with an acceptance line of credit for which a fee is charged. Each accepted draft is returned to the drawer who then arranges to sell it to an investment dealer who, in turn, offers it for sale in the money market.<sup>23</sup> The drawer is responsible for payment at maturity, but since a fee is charged by the bank, the latter also incurs a legal contingent liability. Maturities range from 30 to 90 days and denominations are between \$100,000 and \$1 million. Essentially this security is the same as corporate paper except that it has the added protection of recourse to the accepting bank. A company can thus obtain accommodation at a lower yield to the ultimate investor than by the issuance of an ordinary promissory note, but the net cost is usually deemed unreasonable because of the 1 1/4% fee (on an annual basis) paid to the bank. To date the acceptance market has not met with very great success and as of July, 1963, it was estimated that the total volume was only between \$10 million and \$15 million.<sup>24</sup>

### Trust Company Paper

The recent growth of trust companies has made them a significant Canadian financial institution. From 1939 to 1960 savings with trust companies increased by 630% while chartered banks showed an increase of only 216%.<sup>25</sup> The main appeal of

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<sup>23</sup>Vladimir Salzyn, "The Canadian Treasury Bill Market," Canadian Public Administration, VI (September, 1963), 290.

<sup>24</sup>Rick Malt, "How Cash Can Go to Work for Even One Day," The Financial Post, July 27, 1963, p.15.

<sup>25</sup>The Trust Companies Association of Canada, Submission to the Royal Commission on Banking and Finance, p.65.

these companies is to the small saver but they were offering guaranteed investment certificates long before the rapid growth of the money market.<sup>26</sup> As of December 31, 1962, investment certificates outstanding amounted to \$1,026 million,<sup>27</sup> of which it was estimated that 40%,<sup>28</sup> or \$410.4 million, came from corporate investors. Data on seventeen trust companies at the end of 1962 show that 26% of their outstanding guaranteed investment certificates were due to mature in under six months, another 17% within one year, while only 2% were to mature five years hence. This illustrates extensive participation in the money market<sup>29</sup> and the increase in trust company investment certificates from \$322 million in 1955 to \$1026 million in 1962<sup>30</sup> indicates their growth with the market.

Their rates have been competitive with those on finance paper although somewhat less flexible, especially in periods of tight money.<sup>31</sup> The paper is even less liquid than finance company paper as the deposits are non-transferable. Failures in the last ten years are unheard of, but a bond dealer has expressed doubt to the writer regarding the management and objectives of some smaller companies under provincial jurisdiction. Nevertheless, deposits with larger trust companies can become particularly attractive to some provinces,

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<sup>26</sup>Ibid., p.76.

<sup>27</sup>Canada, The Royal Commission on Banking and Finance (Ottawa: The Queen's Printer, 1964), p.181.

<sup>28</sup>Ibid., p.182. <sup>29</sup>Ibid., p.182. <sup>30</sup>Ibid., p.181.

<sup>31</sup>Ibid., p.184.

municipalities and corporations which are restricted to "trustee" investments.

### Instruments Created by the Dealer

Through their own extensive operations the fifteen privileged dealers - those with sale and repurchase agreements with the Bank of Canada - add considerably to the flexibility of the money market through two major types of activity.

Buy Backs and Dealer Loans. When a dealer does not have the customer's desired maturity of a security in inventory, he can sell either short Canadas or treasury bills at a specific price with the agreement to repurchase at a certain time in the future. These are sold at a discount, so subject to the limitation described in Chapter II, the investor gains further by his earnings in terms of a non-taxable capital gain. Alternatively, to help finance their inventories, dealers borrow from institutions including non-financial corporations. This procedure is known as "country banking". At the end of 1963 it exceeded call and day-loan borrowings from chartered banks by almost \$100 million, and the total volume at times has exceeded \$400 million.<sup>32</sup> The disadvantage to the investor of low yield is offset by their usual callable feature and the double security of the dealer and the instruments in his inventory.

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<sup>32</sup>Ibid., p.305.

Back to Back. The dealer negotiates this transaction when a lending corporation is not authorized to deal with other non-financial corporations but can accept trust company guarantee instruments. The lending company thus loans funds to the trust company from which the borrower attains accommodation.

### III. INTERNATIONAL MONEY MARKET INSTRUMENTS

Opportunities are presented outside the country for the corporate borrower or investor and almost every firm that engages in international trade must participate to some extent in the international money market. There is, of course, the added complication of foreign exchange, so a brief consideration of this market will be a useful digression.

The Foreign Exchange Market. At the time of this writing the Canadian dollar is pegged at \$92.50 U.S. The value may fluctuate but within very narrow limits of the pegged rate because of stabilization activities of the Bank of Canada. There is no guarantee that the rate will remain fixed, however, and appropriate measures to safeguard the corporation are often undertaken.

In an ordinary exchange transaction, a foreign currency is purchased or sold for payment within a few days. This is spot exchange and dealings are carried out through banks. Forward exchange differs in that payment on a contract made now will take place on some future date. When a treasurer enters the forward market the process is known as "hedging"

because he is guaranteed that on some future date he will be paid in the same dollar equivalent as exists at present. He must, of course, pay a fee to the bank for relieving him of this risk. The U.S. bank swap discussed above is an example of an international transaction where hedging occurs.

International Money Market Investment and Borrowing.

In addition to bank swaps, the Canadian investor may find it profitable to invest in American treasury bills when their rates are higher than those in Canada. This does not occur very often, however, and Canadian rates usually follow those in the United States at a slightly higher yield. If the U.S. rate does go above the Canadian it would still have to be enough to compensate for the cost of hedging. Even with the lower rate, however, a firm may find such an investment attractive when it has both income and expenditures in the United States. For example, if it sells goods in the United States and will later need the money for a purchase, rather than incur the cost of two foreign exchange transactions, it may invest the money in treasury bills, or any other short-term American security in which the treasurer has confidence. Alternatively, if the purchase comes first, short-term borrowing by the issuance of commercial paper may be undertaken and liquidated when the revenues come in. No hedging is required as the same dollars are used for the loan and purchase.<sup>33</sup>

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<sup>33</sup>Greenshields Incorporated, A Memorandum on Short-Term Borrowing Through the International Money Market prepared for Rolls-Royce Limited, (Unnumbered Reprint), p.5.

These transactions, of course, are also feasible in the United Kingdom or any other country where a money market exists.

A money market instrument of especial importance to a firm engaged in foreign trade is the letter of credit. It is a form of banker's acceptance and finds much more extensive use than the domestic acceptance noted above. This instrument is utilized when a bank accepts the obligation for payment of a time draft or bill of exchange. After the customer has sent his purchase order, he forwards a formal application for a letter of credit in favor of the beneficiary, the exporter, who is paid upon shipment by the accepting bank. The importer's bank, known as the "opening bank" will ordinarily write an irrevocable letter of credit, by which it authorizes the exporter to draw on the bank account of the importer for a sum not exceeding the value contracted between the parties. Shipping documents, including the bill of lading which must be presented to the shipper for receipt of the goods, will be sent to the opening bank and they will be surrendered to the importer only when he has complied with the stipulations of payment or credit. Because of the complexity of this instrument, the exporter also usually deals with a bank, which is known as the "confirming bank". This bank negotiates on his behalf and gives the exporter assurance that if he presents his draft and documents in order, they will be honored, regardless of what may have happened to the foreign importer and opening bank in the meantime.

It is clear from the above discussion that the reason for the existence of this instrument is the difficulty of assessing the creditworthiness of a foreign customer. With increased dealings, better communications, and greater confidence in the foreign firm, this cumbersome method of transaction is replaced by open accounts as in ordinary domestic sales.

A market for dollar deposits in Europe, the Euro-dollar market, has grown in the late fifties largely because of the wide acceptance of the American dollar for international transactions. Euro-dollars are U.S. dollars on deposit with banks outside the United States and often the attraction of higher interest rates to the investor than American banks may under Regulation Q of the Federal Reserve Act. The transactions are normally hedged and the dealings take place with foreign banks. It can thus become quite complicated and a major difficulty is that of assessing the creditworthiness of the borrower.

#### IV. SUMMARY AND CONCLUSION

Unfortunately, statistics on outstanding amounts of the various money market instruments are extremely sketchy. Those presented above come from a variety of sources and are, in many cases, estimates. A summary of some of the paper outstanding on various dates is presented in Table VII. The predominance of Government of Canada issues and those of banks and trust companies is noteworthy. This is

TABLE VII

## AMOUNT OUTSTANDING OF SELECTED SHORT-TERM PAPER

(Dollar figures in millions)

<u>Instrument</u>	<u>Date</u>	<u>Out- standing</u>
<u>Government of Canada</u>		
Treasury Bills - Total	December 31, 1963	2240
- Held by General Public	December 31, 1963	431
Short-term Bonds (under two years maturity)		
- Total	December 31, 1963	3548
- Held by General Public	December 31, 1963	1471
<u>Provincial</u>		
Bonded debt up to three years maturity	March 31, 1963	17
Treasury Bills less than two years maturity	March 31, 1963	68
<u>Municipal</u>		
<u>Trust Companies</u>		
Deposit Receipts and guaranteed investment certificates	December 31, 1963	1169
Sales Finance and Consumer Loan Companies - Demand and short-term notes payable (Canadian dollars)	December 31, 1963	731
Corporate Paper	June 30, 1963	229.9
Investment Dealers "Country Banking"	December 31, 1963	350

Sources: (1) Bank of Canada, Statistical Summary, January, 1964.

(2) Dominion Bureau of Statistics: Business Financial Statistics (Selected Financial Institutions; and Financial Statistics of Provincial Government).

(3) Canada, Report of the Royal Commission on Banking and Finance (Ottawa: Queen's Printer, 1964), p.305

supported by Tables XXVI and XXVII in the Appendix of the thesis. Yields on the securities appear in Table VIII.

Most of the instruments discussed in this chapter have come of age within the last decade. Full maturity of the Canadian money market has not yet been reached and as corporate treasurers are becoming more sophisticated, any action taken upon the recommendations of the Royal Commission on Banking and Finance will be of great interest.

In general, the members of the Royal Commission noted that several institutions, including trust companies and sales finance companies, have become major depositories of liquid financial assets and thus are increasingly assuming a role similar to that of the chartered banks. They, therefore, recommended that cash reserve requirements be more stringent for these institutions and less stringent for banks; that the 6% ceiling on interest charged by banks to corporations be removed; and that all financial institutions be subject to increased government scrutiny and regulation.

The net effect of the recommended action will be to aid the competitive position of the chartered banks. Absence of the 6% loan interest ceiling would allow them to charge according to the creditworthiness of the borrower and thus lower the prime loan rate. Combine this with increased regulation of other institutions and the chartered banks may well have more to offer to the corporate borrower and lender in the money market.

TABLE VIII

## YIELDS OF SELECTED MONEY MARKET INSTRUMENTS, JANUARY 30, 1964

<u>Instrument</u>	<u>Yields</u>
<u>Canada Treasury Bills</u>	
91 days	3.77
182 days	3.94
<u>Finance Company</u>	
30 - 89 days	3 3/4 - 4
90 - 179 days	4 - 4 1/8
180 - 269 days	4 1/4 - 4 3/8
270 - 365 days	4 3/8 - 4 5/8
<u>Prime Corporate Paper</u>	
24-hour demand	3 5/8 - 3 3/4
30 days	3 3/4 - 3 7/8
<u>Bankers' Acceptances</u>	
Demand	3.50
30 days	3.60
60 days	3.75
90 days	3.85
<u>Trust Companies</u>	
30 - 89 days	3 3/4
90 - 179 days	4
180 - 269 days	4 1/4
270 - 364 days	4 1/2
1 yr. - 3 yrs.	4 3/4 - 5

Source: McLeod, Young, Wier and Company, "Weekly Money Market Quotations".

In conclusion, the Canadian money market, while still in its development stages, does offer a great deal to the corporate treasurer as a means of ameliorating his profits through improved cash management. Techniques for better use of this vehicle, factors affecting such activity, and current attitudes and actions of Canadian corporations will constitute the discussions of Chapters IV and V.

## CHAPTER IV

### TECHNIQUES OF MONEY MARKET INVESTMENT AND BORROWING

The investment and borrowing outlets in the money market permit much scope for the corporate treasurer to ameliorate his company's profits. This chapter shall consider methods available to use the market most effectively, and policies and attitudes of several active participants.

#### I. CHANGES IN MONETARY CONDITIONS

Causes of interest rate fluctuations have been noted in previous chapters. Such movements are of particular concern to the corporate investor who wishes to gain the greatest yield from managing his idle balances, and careful scrutiny can result in rewards simply from the timing of purchases and adjusting of maturities correctly. Some judgment regarding probable trends is required and when extensive trading is contemplated, the liquidity inherent in Government of Canada treasury bills renders them the most useful vehicle. To aid their clients in such manoeuvres, the money market dealers publish circulars. Some such as that published by McLeod, Young, Wier and Company, place emphasis on the yields of the various instruments, while Greenshields and others stress a more detailed verbal account of the trends and their causes.

Before noting some trends and deducing the appropriate action to be taken in light of them, it will be useful to

cite a typical action and the appropriate reaction. Suppose a firm obtains a large inflow of cash in a particular week and will not require it for corporate purposes until six months hence. An example of this type of company is a credit rating firm which obtains the bulk of its receipts right after it sends out its yearly ratings to customers. Another example might be a firm which has engaged in long-term financing but does not require some of the funds until a later date. Suppose further that the board of directors of the firm has limited its investments to treasury bills and the dealer advises the treasurer that rates are likely to rise by  $1/2$  of 1% within the next week. If the investment is \$1 million, the annual before-tax yield difference for the 6-month bills would be \$5000; the after-tax difference (with a 50% tax rate) for the six-month period would thus be \$1250. The yield will actually be only  $\$1250 - (1250 \div 26)$ , or about \$1200, because the bills will only be held for twenty-five weeks. An assumption is that the one-week bills will be capable of being sold at a price nearly equal to the original. The gain can be augmented further by investing the \$1 million for the first week. Changes are rarely as dramatic as the example noted here, although in the June, 1962 financial crisis, before-tax yields on six-month bills rose almost 2% in a month. After a rise from 3.83% to 4.12% between June 6 and June 13, the alert treasurer contemplating investment might have speculated on the trend and waited until the following week to buy at 5.16%, or even until June 27, to obtain the yield of a near peak of

5.73%. Further implications of short-term price and yield movements will be discussed in the following section.

The causes of movements in long-term interest rates were noted in Chapter II. It is basically the same factors which cause short-term rates to fluctuate, but there is less time to assess a trend and action must be taken more quickly. The question is no longer whether to float a long-term bond issue now or next year, but rather, whether to place funds in treasury bills today, tomorrow, or next week.

As in the long-term market, one of the more important influences is the activity of the Bank of Canada in the open market. This has already been discussed adequately. Another factor to note is the yield pattern in the United States and United Kingdom. For example, on February 28, 1964, when inflationary tendencies and external pressures on the pound caused Great Britain to raise its bank rate from 4% to 5%, yields on Canadian government securities, including treasury bills, also rose.<sup>1</sup> The British action had been predicted two weeks earlier<sup>2</sup> and although the investment dealer making the prediction referred to it as "rumour," mention in its weekly circular indicated the possibility for rates to increase. Other paper follows the treasury bill pattern so the corporate treasurer should have stayed liquid if advised that the cost of doing so (in terms of lower yields for near-maturity instruments) would be more than compensated by the

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<sup>1</sup>Greenshields Incorporated, Canadian Money Market Review, March 3, 1964.

<sup>2</sup>Ibid., February 18, 1964.

higher rates forthcoming.

A final factor which affects the money market rates to a substantially greater extent than long-term yields occurs at the end of the year. It was noted in the previous chapter that at the 1963 year end short-term money was scarce. This situation was not limited to 1963 and is likely to occur in the last week of every year. The reason is that many corporations wish to liquidate their marketable security portfolio and show as much cash as possible on the balance sheet. Regardless of the ethics or advisability of such a policy, it does exist, and rates on one- or two-week paper can become very attractive as issuers require the cash to fill the gap until balance sheet date. A corporation which does not follow this policy, or one which closes its books at another date, may find rates extremely attractive for these few days, and profitable to tailor its short-term investment maturities accordingly.

Other changes in short-run monetary conditions are generally the same as those in the long run. Normally, the former precedes the latter but if participants in the long market foresee changes in the underlying forces and anticipate the action that will likely be taken by the central bank, the long market may change direction before the short. For example, long-term rates in Canada fell very sharply in 1957 and rose in 1958 prior to the reversal in short-term rates. Therefore, participants in the money market might look at the longer-term market as yet another hint as to future fluctuations.

## II. THE YIELD CURVE AND TRADING PROFITS

The yield curve described in Chapter II can play an important role for the treasurer who wishes to take maximum advantage of treasury bill dealings. Because of the normal pattern of lower yields on outstanding securities closer to maturity, a technique known as "riding the yield curve" can be a rewarding pursuit. This action consists of buying treasury bills and selling them on the market before maturity. Suppose, for example, that someone bought a 182-day bill on September 19, 1963 for an annual after-tax yield of 1.83%. He could have sold it three months later on December 19, 1963 at the market yield of 1.77% or 1.81%<sup>3</sup> after the dealer was compensated for his services, for an extra .02% for the three-month period, or .04% on an annual basis.<sup>4</sup> Add to this the after-tax 1.83% on the bill he held for the three-month period and the annual rate of return is 1.87%.

This technique does have its limitations as the Bank of Canada lends some support to these rates through its reserve bid at the weekly treasury bill tender. Furthermore, if interest rates rise substantially while the bill is held,

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<sup>3</sup>McLeod, Young, Wier and Company Ltd., "Weekly Money Market Quotations."

<sup>4</sup>The determination of this rate can best be explained in dollar terms. If he bought a \$100 bill at 1.83%, the annual yield would be \$1.83; but if he sold it at maturity (that is, after one-half year) he would receive only one-half of the annual interest, or \$.915. Likewise, the gain in the example of .02% becomes \$.01 for the six-month bill. If he continues this exercise all year, making the same gain of \$.01 four times, the annual gain is \$.04, or .04%. It is assumed that this interest is not compounded.

the natural drop in yield caused by approach toward maturity may be deleted. In fact, Figure 2 shows that the above example was partially such a case. That is, interest rates had generally risen from September 19 to December 19, but not enough to completely offset the effect of the yield curve.

It should be noted that this technique is much more practicable in the United States than in Canada as treasury bills are no longer such an important money market investment for the corporate treasurer (see Table VII). In the United States, on the other hand, they constitute about 70% of money market securities.<sup>5</sup> They are held for quarterly tax payments while Canadian companies must pay monthly. In Canada the difference between the dealer bid and asked yields was .06% on September 19 for 182-day bills, while it was .50% on 7-day bills.<sup>6</sup> Therefore, while the short end of the September 19 yield curve persisted through the following week, and it may have appeared extremely profitable to buy a 14-day bill to sell a week later, the high dealer spread would more than offset any gains from "curve riding".

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<sup>5</sup>D.P. Jacobs, "The marketable Security Portfolios of Non-Financial Corporations, Investment Practices and Trends," The Journal of Finance , XV (September, 1960), 343.

<sup>6</sup>The reason for the higher spread in terms of yield on shorter term bills is that the shorter the term to maturity, the less difference in price for a given difference in yield. (See Chapter II, Footnote 9, p.16).

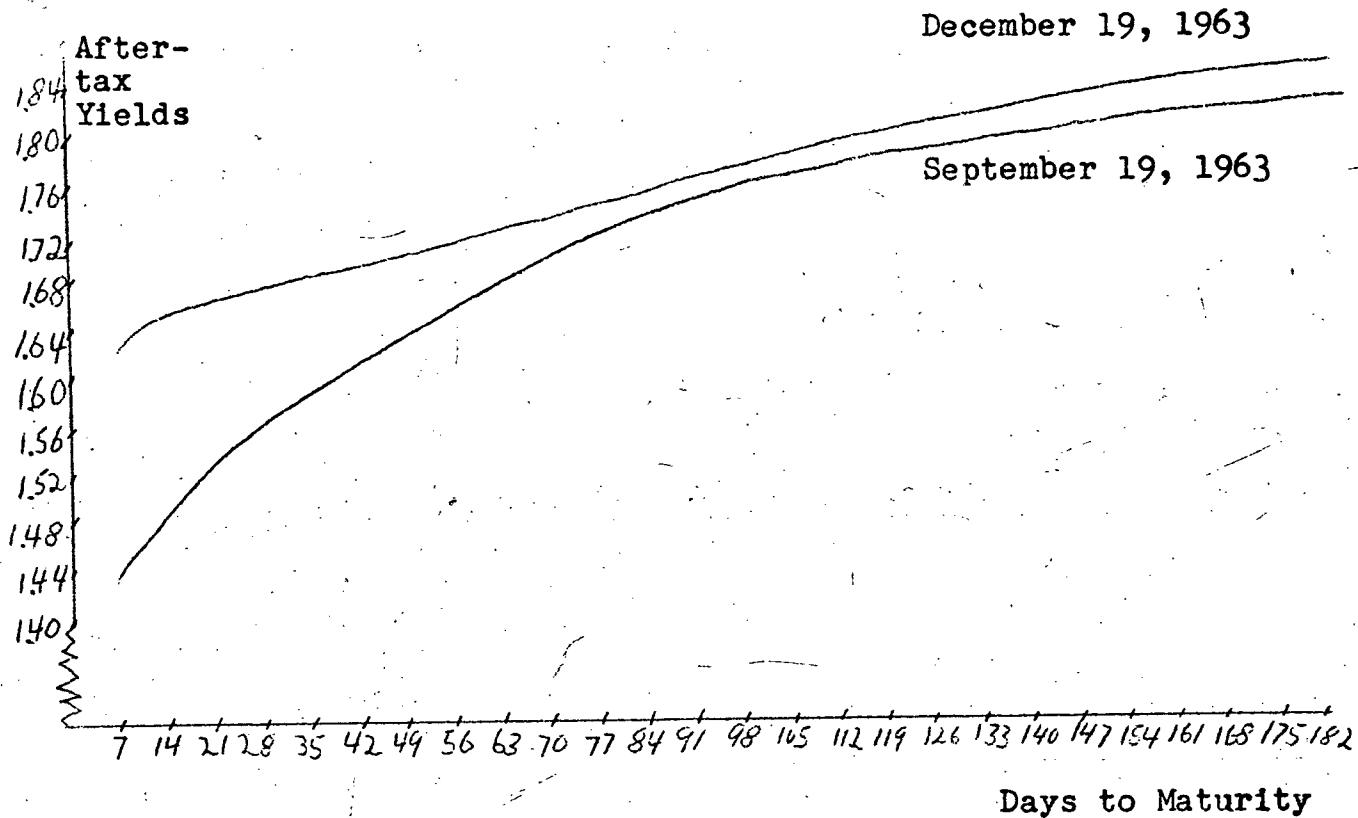


FIGURE 2

SELECTED AFTER-TAX YIELD CURVES (DATA FROM  
McLEOD, YOUNG, WIER AND COMPANY  
LIMITED, "WEEKLY MONEY  
MARKET QUOTATIONS")

### III. LONG TERM RATES AND SHORT TERM INVESTMENT

Policies regarding the composition of capital structures vary widely between firms. Some prefer to have a high percentage of their capital in debt while others choose to minimize or eliminate long-term debt. This depends largely upon considerations of leverage versus equity base. Any firm that desires some debt is concerned with its cost and naturally wishes to float a new issue or refund an old one at the lowest debt-servicing costs possible. The timing of such an issue is thus an important factor in light of the fluctuating pattern of long-term interest rates, and it may be viewed as less costly for a constantly expanding firm to issue some debt even when it is not immediately required.

Suppose that a firm expects to need funds in about a year for expansion of facilities but at the present time long-term interest rates are generally regarded as low, perhaps because of a central bank monetary policy of ease, or because of a temporary economic slump. Under these circumstances it can presently float a twenty-year issue with no sinking fund for \$10 million at a rate of  $4\frac{1}{2}\%$ , and is advised that a year hence the yield may have to be raised to 5%. The firm has the choice to wait until the funds are needed and thus probably pay a higher interest rate for them, or to sell securities immediately and invest the proceeds temporarily in the money market.

The second method can be advantageous, for while the firm will be losing the differential between higher borrow-

ing than lending rates for one year, it will gain the differential between the borrowing rates for the entire life of the issue.

The advantages can be illustrated with an example using the assumptions outlined above. Since in either case it will want a maturity of twenty years after the start of the project, its choice is to borrow now for twenty-one years or a year hence for twenty years. The first alternative offers an annual before-tax saving of  $1/2$  of 1%, or assuming a 50% tax rate,  $1/4$  of 1% after taxes. In dollar terms this is an annual after-tax saving of \$25,000. Assuming that the company's after-tax normal rate of return is 6%, the discounted savings taken one year from now, when the project begins, for the following years will be \$286,750 (or  $25000 \times 11.470$ ). The present value of this amount received one year hence is \$270,405 (or  $286750 \times .943$ ), and this is the present value of the savings made by the alternative.

One must next consider the costs. For the following year, the company will be paying  $4\frac{1}{2}\%$  before taxes on the \$10 million with which it can earn only 3% in short-term investments. This is an after-tax cost of  $3/4$  of 1%, or \$75,000, of which the present value is \$70,725. Thus the net present value of the savings they can achieve by this alternative is  $\$270,405 - \$70,725 = \$199,680$ .

This, of course, is a hypothetical and simplified example, but the essence of the argument is still valid: The higher cost of borrowing lasts the entire life of the

bond issue while the extra cost from lending at a lower rate than borrowing should only last a short time.

#### IV. CASH MANAGEMENT

Profit from money market investment depends largely on the efficient use of idle cash. The treasurer must therefore determine how much cash he will have on hand on particular dates and then how much is needed for corporate purposes. The residual is invested in the money market. Each of these areas will be considered in turn.

Cash Forecasting. In almost every firm there is some degree of cash forecasting. The extent may only be an educated guess on the part of a treasurer but if the maximum use of cash is to be achieved a more detailed and formal prediction is required. Often cash forecasting is part of the profit plan, where profit objectives are set for the firm, and operations are planned to produce the desired results. Where such a budget is used as a control as well as a planning device, it is easier for the treasurer to maintain reliable forecasts as objectives are altered according to changing circumstances. Some firms plan annually although additional shorter planning periods provide for more efficient utilization of the cash account. Therefore, it is becoming more common to plan monthly, weekly, and even daily.

The first operation in a popular method of cash forecasting is to determine the cash receipts from sales. Credit sales are subtracted from total sales in a period to establish the expected cash sales and added to this figure is the

expected collection of accounts receivable. Proceeds from the sale of used equipment and other income items such as interest and dividends received are then added to obtain a figure for the total cash receipts anticipated. The next step is to determine the outlays by adding cash purchases of materials and equipment to payment of outstanding trade accounts, wages, administrative expenses, taxes, dividends, interest, and bond redemptions. Other items, such as the sale of stock or bonds expected in a period, are also included and the net receipts minus the net payments gives the net inflow or outgo. Finally, the balance or deficit at the beginning of the period is added or subtracted to estimate that at the end.<sup>7</sup> Presumably the company has determined its minimum cash position so it can decide how much to plan on borrowing or investing temporarily.

Suppose, for example, that a company has decided upon a minimum cash balance of \$10 million and that it prepares monthly forecasts for six months ahead and extended appropriately every month; that is, at the end of December it plans until June and at the end of January it extends its plans until July. Suppose further that (1) at no time during the six-month period from January until June is the cash balance on hand expected to fall below \$15 million; (2) it will be as high as \$20 million throughout every month

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<sup>7</sup>P. Hunt, C.M. Williams and G. Donaldson, Basic Business Finance (Homewood: Richard A. Irwin, Inc., 1961), pp.151-157.

except April; and (3) at the end of June the expected cash balance will be reduced again to \$10 million.

The most logical alternative would seem to be to invest \$5 million in a six-month note and \$5 million in a three-month note, the latter to be liquidated at the end of March and re-invested at the end of April. Table IX shows the profits to be gained by this approach using treasury bills and their yields as of December 31, 1963. This shall be referred to as Investment Policy A.

An alternative approach is Investment Policy B whereby the company invests the entire \$10 million in six-month notes and plans to liquidate \$5 million for the month of April. Table X shows the results from this attack. It should be noted that December 31 rates are used in both cases and an assumption is therefore that interest rates will not change between December and April. If such a change is expected the figures should be altered accordingly, and in particular, the gain from "curve riding" in Investment Policy B may be a loss if interest rates rise substantially.

There is yet a third possible approach which shall be designated as Investment Policy C. This consists of investing the full \$10 million in six-month bills and leaving it invested for the entire period. When the money is needed in April, a 30-day promissory note will be issued. It is assumed that the company has a high credit rating and that the prime corporate paper rate of December 31, 1963 will prevail through April, 1964. This rate is  $4 \frac{1}{8}\%$  and when

TABLE IX

## PROCEEDS FROM INVESTMENT POLICY A

Annual after-tax yield for 6-month Treasury Bill	1.89%	
Amount invested for 6 months	\$5 million	
Proceeds from Investment		\$47250
Annual after-tax yield for 3-month Treasury Bill	1.78%	
Amount invested for 3 months	\$5 million	
Proceeds from Investment		\$22250
Annual after-tax yield for 2-month Treasury Bill	1.73%	
Amount invested for 2 months	\$5 million	
Proceeds from Investment		\$14750
		<hr/>
Net Proceeds		\$84250
		<hr/> <hr/>

TABLE X

## PROCEEDS FROM INVESTMENT POLICY B

Annual after-tax yield for 6-month Treasury Bills	1.89%	
Amount invested for 6 months	\$5 million	
Proceeds from Investment		\$47250
Amount invested for 3 months in 6-month Bills	\$5 million	
Proceeds from Investment		\$23625
Annual after-tax yield for 2-month Treasury Bills	1.73%	
Amount invested for 2 months	\$5 million	
Proceeds from Investment		\$14750
Gain from "Riding the Yield Curve" (per analysis in previous section)	$\frac{.0007 \times \$5 \text{ million}}{2} = \$ 1750$	
Net Proceeds		<u>\$87375</u>

the dealer commission of  $1/8$  of 1% is added, the net before tax cost to the company is  $4\frac{1}{4}\%$ , or 2.04% after taxes.<sup>8</sup> Table XI shows the results of such a policy.

It would seem from the above analysis that Investment Policy B is the most appropriate. However, it is based upon the assumptions that (1) the only vehicle is the treasury bill; (2) that the December 31, 1963 yields on treasury bills will hold through April, 1964; (3) that the yields on corporate paper will also remain constant; and (4) cash forecasts are only made on a monthly basis. These assumptions may or may not be reasonable at the time an investment is contemplated. As noted previously, the treasury bill is not the only method of investment and, in fact, far from the most important one. Other papers offer higher yields and are likely to be used instead. The advantages in yield, however, may be offset by a sacrifice in liquidity and even if the paper can be sold before maturity a significant loss on sale may be the result. Thus, Investment Policy B may be inappropriate. In such a case this policy should be examined in relation to Investment Policy A or C using finance or other paper. The second and third assumptions may also not be valid. Even in the example cited above, interest rates were rising from September to December, 1963, and if this trend is expected to continue profits from riding the yield

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<sup>8</sup>McLeod, Young, Wier and Company Limited, "Weekly Money Market Quotations." It is assumed in all cases in the examples noted in this section that the tax rate is 52%.

TABLE XI

## PROCEEDS FROM INVESTMENT POLICY C

Annual after-tax yield for 6-month Treasury Bills	1.89%	
Amount invested for 6 months	\$10 million	
Proceeds from Investment		\$94500
Annual after-tax cost of Corporate Paper	2.04%	
Amount issued for 1 month	\$5 million	
Cost of the Issue		\$ 8500
Net Proceeds		<u>\$86000</u>

curve will be reduced or eliminated. Furthermore, they are investing for six months at lower yields than will be later obtainable. Both of these factors will increase the relative advantages of Investment Policy A.

If the fourth assumption, monthly cash forecasts, is not valid the entire analysis may be altered. For example, the company may find that funds are not required throughout the entire month of April but only the last two weeks. The issuance of corporate paper for such a short time may not be feasible so the costs of a bank loan should be investigated; or the type of paper bought may not be attainable for maturity except at 30, 60, or 90 days. In the latter case, the possibility of buying the paper for a three-month period and then investing in a more liquid instrument for the two weeks of April should be examined. It is obvious that more precise cash forecasts will increase the number of possibilities and maximize the gains possible from investment by keeping the funds more fully utilized in the paper.

One must conclude from the above remarks that there is not one policy that is universally better than any other. The important point is that it is useful for an analysis such as the one made above to take place before the investment. In the questionnaires circulated by the author, comments were requested. Many respondents expressed pride in their extensive cash forecasting but none mentioned any formalized approach to decide upon alternatives. One firm did state that in accordance with their cash forecasting it tailored its maturity

dates. Most of its payments were mailed on the twentieth of every month, so when receipts came in throughout the month, they were invested in paper to mature on the twenty-first, twenty-fourth and twenty-fifth. However, it did not mention consideration of other alternatives, such as remaining fully invested for a longer time and borrowing to meet these payments. Therefore, an approach consisting of a consideration of alternatives in light of future expectations and types of authorized investment media is recommended here.

Cash Economizing. In the analysis above the minimum cash balance was given; determination of this figure is an important decision. If the firm in the example was actually able to work with a minimum balance of \$5 million instead of \$10 million, a large sum of potential gains from money market investment was foregone.

With the large postwar economic expansion, additional working capital needs have made firms aware that they could generate a volume of sales with much less cash than they had earlier anticipated. In poor business years when inventories were reduced and there was more cash available, the treasurer was then able to use the excess. Garvy explained this in terms of the "ratchet effect": a need caused an action, but once the need disappeared the action remained.<sup>9</sup> In spite of a rise in interest rates during an expansion, rather than

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<sup>9</sup>Garvy, G., Deposit Velocity and Its Significance. (New York: Federal Reserve Bank, 1959), p.70.

encourage corporate security investment, additional capital investment took place. This, in turn, created a corporate demand for money which pushed interest rates up further. With money harder and more expensive to obtain, the corporation, out of necessity, worked with a smaller cash/sales ratio than it had previously, and thus learned to economize cash. Then when the economy's growth slowed down, the treasurer learned to work with less cash and thus could invest in short-term securities the surplus not needed.

To examine the validity of the above argument in light of recent Canadian events, Table XII shows the cash/sales ratios in recent years. One will note that the years 1951, 1956 and 1959, in which there were the most rapid rise in sales, coincided with the most rapid declines in cash/sales ratios; and in the years of slowed growth in sales (1952, 1954, 1957, 1958, 1960 and 1961), the ratios all climbed or showed minimal decreases from the previous years. Table XIII shows further that manufacturing firms have had lower cash/sales ratios than non-manufacturing firms in good years and higher ratios in lean years. This may be attributed to the larger size and greater susceptibility of the former to cyclical swings.<sup>10</sup>

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<sup>10</sup>Bruce King MacLaury, "The Canadian Money Market, Development and Impact" (Doctoral Dissertation, Harvard University, 1961), p.245.

TABLE XII

## SALES AND CASH OF CANADIAN NON-FINANCIAL CORPORATIONS

(Millions of dollars; percent)

<u>Year</u>	<u>Cash</u>	<u>Sales</u>	<u>Cash/Sales</u>
1950	\$1225	\$ 25827	4.9%
1951	1134	30647	3.7
1952	1267	33245	3.8
1953	1349	36862	3.7
1954	1515	37968	4.0
1955	1637	42311	3.9
1956	1547	48461	3.2
1957	1571	50399	3.1
1958	1706	50811	3.3
1959	1654	55496	2.9
1960	1597	57427	2.8
1961	1789	59452	3.0

Notes: These statistics are totals for all fully tabulated corporations minus "finance, insurance, and real estate" category. Taxation Statistics.

Taxation year includes all corporations whose fiscal year ends within the stated calendar year.

Source: Canada, Department of National Revenue, Taxation Division, Taxation Statistics.

TABLE XIII

## SALES AND CASH OF CANADIAN MANUFACTURING CORPORATIONS

(Millions of dollars; percent)

<u>Year</u>	<u>Cash</u>	<u>Sales</u>	<u>Cash/Sales</u>
1950	\$ 645	\$ 12853	5.0%
1951	502	15360	3.3
1952	553	16267	3.4
1953	604	17756	3.4
1954	729	17758	4.1
1955	747	19805	3.8
1956	602	22213	2.7
1957	632	22111	2.9
1958	753	21774	3.5
1959	668	23824	2.8
1960	641	24680	2.6
1961	725	25289	2.8

Source: Canada, Department of National Revenue, Taxation Division, Taxation Statistics.

It was mentioned that in years of rapid growth when interest rates were high, there was a great deal of capital investment. This situation exposes an interesting paradox, as just when money market securities were most attractive, the corporation had less funds available to invest in them. Of course, it also had less cash relative to sales. The conclusion, then, is that high interest rates were not necessarily the cause of money market investment, and in fact, the relationship should be an inverse one. The treasurer should have taken note of the "ratchet effect," however, and realized that he was able to work with less cash than he had earlier supposed. Finally, when his sales growth slowed down and investment opportunities in his own company decreased, he could have maintained the previous cash/sales ratio, and with the excess cash, obtained some return from the money market. At this time money was likely to be easier and his returns not as great as before, but the opportunity to invest did exist.

The last condition, that of easier money with slowed expansion, is not always a valid one. In fact, during recent years the Bank of Canada, through its monetary policy, has maintained interest rates at a high level in spite of slowed expansion. Therefore, relatively high interest rates have coincided with availability of funds for temporary investment.

The most useful tool to aid cash economizing is the cash budget similar to that described in the previous section. Other methods include centralizing of bank balances, improved

communications between branches, and improved synchronization of trade payments and receivable collection.

## V. EMPIRICAL OBSERVATIONS

Much of the short-term borrowing and investment activity of a particular firm is tempered by the character of the firm itself or the industry of which it forms a part. These factors shall be discussed in the following chapter. This part shall consider some of the investment and borrowing policies of Canadian firms to give an impression of attitudes of several financial executives regarding the money market, and what is currently being done by some firms to take advantage of the opportunities.

### Cash Forecasting

The most detailed reply to the questionnaire regarding cash forecasting in conjunction with money market activity was submitted by a large industrial corporation with total assets exceeding \$150 million. The assistant treasurer made the following comments after stating the large scope of his firm's operations:

...Thus to gain the maximum benefit from surplus funds (or conversely to avoid having idle funds in the bank at no interest), to meet short-term requirements, for additional funds at the lowest possible cost, and to be forewarned regarding the need for additional, more permanent capital it is necessary to prepare plans ranging in term from one month to five years. These financial plans are developed from short- and long-term operating forecasts, projected capital expenditures and other estimates of the future, most of which are compiled as part of a regular routine.

A long-term forecast gives us an indication of the cash which will be generated internally, the demands on it for capital expenditures, the amounts which will be available for investment or debt repayment, and is one of the factors taken into account for dividend policy. The one-year cash forecast is a more detailed plan by months for the next quarter and by quarters for the balance of the year. It is revised every three months. From this and data on monthly variations, we can judge whether investments should be for, say, 30 or 60 days, or extended into six to nine months. We can also judge from this whether it would be preferable to select some easily saleable security rather than some fixed term commitment which would result in a loss if additional funds were needed in an emergency. The final measures consist of a forecast for one month which is developed in considerable detail and a daily cash statement prepared in similar form. These latter elements in cash planning provide us with a daily check on our progress against the plan and allow us to invest cash for as short as one day or as long as 30 days, independent of what may be indicated by longer term estimates.

Another large industrial firm with total assets exceeding \$50 million reported use of a cash forecast in conjunction with a profit plan. The treasurer stated the following:

We prepare a 12-month running forecast of profit and loss and a 12-month running forecast of cash flow. We merge these into a forecast of change in financial position and a forecasted balance sheet. This procedure permits us to see well in advance whether or not the results we predict will be satisfactory. If it appears that they are not going to be satisfactory, it gives us plenty of time to change our plans and find a basis that will produce the desired results.

These reports are based upon a forecast of unit sales, production, and inventory, broken down into \_\_\_\_\_, \_\_\_\_\_, and various special products. To the unit forecast we are able quite accurately to apply the weighted average sales prices to obtain sales estimates and the weighted average cost prices to obtain cost of sales and cost

of production. We have detailed methods of forecasting and budgeting sales and administrative expense and other major disbursement areas including capital disbursements for expansion, improvement and replacement of capital facilities.

We also maintain a long range 5-year sales forecast, a 5-year profit and loss and cash flow, which are prepared on a different basis than the 12-month short range forecasts which permit a more detailed approach.

The companies quoted above were large, but their procedures were not necessarily a function of size. The controller of a firm with assets of less than \$15 million reported that his company prepared pro-forma financial statements on a monthly basis and while he described his weekly cash forecasts as "rough estimates", they did permit him to invest in treasury bills for about ten days each month between large cash inflows and outflows.

#### Banker Relationships

It has been noted that banks are adverse to the issuance of commercial paper, especially because they are forced to support the market through their lines of credit. However, the extent to which action is taken by the banks to prevent their customers from issuing paper differs widely among firms and, judging by statements of respondents to the questionnaire, the paramount factors are attitudes of corporate treasurers and bargaining between them and their bankers. The following examples will illustrate this line of reasoning.

The treasurer of a company with an AAA1 credit rating and a sophisticated system of cash management stated that:

...we would not borrow from commercial corporations because we prefer to pay slightly more and keep our lines of credit with our bankers firmly established. When money is essential it is usually hardest to get and the commercial type of borrowing is on a here-today-gone-tomorrow basis, whereas the banks are constant, and we feel it is better to keep our credit well established with them.

A construction supply firm with a highly cyclical cash flow reported:

At present, we choose to remain in the short-term money market since it is more economical with interest rates in the range of 4% to 4 1/2%, whereas long-term borrowing rates would be in the 6% to 6 1/2% range and, of course, in addition to this you would have the legal, financial and underwriting costs which go along with a long-term issue. This policy can only be followed as long as sufficient funds are available in the short-term market and, at the same time, we believe that any short-term borrowing on the open market must be fully backed by a line of credit with the banks.

One commercial paper borrower had an understanding with his banker that he would do at least 66% of his short-term borrowing there, while another had a similar agreement, but the amount was 50%.

There is also a wide variety of policies on the investment side. Some firms keep a minimum cash balance with the bank, while one mentioned that it has agreed to keep a \$700,000 deposit with its bank for services rendered; for a period of about ten days every month the balance declined below this figure and an annual 4 1/2% interest rate was paid to the extent of this deficiency. A firm was quoted in the previous chapter as investing in term deposits only

to maintain banker relationships. Another stated that it placated its banker by buying treasury bills there. On the investment side the banks have at least offered the corporate treasurer a competitive instrument, the bank term deposit; on the borrowing side, both their loans and acceptances were deemed excessively expensive.

### Investment Policies

As in the case of banker relationships, one cannot generalize with respect to investment policies. Board of director approval was generally required for the various securities and one finance company executive stated that most larger firms placed limits on the amounts of various instruments. He noted further that since his company has been growing very rapidly in the past several years, one of his continuing problems was to convince larger industrial firms to increase their quotas of his notes. He also mentioned that while all finance company notes were placed through investment dealers, he did extensive marketing himself on an informal basis. Thus, once again, personal attitudes and the bargaining process were paramount considerations.

Not one firm reporting on their procedure detailed any type of formal analysis as recommended earlier in the chapter, but many firms outlined considerations including expected needs according to their cash flow, security, marketability, and yield.

One of the basic problems regarding safety of the investment was that there were no concrete standards of performance. Many firms expressed fear as to defaults in commercial paper, yet the fact remains that to date there has been none; nor have any of the finance companies listed in Table V failed to meet a maturity payment. Examples presented below give an impression of the variety of attitudes of several treasurers active in the money market and how these attitudes affect their portfolios. The portfolios themselves are presented in Table XIV.

Company A. The treasurer of a large public utility stated that the basic policy relating to investments was "maximum security with complete liquidity." Table XIV shows that this policy was not in fact adhered to, although the treasurer also mentioned that maturity dates were tailored carefully to corporate needs. The meaning of maximum security was also not clear but the absence of commercial paper is noteworthy.

Company B. The secretary-treasurer noted that, in conjunction with a policy of highest net yield consistent with safety and liquidity, his company rarely invested for a period beyond six months in non-Government of Canada securities. The following remarks further explained his portfolio:

...The growth and availability of Provincial and Municipal low-coupon bonds and notes have resulted in our using this medium for a sub-

stantial amount of our term lending rather than Finance and Trust Company paper, which media we had used extensively in prior years.

In conclusion, I would point out that one criticism we have of the present short-term market is that quality of investment does not always seem to be reflected in the yields available. This may have something to do with the relative amount of money available from lenders who are taxable as compared with those who are not taxable on capital gain, combined with lack of appreciation on the part of some lenders as to the inherent risks in lending to some borrowers.

Company C. The Vice-President-Finance of a large appliance firm stated the following regarding his investment policy:

From a review of the investment securities statements, you will note that our securities are highly marketable. Our policy is to keep liquid and not to get locked into an investment situation even though this policy does reduce the yield that we might obtain. However, we feel that it is wise in order that we may take advantage of any opportunity that might present itself where a substantial amount of cash might be required.

Table XIV indicates that a large proportion of the firm's investment was not, in fact, highly marketable. However, it forecast its cash needs and it was thus likely that the large sum on call would suffice for any unexpected requirements. Furthermore, the detailed list sent to the author gave evidence of a substantial diversification both in issuers and maturity dates.

Company D. This is the company of assets over \$50 million quoted in the "Banker Relationships" section above. Regarding its investment policy, it agreed with Company B

that the yields on corporate paper did not justify the risk and in conjunction with its policy of good bank relations, invested mainly in bank term deposits, U.S. "swaps," and treasury bills. While its policy indicated lack of aggressiveness in searching for the highest yielding instruments, the following extract from the treasurer's letter showed much aggressiveness in another respect:

...With regard to real short-term money we always look at our bank balance at 10:30 Friday morning, ascertain our probable exposure for drawing on the week-end on Friday until close of banking, then we invest the balance for the week-end by dealing with a large underwriting house on a sell- and buy-back basis with short-term treasury bills held as collateral. Thus, we may have a variety of investments all at the same time, namely, bank deposit certificates for thirty, sixty, or ninety days, thirty, sixty, or ninety-day treasury bills and week-end loans on short-term market supported by treasury bill collateral. We graph our bank balance vs. our investments and try at all times to have the maximum amount of refund invested. It pays off, has no risk and is using funds that would otherwise be idle.

Company E. The Vice-President-Finance of this firm was interviewed by the author. Table XIV shows a well diversified portfolio, most of which was in discounted bonds. He stated that he kept informed of movements within the money market, and had a thorough understanding of discount and yield movements. In fact, he claimed that many issuers and dealers often misquoted prices, so he made continual reference to his own yield book. Not only did he receive a daily statement from his bank, but reconciled this with his own cash flow and issuance of cheques, and

he knew each day exactly what his cash position was. His bank account was kept at a minimum and often was a negative figure. This was unknown to the bank because of the bank float, and when a deficit occurred he was sure to replenish it before his outstanding cheques would be entered in his account.

His policy with regard to long-term debt was equally aggressive. His firm was continually expanding, so when few issues were placed on the market by others, and the market seemed receptive, he would float an issue whether he needed the money or not; then he invested the proceeds temporarily. Furthermore, his bond indentures from previous issues had sinking fund provisions, but instead of calling bonds at 100, he bought outstanding bonds on the market at as low as 83. The price was this low because these bonds were originally sold when interest rates were much less. Therefore, he fulfilled his sinking fund requirements, and made substantial profits in the process.

He admitted to a slight "window-dressing" of the cash account for annual report purposes. The reasoning was that shareholders liked to see some cash, and this was accomplished by not renewing some of the investments that matured at the end of the year until the beginning of the next. Nevertheless, the company did show its short-term securities separately on the balance sheet and profit from this dealing in the income statement.

This financial man agreed with those in Companies B and D that yield differences did not merit investment in cor-

porate paper. He stated that if the firm in which he placed about \$5 million had financial difficulties and defaulted, court delays might hold up payment when his own firm needed the funds for corporate purposes. He would then be embarrassed to tell board of directors that he made the investment for an after-tax yield advantage of about  $1/8$  of 1%. It is noteworthy that his board was an exception to the rule by showing enough confidence to place no restrictions whatever upon his investment policies.

The company made ten-year and five-year predictions of capital expenditures, the latter in greater detail than the former. Furthermore, a one-year cash forecast was made by months in conjunction with the operations budget. Thus, inflows and outflows were known well in advance and maturity dates could be tailored accordingly. The daily forecast has already been noted and it enabled the Vice-President-Finance to invest for periods as short as a week. He has occasionally placed money over the week-end and expected to give more attention to this outlet in the future.

Aside from these companies noted in the examples above, other respondents indicated further variety in policies and attitudes. In particular, two firms in a chronic cash surplus position preferred to place the funds in equities because the dividends were not taxable in the hands of corporations. The secretary-treasurer of one of these firms mentioned the risk of capital loss through forced sale, but expressed confidence that the rising trend in stock prices should continue.

TABLE XIV

## INVESTMENT PORTFOLIOS OF SELECTED COMPANIES

(In percentages of total short-term investments)

<u>Security</u>	<u>Company</u>				
	A	B	C	D	E
Government of Canada Direct and Guaranteed Bonds	7.5	34.3	30.8	-	34.5
Provincial Direct and Guaranteed Bonds	22.0	32.2	7.9	-	52.0
Municipal	-	-	4.1	-	4.1
Bank Term Deposits (Canadian and U.S. Funds)	22.4	12.3	-	100.0	-
Trust Company Deposits	39.6	-	8.3	-	2.7
Finance Paper	8.5	-	1.6	-	6.7
Commercial Paper	-	-	12.6	-	-
Dealer Loan	-	21.2	34.7	-	-
Total	100.0	100.0	100.0	100.0	100.0

Note: Companies reported on different dates.Sources: Selected Canadian companies.

Several replies indicated disagreement with the attitudes of Companies B and D concerning safety, and one treasurer regarded a policy of only placing funds in governments as an "extreme view". Composite results of total investments and borrowings of the respondents are presented in the Appendix. The predominance of Federal Government obligations and those of banks and trust companies is noteworthy as is the fact that only three respondents investing in corporate paper made use of that media alone.

From an examination of the responses one must conclude that there was a variety of investment policies based mainly on the different attitudes of the executives and boards of directors of the companies. There were also substantial differences as to how hard companies were willing to work their cash. Only two companies reported the use of week-end investments and one treasurer stated that his board of directors did not think an investment for a few days only was "worth while".

The factors noted above determine the investment or borrowing policy when there is a surplus or deficiency of funds. Such excesses of, or needs for, cash are largely determined by characteristics peculiar to an industry or by the financial structure of individual firms. These considerations will form the discussion of the following chapter.

## CHAPTER V

### INFLUENCES UPON MONEY MARKET ACTIVITY

The non-financial corporation's major scope of activity does not include dealing in securities. It has its own nature of trade toward which efforts are concentrated, and money market dealings should thus be a marginal portion of operations to take place when the firm has surplus funds available or needs additional cash to carry on its business. Many factors cause some firms to have more of such surpluses or needs than others, and these considerations shall be the subject of this chapter. It should be noted that the factors do not always carry the same weight. For example, one company may have a large dividend payment of \$5 million while another, only \$100,000; the former will have to save in anticipation of the payment while the latter may find dividends a minor aspect of its cash flow. One should also note that the factors do not always work in the same direction and a firm may discover, for example, that bank borrowing facilities eliminate the need to save for any lump sum payments.

#### I. THE INDIVIDUAL FIRM

If a firm can earn 8% before taxes on capital invested within itself, it is obvious that such capital is being put to better use than in securities yielding 3% or 4%. There-

fore, it is advantageous for the company to have its cash and marketable security accounts as small as possible. The more even the cash flow, the easier it becomes for the company to minimize these accounts, but most firms are subject to fluctuations arising from causes noted below.

Use of Trade Credit. With the exception of retail sales, buying and selling are rarely done on a cash basis. As this is affected by particular industry characteristics it shall be discussed in the next part of the chapter, but it is often a function of the firm itself or its suppliers and customers. A company may deal extensively with one supplier from which it receives invoices throughout the month payable on the tenth of the following month. Furthermore, it may receive payment from customers throughout the month, and thus have a surplus build up for which a lump-sum payment must be made. The supplier, on the other hand, may have to make its disbursements throughout the month, so receipts must be held for these payments. The ideal situation for minimizing the cash account would be a coincidence of receipts and payments.

The use of trade credit has had an important influence on the cash account in periods of credit restraint.<sup>1</sup> With money harder to obtain, firms have found it arduous to collect accounts according to the agreed terms and such

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<sup>1</sup>J.H. Young, J.F. Helliwell, W.A. McKay, op.cit., pp.V-1, V-2.

terms have become increasingly difficult to enforce in light of more competitive business conditions. The result is that the supplier must maintain additional liquid reserves to compensate for slowed collections.

Cash discounts can aid in ensuring quicker customer payments. Terms of 2/10, net/30, are a substantial incentive to the customer; if he chooses to pay a \$1000 bill in thirty days he gets the use of \$980 for an extra twenty days at the cost of the discount foregone of \$20. He thus pays 2.04% for the use of \$980 for twenty days (or one-eighteenth of a year), and in annual terms the cost of the continued loss of discount is  $2.04 \times 18$  or 36.72%. One controller who had previously given such discounts to customers, however, stated that he did not find the arrangement satisfactory; customers would often take the discount even when paying late, and billing them accordingly was not only a nuisance but also a source of friction. A similar tactic is to charge interest for overdue accounts, but the same controller noted that this, too, hampered customer relationships.

Lump Sum Payments. Certain types of payments are made on specific dates throughout the calendar year and funds must be saved for these purposes.<sup>2</sup> The first is the accumulation of tax reserves for monthly payments. The need

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<sup>2</sup>Garvy, op.cit., pp.68-69

for such saving is greater in the United States where taxes are paid quarterly, and one Canadian firm with a sizable portion of its earnings in the United States reported a substantial investment in American treasury bills for tax purposes.

A second category of lump-sum payments relates to the financial structure of the firm. Dividends and interest remuneration and debt repayment or amortization take place at specified times during the year and funds must be accumulated accordingly. Also, when a long-term security issue is floated, funds may not be needed immediately in the business, and thus a large cash surplus results. This condition is especially pertinent to a continually expanding firm which goes to the market frequently for funds. The extent to which the firm can immediately reinvest retained earnings to finance the expansion will have the effect of reducing the size of security issues, and thus also reduce the pool of surplus funds.

Liquidity is often desired to take advantage of business opportunities, such as, exercise of options, acquisition of inventories, and deposits on bids. These opportunities are largely a function of the industry and shall be discussed as such in the following part of the chapter. Reserves are also maintained for precautionary purposes. Funds may be unexpectedly needed because of a strike, transportation tie-up, a sudden decline in sales, and the like.

Size of Firm. The size of a company will have an effect upon the amount of liquid reserves and, more importantly, changes in them. The corner grocer, for example, will obviously have a much smaller monthly cash swing than a large grocery chain and the factors noted in the previous section will have greater consequences for the latter. Its capital needs, payroll, tax payments, and emergency reserves will be larger, as will the surplus or deficiencies which result. Investment and borrowing opportunities are likewise a function of size. The large chain will likely find borrowing available in the commercial paper market, while the corner grocer, if in a surplus position, will probably not have enough to buy the smallest unit treasury bill.

Table XV shows the average cash and security portfolios for the different sizes of Canadian firms in 1961. The average size of the sum of these two accounts is, of course, greater for larger firms; more significant is the fact that as firms increase in size their ratio of cash to total securities falls. Thus, not only do large firms have more liquid funds available, but they use a greater proportion for investment.

Debt versus Surplus Positions. Two firms in the same industry and similar in all respects noted thus far may have substantially different current accounts because of the relative preference for a debt or surplus position. Some companies like to build up their cash account to make pay-

TABLE XV

## CASH AND SECURITY HOLDINGS OF CANADIAN COMPANIES

(Dollar figures in thousands)

Asset Size	Cash	Government Secu- rities	Other Secu- rities	Total Secu- rities	Total Cash & Secu- rities	Number of Firms	Average Cash & Secu- rities	Cash/ Total Secu- rities
Under								
\$ 100,000	156.2	9.5	133.2	142.7	298.9	52136	.006	1.09
\$ 100,000- 249,999	149.7	24.8	302.5	327.3	477.0	26222	.02	.46
\$ 250,000- 499,999	175.3	28.1	337.9	366.0	541.3	12287	.04	.48
\$ 500,000- 999,999	150.5	35.7	397.6	433.3	583.8	6710	.09	.38
\$ 1,000,000- 4,999,999	376.4	101.3	1165.4	1266.7	1647.1	5439	.32	.30
\$ 5,000,000- 9,999,999	180.6	56.1	678.3	734.4	915.0	807	1.13	.25
\$ 10,000,000- 24,999,999	251.8	130.4	906.1	1036.5	1288.3	535	2.40	.24
\$25,000,000- 99,000,000	457.4	273.7	2069.8	2343.5	2800.9	350	8.00	.19
\$100,000,000 and over	419.6	677.9	2340.0	3017.9	3427.5	110	31.10	.14

Source: Department of National Revenue, Taxation Division, Taxation Statistics, 1963, p.156.

ments, while others prefer revolving credit from the bank. Theoretically, the latter type borrows from the bank with the understanding that it will eliminate the debt position periodically. However, several firms reported that they are continual borrowers on a demand basis. The reasoning here was that their operations showed a greater return than the 6% interest for the loan. This system was even more advantageous before September 1962 when banks allowed overdrafts. The firm would then show a negative cash balance and pay interest only to the extent of its overdrawn account on a daily basis. Overdrafts are no longer allowed, so a company must now take out a loan for a certain period of time and pay interest even on the funds left on deposit in the bank during the period. The effective rate of interest is thus above 6%. This procedure may become even more costly to the smaller firm if legislative action is taken upon the recommendation made by the Royal Commission on Banking and Finance that the 6% interest ceiling be removed.

Of the 137 respondents to the questionnaire who claimed no money market participation, sixty-seven stated the use of bank borrowing, twelve claimed no bank borrowing, two mentioned that their cash needs were fulfilled within their intercorporate organization, and fifty-six made no statement regarding their borrowing position (See Appendix).

To the extent that borrowing is used in lieu of a policy of always having enough cash or marketable securities on hand to meet payments, less funds are available in non-

financial corporations for investment into the money market. One firm even reported use of bank credit beyond current needs:

Our short term cash requirements are predicted on the maintenance of debt/equity ratio theoretically set at 60/40. Between issues of securities (a discreet rather than continuous process), commercial bank loans are used to supply funds for both operating and capital expenditures. As the loan approaches a stated credit limit, a new issue of securities is floated to retire it, and from that point the cycle starts again.

Such a policy again reduces activity in the money market and is opposed to one of issuing long-term securities before the cash account becomes negative.

Intercorporate Relations. Participation in the money market is further reduced by the extent of intercorporate cash transfers between parents and subsidiaries and between associated companies. When peaks and troughs of cash offset one another it is wise to lend between the companies, and to that extent, eliminate the profits of intermediaries. Conversely, when the peaks and troughs occur at the same time in parent and subsidiaries they can pool their funds to make the investment a worthwhile amount and thus enhance money market activity.

The investment and borrowing policies of a subsidiary may be somewhat inhibited by its parent and the latter may either place restrictions or supply the financial requirements of the former. From the point of view of the whole organization, this can be advantageous as the subsidiary's short term requirements may be fulfilled by corporate paper issued under

the stronger name of the parent.

Other Restrictions. The trust deed of a debt obligation often carries restrictions regarding liquidity. One firm which had placed a long-term obligation with an insurance company was forced to maintain a specified minimum working capital position, and this had the effects of reducing its borrowing and decreasing its funds available for temporary investment. In actual fact, the firm was able to manipulate its balance sheet to reduce the burden of the restriction by denoting a bank loan a "special" item, and placing it outside the current liabilities section.

When a firm deals with a government it must often leave a deposit to assure fulfillment of the contract. Rather than place this deposit in cash, government securities are used. At least one provincial government has been known to insist that its own obligations be used for this purpose.

A final characteristic which can have a substantial effect on a firm's cash flow is its location. When goods must be transported inland by ship, the company in the centre of the country must stockpile its inventory in the fall to last through the winter months, while its counterpart on the coast can even out its transportation costs. Furthermore, a firm with heavy construction payments will have a more even cash flow if it is located on the coast where the ground does not freeze in the winter.

## II. INDUSTRY CHARACTERISTICS

The cash flow of a company is highly dependent upon its nature of trade. Certain factors peculiar to the various industries cause different types of fluctuations in their cash accounts and each major type of industry shall be considered. To aid in the analysis, the following tables are presented below:

Table XVI	-	Day's Receivables Outstanding.
Table XVII	-	Day's Payable Outstanding.
Table XVIII	-	Sales Growth from 1957 - 1961.
Table XIX	-	Proportion of Total Liabilities in Mortgage and Other Funded Debt.
Table XX	-	Mining Production by month using 1949 base Year Index.
Table XXI	-	Manufacturing Shipments by Months.
Table XXII	-	Retail Trade by Months.
Table XXIII	-	Retail Credit Outstanding by Quarters.
Table XXIV	-	Wholesale Trade by Months.

These tables shall be referred to in the text. The industries are broken down into groups and sub-groups where significant differences exist within them and reference shall be made to pertinent items affecting cash flows. Figures used in Tables XVI and XVII are for the year 1961; those in Tables XIX to XXIV are for the year 1963. Where monthly fluctuations are noted, the year 1963 has been found to be typical.

Mining. Mining production has a gradual increase during the spring, a slight downturn in July, a pick-up again in the autumn, and finally a decrease in the winter. Such fluctuations cause seasonal changes in the cash flows. An even greater need for cash balances arises from the develop-

TABLE XVI

## COMPUTATION OF DAY'S RECEIVABLES OUTSTANDING, YEAR 1961

(Dollar figures in millions)

INDUSTRY	Sales	Average day's sales	Year-end receiv- ables	Day's receiv- ables out- standing
Mining, Quarrying and Oil Wells	2233.7	6.1	256.1	42
Manufacturing	25289.4	69.4	2909.0	42
Construction	4287.7	11.5	697.9	61
Transportation	2124.9	5.8	234.5	40
Utilities <sup>a)</sup>	578.9	1.6	83.8	52
Merchandising:				
Wholesale	11865.3	32.4	1426.6	44
Retail	9977.9	27.3	679.4	25

a) Includes "Electric Power," "Gas Distribution," and "Other Utilities."

Source: Canada, Department of National Revenue, Taxation Division, Taxation Statistics, 1963.

TABLE XVII

## COMPUTATION OF DAY'S PAYABLES OUTSTANDING, YEAR 1961

(Dollar figures in millions)

INDUSTRY	Cost of sales	Average day's purchase	Year-end payables	Day's payables out- standing
Mining	658.9	1.8	192.2	107
Manufacturing	18670.9	50.8	1700.6	34
Construction	3458.6	9.5	500.4	53
Transportation	199.4	.55	209.0	380
Utilities <sup>a)</sup>	161.2	.44	62.8	143
Merchandising:				
Wholesale	9811.7	26.8	806.9	30
Retail	7642.4	20.9	536.6	26

a) Includes "Electric Power," "Gas Distribution," and "Other Utilities."

Source: Canada, Department of National Revenue, Taxation Division, Taxation Statistics, 1963.

TABLE XVIII

## SALES GROWTH

(Dollar figures in millions)

INDUSTRY	1957	1958	1959	1960	1961	% Growth 1957-1961
Mining	1882.6	1854.9	2092.8	2168.6	2233.7	18.6%
Manu- facturing	22111.2	21773.9	23822.5	24680.0	25289.4	14.4%
Construc- tion	3636.2	3830.8	4044.5	4220.6	4287.7	15.2%
Transpor- tation	1806.6	1796.8	2014.1	2084.5	2124.9	17.6%
Utilities <sup>a)</sup>	365.7	436.4	531.6	540.3	578.9	58.5%
Merchandis- ing:						
Wholesale	10219.7	10278.5	10990.9	11367.6	11865.3	16.0%
Retail	8157.7	8619.6	9467.2	9598.0	9977.9	22.3%

a) Includes "Electric Power," "Gas Distribution," and "Other Utilities."

Source: Canada, Department of National Revenue, Taxation Division, Taxation Statistics, 1963.

TABLE XIX

PERCENTAGE OF TOTAL LIABILITIES IN MORTGAGE  
AND OTHER FUNDED DEBT, YEAR 1961

(Dollar figures in millions)

INDUSTRY	Mortgage and other funded debt	Total liabili- ties	% Mortgage and other funded debt to total liabilities
Mining	2182.4	6306.6	34.7%
Manufacturing	2492.6	6367.3	37.6%
Construction	263.9	2642.2	10.0%
Transportation	1508.3	4499.4	33.6%
Utilities <sup>a)</sup>	1225.0	2704.3	45.3%
Merchandising	509.2	9271.1	5.5%

a) Includes "Electric Power," "Gas Distribution," and "Other Utilities."

Source: Canada, Department of National Revenue, Taxation Division, Taxation Statistics, 1963.

TABLE XX

## MINING PRODUCTION

(Volume Index 1949 = 100)

<u>1963</u>	<u>Metals</u>	<u>Non-Metals</u>	<u>Fuels</u>
January	169.9	201.0	540.8
February	177.0	203.1	555.2
March	182.7	210.1	539.2
April	191.4	207.1	471.4
May	207.3	234.9	483.3
June	211.9	231.5	497.7
July	183.1	201.2	490.1
August	198.8	244.1	488.9
September	220.2	251.7	514.0
October	208.0	256.4	512.8
November	202.0	274.4	522.1
December	184.2	221.9	561.1

Source: D.B.S., Canadian Statistical Review, April, 1964,  
p.6.

ment of new mines once the ore is discovered and the research that accompanies such discovery.

Table XXVII shows that the day's payables outstanding far exceeded the day's receivables outstanding, allowing mines, in effect, to use the funds of others for their own purposes. The sales of the industry have grown in the years 1957-61 and thus the need for capital funds has also increased. In fact, the ratio of debt to total liabilities was relatively high in 1961 compared to other industries and this indicates greater interest and sinking fund payments as well as lump sums of funds received from security issues.

Manufacturing. Manufacturing firms in general have a shorter payment than receivable period, and thus experience the need for cash to help finance their customers. While their growth in sales has not been as large as most other industries, they do more debt financing than any other, carrying with it the implications noted in the previous section.

The best indication of seasonal fluctuations is shipments and because of substantial differences between segments of the industry, Table XXI breaks down these groupings. The first category, foods and beverages, shows wide fluctuation by months with no real discernible pattern. This is because of the wide variety of foods and beverages, each with its own pattern. From production statistics,<sup>3</sup> the sector showing the

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<sup>3</sup>D.B.S., Canadian Statistical Review, April, 1964, p.7.

TABLE XXI

## MANUFACTURING SHIPMENTS

(Dollar figures in millions)

1963	Food and beverages	Textiles	Wood	Primary metal	Metal fabricating	Machinery
January	412.7	87.3	90.6	269.2	121.0	54.3
February	402.7	82.9	95.9	244.5	112.9	60.9
March	417.1	92.2	107.0	268.2	125.4	67.8
April	438.1	86.0	100.7	257.6	128.9	74.2
May	481.5	96.2	117.4	285.1	150.0	75.3
June	479.5	93.6	118.7	263.6	147.3	74.1
July	493.4	79.7	144.6	258.6	146.5	82.4
August	482.3	85.6	142.7	262.7	147.0	64.4
September	477.4	95.8	139.4	259.5	161.5	66.4
October	503.3	103.9	141.1	281.5	166.2	68.6
November	477.5	97.6	130.8	279.6	149.4	63.5
December	459.6	94.5	129.0	268.5	140.7	63.4
1963	Transpor- tation Equipment	Electrical products	Non-Metallic mineral products	Petroleum and coal products	Chemical and chemical products	
January	252.7	103.9	41.1	121.8	120.7	
February	234.4	107.2	40.5	110.7	120.4	
March	244.2	113.4	47.8	110.1	132.8	
April	272.9	104.9	54.0	107.2	144.6	
May	305.6	114.5	69.4	121.7	162.2	
June	270.0	116.8	73.6	113.1	144.7	
July	215.1	108.7	72.9	120.7	125.4	
August	105.9	107.2	71.0	120.9	132.7	
September	214.5	135.7	71.8	121.2	140.6	
October	275.6	136.9	73.6	118.9	148.1	
November	322.6	131.1	64.9	116.6	137.0	
December	337.4	123.6	48.7	126.9	126.7	

Source: D.B.S., Canadian Statistical Review, April, 1964, pp.7-10.

greatest seasonal change was the canning industry, of which the production increased substantially in the summer months after the fruit was collected. Also noteworthy were spring and summer increases in the production of beer and soft drinks to meet the increased summer demand in these seasons. The following responses to the questionnaire give further impressions of characteristics enhancing the opportunity for money market activity in the food and beverage sector of the industry:

Sugar Refinery. As the sugar refineries of this company are located on inland ports, it is necessary to accumulate substantial inventories of raw sugar over the period when navigation is closed. In consequence, substantial sums of money are invested in inventories throughout the winter and substantial recourse is made to the short-term money market to finance this requirement. In the spring and summer the reverse holds true and substantial sums are available for short-term investments.

Bread Company. Our period of short-term borrowing is usually for the period December to March, which is our slack sales period each year.

Malting Company. Our company is required to buy its winter requirements of barley (our raw materials) in the late summer and fall in order to obtain the desired quality for malting and also to take advantage of water rates for transportation (which are roughly one-third to one-half the corresponding rail rates) to Eastern Canada. This results in a substantial accumulation of inventory which has to be financed by bank borrowings and commercial notes.

...Cash flow estimates are made for 2 or 3 years in advance as required. In addition, the current cash position is watched almost daily to keep track of borrowings and the proportion between bank and paper. There can be substantial fluctuation (\$100,000 - \$200,000) depending on barley purchases, which can fluctuate considerably due to weather, availability,

etc., and also in cash collections, which can also vary, especially in the export field.

Candy Company. In our business cash comes in at the peaks, such as, Christmas and Easter and is required in the off-seasons for purchases, dividends, wages and other running expenses.

Dairy Company. The surplus funds we do have, we keep in reasonably short-term paper due to the fact that we have, generally speaking, fairly large commitments in the summer months on our inventories and in the spring months on capital expenditures.

The importance of seasonal fluctuations in food and beverage manufacturing is further supported by Table XXIX in the Appendix in which nineteen of the twenty-four reporting firms indicated this as a reason for money market activity. Furthermore, Table XXVIII in the Appendix shows the predominance of the "food and beverage" segment as issuers of corporate paper. The stability of the industry is a possible reason enabling the firms to meet their seasonal needs through this media.

Most of the other sectors of the manufacturing industry are affected by the short-term construction cycle and Table XXI shows increases in shipments in the spring, especially May.

Table XXIX in the Appendix indicates especial importance of seasonal fluctuations in electrical equipment and iron, steel and non-ferrous metals. Because of the bulkiness of metals, the transportation factor is important to inland companies, and one reported a large buildup in inventory before the winter months. Peak sales periods were cited by

one company as being largely determined by automobile production, and it will be noted that Transportation Equipment has a highly seasonal pattern. On the other hand, a structural steel firm noted its operation as cyclical but not seasonal. Therefore, its cash flow was determined principally by the longer term construction cycle.

Construction. The time periods of receivables and payables outstanding in the construction industry are quite closely synchronized. One firm reported thirty-day terms on receivables but "hold-backs" tended to increase this period. Growth has been about average although the industry is less leveraged than any other. The heavy construction period is in the second and third quarters of the year, but the effect this has on cash flows shows some variation between companies, as noted by the following comments:

Construction Firm. In the Construction industry borrowing is generally of a short-term nature; the capital borrowed being used primarily for:

- (1) security deposits with tenders
- (2) 30-day financing of Accounts Receivable
- (3) the financing of hold-backs which vary from 10% to 20% of the total contracted amount.

Construction Supply Company. In our business which is highly cyclical, our greatest sales take place during the period May through October of each year, with the result that the cash flow from receivables is relatively small for the first five months of the year. During this time, of course, our short term borrowings reach their peak and thereafter they tend to decrease until the low point is reached in December and January.

Cement Company. Cash forecasting is tied to our annual budgeting for capital expenditures, the timing of these with progress payment requirements and dividend payments. Large inventory requirements such as fuel oil by tanker load approximately every eight months. Our lending begins to build up each year by May increasing rapidly through the heavy construction season to a peak during Nov - Dec. Major capital installations are done over the slacker winter season in preparation for the next spring. Heavy outflow generally Jan. - April.

Cement Company. Our business is strictly seasonal and we find that large cash balances accumulate up to March 31st at which time they diminish until September when they again begin to build up. As a matter of policy then, excess cash in the Fall (beginning build-up period) would be invested for longer terms in order to achieve the highest rate. This basic philosophy must be tempered by the need for large cash at October 31 to cover interest and bond repayments.

Paving Firm. Generally speaking, our investment in short term funds is confined to either Government of Canada Treasury Bills or Bank Guaranteed Deposit Receipts. This, generally speaking, takes place in the latter part of our fiscal year which ends March 31st. During the operating season, generally from April to November, we do experience fluctuations on our bank deposits during the month and we are now giving a great deal more attention to investing these monthly surpluses for periods of from one to two weeks.

Transportation. The figure for days payable outstanding in Table XVII for the transportation business is meaningless as it will be noted that year-end payables exceeded their cost of sales. This situation arises because the industry does not buy and sell commodities so their payables are for other expenses. The large investment in capital equipment contributes to a large debt structure although growth has not been exceedingly great.

Rail transportation has peaks in the spring and summer months. Other types of transportation follow this pattern generally, although the following responses will indicate peculiarities inherent in them.

Steamship Company. Our normal cash flow cycle culminates at December 31 of each year... During the next 4 months, the lake ship trade is inoperative and we run down cash balances through payments for overhead and ship repairs. In addition, our land transportation businesses borrow from the parent company during the first six months of the year to pay for licenses, insurance, and equipment.

Cash balances from May to October remain more or less static and rapidly build up again during November and December.

The requirements of shipyards for financing varies considerably from year to year and does not present any consistent seasonal trend.

Our short term lending policy therefore is as follows:

1. Maintain an investment in mid-term Government of Canada bonds \_\_\_\_\_ to be used for shipyard deposit purposes.
2. Maintain investment of \_\_\_\_\_ in 1-2 year Government of Canada bonds.
3. Invest \_\_\_\_\_ on various instruments coming due in 2 week intervals during period from January to April.
4. Maintain variable balances on "call" to finance day to day demands.

Trucking Firm. Because of the fact that most of our payments must be made in cash and by this I mean other than payroll, items such as Income Tax, licensing, gasoline, etcetera, the shortage of this commodity is of vital importance to any Truck Company here.

Also, another point is, that when your wage bill runs at approximately Fifty Per Cent of your Revenue, a supply of ready cash is of paramount importance to this operation, we therefore operate on credit accommodation from one of the local banks.

Utilities. As in the case of transportation, the days payable outstanding is a meaningless figure.

The noteworthy features of public utilities are their huge rate of recent growth and frequent trips to securities markets, and Table XXIX in the Appendix shows "capital expenditures" as their main reason for money market activity. Several firms noted that because of their large size and thus substantial amounts required when an issue was made, they have tried to find times when the market seemed most receptive. Thus they have had large sums of cash on hand for temporary investment before and during construction. As reported by the treasurer of an electrical company:

The need of continuing capital expenditures are important in our industry due to increasing demand for electric power. A certain amount is generated internally from depreciation and retained earnings less long term debt sinking fund requirements. The needs do not always dovetail with the expenditures. Excess funds are temporarily employed in short-term investments and deficiencies by bank loans or other short-term borrowings. Unusual large expenditures that cannot be generated internally over a few years are covered to the extent necessary by issuance of long-term debt and equity financing to the proper proportion and depending on the security market.

Telephone companies are not seasonal but have marked patterns within the month. One secretary reported that his payments occurred between the tenth and the fifteenth, while his receipts flowed in between the twentieth and twenty-sixth.

Natural Gas companies, on the other hand, have a distinct seasonal pattern:

...I may say that cash requirements and cash surpluses in the natural gas business differ materially from those of manufacturing and retail business. The revenue is greater than expenses during the heating months and the expenses exceed the revenue in the warmer or summer months. Consequently, surplus funds accumulate in the early months of the year which are used to meet operating expenditures occurring in the latter part of the year. Capital expenditures are usually financed by the issue of bonds or long term debt.

Merchandising. Wholesale firms have longer receivables than payment periods, while these periods are about equal for retail companies. Cash discounts are common to retailers and there is thus an incentive to make lump-sum payments on the tenth and/or the fifteenth of the month. Merchandisers show a generally small leverage position and much of their facilities are rented. Therefore, quarterly or semi-annual mortgage and debt servicing payments are small while monthly rentals are high. The retail business has shown substantial growth and a department store chain expressed a continuing need for funds to expand facilities.

Table XXII illustrates that most sectors of the retail trade show sales peaks in the Christmas season and Table XXIX lends support to the importance of seasonal peaks in the industry. The resulting cash flow was noted as follows by the assistant-treasurer of a department store chain:

The Company is primarily in the Department Store business across Canada. During the course of the year the department store industry's cash requirements for inventories and receivables rises gradually to a peak generally in late November, and falls off rapidly and substantially by year-end. The slower periods of the Spring and Summer provide the opportunities for major

TABLE XXII

## VALUE OF RETAIL TRADE

(Dollar figures in millions)

1963	Grocery and combination	Other Food and beverage	General	Depart- ment
January	303.8	89.2	48.5	100.7
February	290.6	91.8	43.2	94.9
March	329.9	102.1	49.1	114.7
April	300.9	104.2	55.0	129.7
May	344.9	106.9	62.8	135.2
June	326.3	113.8	62.7	121.4
July	313.7	116.1	64.8	111.8
August	347.9	127.3	68.3	133.0
September	308.6	105.1	60.0	140.4
October	328.7	115.9	64.3	148.5
November	348.1	117.5	65.7	187.1
December	349.5	168.9	69.4	230.4

1963	Variety	Motor vehicle	Garages & filling stations	Family Clothing
January	20.3	211.9	96.2	16.7
February	20.2	212.0	85.2	12.2
March	25.3	265.4	90.4	16.8
April	31.0	303.2	102.8	21.4
May	31.9	318.2	108.7	20.7
June	32.8	298.7	104.6	20.9
July	31.4	255.8	119.7	17.1
August	35.4	202.0	118.7	20.9
September	30.0	172.8	105.6	20.0
October	32.5	252.3	110.6	23.1
November	38.2	267.2	107.9	28.4
December	68.0	245.2	110.6	37.7

TABLE XXII (continued)

1963	Shoe	Hardware	Lumber & building material	Furniture and appliance
January	12.0	20.2	26.8	47.5
February	8.0	19.7	23.6	35.3
March	11.6	21.4	30.2	42.3
April	15.6	26.4	32.9	43.7
May	15.9	33.7	42.2	46.2
June	16.6	34.1	47.8	44.3
July	13.6	31.3	48.3	43.2
August	15.1	32.7	48.5	47.5
September	14.5	31.4	46.3	46.5
October	13.7	33.6	51.4	55.1
November	16.4	30.4	42.3	58.5
December	22.5	40.3	33.8	58.2

1963	Restau- rants	Fuel dealers	Drug	Jewelry
January	45.7	36.0	36.0	7.7
February	42.6	34.1	34.1	7.3
March	48.8	37.4	37.4	8.5
April	48.1	37.2	37.2	9.1
May	50.3	36.2	36.2	10.8
June	50.4	35.7	35.7	10.7
July	55.2	36.3	36.3	9.8
August	58.1	37.1	37.1	10.8
September	50.8	36.6	36.6	11.1
October	50.8	39.3	39.3	10.2
November	49.4	36.3	36.3	12.4
December	47.9	48.5	48.5	32.2

Source: D.B.S., Canadian Statistical Review, April, 1964,  
pp.53-54.

expenditures for fixtures and construction of stores, and affect, to some degree, the cash needs of the industry in the first three-quarters of the operating year. The periodic payments of dividends naturally have a nominal effect on the cash needs of companies in this industry, however, income tax payments are fairly regularized from month to month, and therefore, do not materially affect a normalized pattern of cash flow..

...the Company's cash resources are small in relation to current liabilities. However, these resources are supported by a substantial amount of accounts receivable which provide a very steady cash flow to meet the payment of current liabilities.

Table XXIII illustrates that the credit extended by most types of retailers follows their sales patterns with peaks at the end of the year. A notable exception for sales and retail credit outstanding is the automobile sector which has peaks according to the introduction of new models.

Chain retailers have the additional problem of numerous bank accounts and the cash needs of individual stores renders it difficult to integrate the cash balances for investment. Nevertheless, one retailer mentioned that he brought the cash accounts together every Friday for weekend investments with a finance company. An additional problem is cash forecasting because of the large number and diversity of payments and receivables. The treasurer of a Hardware chain which imported substantially and also had a large wholesale department, stated that he could not know when letters of credit would arrive nor when a large bid to a contractor would be accepted. He, therefore, did not even attempt a detailed cash forecast and loaned continuously from the bank with an established credit limit. He expressed much displeasure with the dis-

TABLE XXIII

## RETAIL CREDIT OUTSTANDING

(Dollar figures in millions)

1963 Quarters	Motor vehicles	Cloth- ing	Hard- ware	Furniture appliance and radio	Grocery and com- bination
1	107.1	52.3	34.3	10.3	184.1
2	115.3	53.2	40.3	10.9	186.0
3	110.4	53.1	41.0	11.4	188.2
4	113.1	65.7	41.6	12.1	197.5

1963 Quarters	Jewelry	General	Fuel dealers	Depart- ment	Garages & filling stations
1	18.0	32.4	67.0	383.1	29.6
2	17.0	36.3	47.1	387.3	30.9
3	16.7	37.2	41.5	393.5	31.5
4	23.6	37.5	59.5	456.7	30.2

Source: D.B.S. Canadian Statistical Review, April 1964, p.57.

continuance of the overdraft system and found that he was paying 6% on some money in his cash account at the bank.

Table XXIV shows that the wholesale trade follows the retail in most sectors except, of course, that seasonal fluctuations of the former precede those of the latter.

### III. SUMMARY AND CONCLUSION

If a firm's own trade yields greater returns on invested capital than money market securities the treasurer would want to minimize activity in the latter by an even cash flow. However, considerations relating to the financial structure or policy of the individual firm and the nature of its industry cause fluctuations in the cash account throughout the year or over a period of years.<sup>4</sup> When such peaks or troughs cannot be avoided the yield from money market investment provides an incentive for the firm in a surplus position to gain some return from its temporary excess cash balance. Conversely, a company in a deficit position can examine its financial strength and weigh the lower costs of commercial paper issuance against its effects upon his banker relationships.

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<sup>4</sup>Table XXIX in the Appendix illustrates the predominance among the respondents of seasonal fluctuation and capital expenditures as reasons for money market activity.

TABLE XXIV

## VALUE OF WHOLESALE TRADE

(Dollar figures in millions)

1963	Foods	Clothing, footwear & textiles	Drugs and sundries	Electrical appliances
January	167.8	23.2	19.8	17.2
February	189.2	25.9	20.0	17.0
March	192.2	28.6	22.2	16.5
April	187.5	31.0	19.5	18.3
May	214.0	27.1	21.6	16.5
June	207.4	25.7	20.3	12.9
July	225.5	23.0	19.0	13.8
August	232.7	34.7	20.6	14.8
September	206.6	40.8	24.6	20.9
October	231.1	34.4	27.1	20.6
November	204.2	35.3	22.2	22.0
December	224.3	29.9	21.4	28.0

1963	Farm machinery	Coal and coke	Hardware	Building supplies
January	3.0	13.7	25.0	66.9
February	4.4	12.7	22.8	59.5
March	7.0	10.9	26.2	75.4
April	10.8	9.2	28.6	75.2
May	11.0	12.3	33.1	95.7
June	9.1	10.1	32.6	90.0
July	11.5	8.6	28.8	91.5
August	6.6	11.7	30.6	90.5
September	5.6	13.9	31.5	99.0
October	5.8	16.5	33.1	107.1
November	2.6	15.3	32.1	94.2
December	7.5	16.2	31.5	76.3

TABLE XXIV (continued)

1963	Industry & transport machinery	Auto Parts and equipment	Newsprint and paper products	Tobacco & confectionery
January	50.0	26.5	22.1	53.1
February	58.1	28.8	22.5	55.2
March	88.3	40.0	23.8	79.2
April	71.1	41.2	27.2	62.2
May	90.8	43.5	28.9	74.6
June	78.8	42.2	26.7	72.0
July	64.9	38.9	28.9	64.7
August	61.6	45.0	28.1	65.9
September	65.4	38.0	29.7	70.4
October	71.1	39.6	31.0	66.6
November	64.6	36.8	29.4	57.9
December	63.2	36.4	26.9	78.6

Source: D.B.S., Canadian Statistical Review, April 1964, p.56.

## CHAPTER VI

## CONCLUSION

A profitable non-financial corporation seeks to avoid the need for money market activity; as long as the company can earn a greater return on the investment in itself such investment takes precedence. However, in the conduct of its own business affairs the firm will likely find that a variety of factors cause peaks and troughs in the cash account. When this occurs, any return from temporary investment of surpluses is better than leaving the cash idle.

To participate in the money market the treasurer does not necessarily have to be an expert in the field of investment analysis. A typical situation with those whom the author contacted was board of director approval on quotas of the various instruments. From there the treasurer would deal with one investment dealer, and it did not require much imagination or aggressiveness to gain returns on idle funds in this manner. However, the more active participants were aware of yield-price relationships, dealt with many investment firms in search of the most profitable outlet, and followed economic trends to make their money market operations fit in with those of the company's own trade. The less sophisticated did not even examine one- or two-week investment opportunities, while the most aggressive attempted to earn a return on every dollar not essential to the running of the

business. It is hoped that exposition of the activities of some of these more sophisticated participants has indicated the wide range and profitable opportunities for the non-financial corporation.

For active participation in almost any venture, an understanding of what makes it work is essential. Therefore, Chapter II outlined the general background and Chapter III attempted to give an understanding of the money market by outlining its brief, but eventful, history, and the vehicles in use. When dealing in money market securities it is necessary to learn how to participate in the bond market, and understand yield-price relationships and dangers inherent in some of the instruments. The secondary bond market also plays an important role and can offer profitable opportunities. Perhaps the most pertinent conclusion of Chapter II is that bonds are not "money in the bank" and in return for a yield, they do possess some risks. Even where the instrument has impeccable safety of principal upon redemption, as in Government of Canada obligations, there still exists the danger of yield fluctuations; some of the most knowledgeable bond dealers learned a hard lesson in the Conversion Loan of 1958.

The history of the money market presented in Chapter III is most likely not all of the story that will be told in a few years from now. If any action is taken upon the recommendations of the Royal Commission on Banking and Finance, interrelationships between the financial institutions will

be substantially altered as noted in the concluding section of the chapter. As for the instruments, one can conclude that at the top of the hierarchy of principal safety rests Government of Canada obligations, followed by those of the financially stronger provinces, the banks, and other financial institutions, in that order. The financial institutions themselves must be individually examined as must be most of the provinces and municipalities. The paper of non-financial corporations requires even closer scrutiny and it is recommended that the principles of prudent bond buying outlined in Chapter II be followed when contemplating such investment.

The liquidity offered by the instruments depends upon the issuer and the term to maturity. If the buyer knows exactly when the funds will be needed it will pay to invest in the highest yielding instrument which meets his standards of safety and matures on the date required. Otherwise, he looks at the extent of secondary market dealings.

Comparative yields generally vary inversely with liquidity and safety, although they are also affected by the amount of paper outstanding from the different issuers and the times to maturity of the various issues put out by the individual institutions. The author agrees with a few of the active financial men that the yield differences do not adequately reflect the risk and although there is yet to be a default in corporate paper, fear of such by some prominent investment dealers indicates that a slight loss in yield is a worthwhile insurance cost when rejecting corporate paper which fails to meet rigid safety standards.

The most pertinent finding regarding investment and borrowing policies is that few, if any, financial men are using a formalized approach beyond the preparation of a detailed cash forecast. It was demonstrated that what may seem to be the most logical policy is not always the most profitable and therefore a detailed analysis, as suggested in Chapter IV is recommended. Another important conclusion of that chapter is the large part played by attitudes and the degree of sophistication of the financial officers of a company. Each has his own definitions of such terms as "liquidity" and "safety" and these attitudes together with the bargaining process and banker relationships are instrumental factors in the investment or borrowing decision. It should be added here that one attitude prevailing with all respondents who gave detailed information to the author was that such information was to be treated as confidential. Reasons given were that (1) they did not want the investment community to know with whom they were dealing and to what extent; and (2) the nature of the information was not published in their annual reports and, as such, was not for public use. Even after second requests, 207 of the 505 firms solicited refused to give any information to the author, or did not reply (See Table XXV in the Appendix); so if it is to be learned exactly how much of every type of paper rests in the hands of the non-financial corporation on any particular dates, such information will have to be compiled by a government agency. To date, this has not been attempted.

The extent of money market activity is largely determined by a company's cash flow. The factors affecting the peaks and troughs in a company's cash account are so numerous and can carry such a large range of weights that each firm would have to examine its own situation. Chapter V was intended to note the absolute factors themselves and what is likely to affect their weights and directions. Beyond that point, one cannot generalize and the actual weights have to be adjusted for each individual company. The factors to be considered are the use of trade credit, the extent of lump-sum payments to occur on specific dates, the size of the firm, policies regarding a debt versus surplus cash position, banker relationships, intercorporate relations, senior debt restrictions, dealings with governments, location of the firm, seasonality of the industry, and capital structure of the company.

In conclusion, the Canadian money market was not established mainly for the benefit of the non-financial corporation. Through its short history, however, it has shown itself to present lucrative opportunities to enhance a company's profits through improved financial management. Knowledge of the workings of this mechanism requires much less sophistication than other duties of the financial executive, such as determination of cost of capital. Furthermore, it does not take much of his time once he has established his policy and outlined a formal approach.

Because of the short term of the transaction from buy to maturity, profits are easily pinpointed which further renders active, though prudent money market dealing a satisfying and rewarding pursuit.

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## APPENDIX

## RESULTS OF QUESTIONNAIRE

The Questionnaire Survey. In November, 1963, a pilot survey of ninety-eight questionnaires was mailed and forty-one firms replied. Second requests with a supporting letter from Dr. H.L. Purdy were mailed in January 1964 to the other fifty-seven firms and twenty-six replied. An additional 407 were mailed in January 1964, of which 177 answered. Second requests were mailed to the remaining 230 and replies were received from fifty-four companies. In total, 505 questionnaires were mailed; 161 indicated participation in the money market, 137 claimed no participation and 207 either did not answer or refused to give information.<sup>1</sup> These totals are broken down by industry in Table XXV.

The firms solicited were selected from the Financial Post Surveys of Industrials, Oils, and Mines, and the intention was to sample a large variety of industries and sizes of firms. Data presented on the basis of the questionnaires are subject to the following limitations:

- 1) Statistical validity is not claimed and generalizations pertain only to the firms which replied;

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<sup>1</sup>Example of the letter, questionnaire, supporting letter and second requests are presented at the conclusion of the Appendix.

TABLE XXV

## RESPONSE TO QUESTIONNAIRE

Industry	Solicited	Number of replies	Money Market partici- pation	No Money Market partici- pation
Property Development	17	10	4	6
Public Utility	53	30	21	9
Printing and Publishing	14	8	6	2
Iron, Steel and Non-Ferrous Metals	82	47	28	19
Mining	18	7	4	3
Oil and Pipeline	38	24	19	5
Pulp and Paper	32	20	9	11
Transportation	13	8	4	4
Electrical Equipment	21	15	3	12
Construction	28	14	10	4
Chemical and Allied	24	19	7	12
Textile	32	14	4	10
Food and Beverage	61	34	22	12
Merchandising	72	48	20	28
Totals	505	298	161	137

- 2) Not all firms which replied regarding participation were willing to provide details to the questions. The number that did submit details is given where data are presented;
- 3) Data for investment and borrowing by the respondents were not all given as of the same date. Therefore, percentages are used rather than dollar figures and an assumption is that each firm allocated its portfolio in a consistent manner.

Instruments for Investment. Table XXVI gives the percentage of total investment in the different instruments by 100 firms which gave the requested figure data, out of the 298 replying. Of the 26.5% invested in banks and trust companies at least 9.6% and 3.5% were specifically noted as Canadian and American banks, respectively. There was, of course, much difference in the amounts invested by various companies and thus some of the figures were weighted by heavy investment of one of two large firms. Therefore, a more meaningful account of the propensity toward the different papers is the number of corporations buying each type, and this is presented in Table XXVII.

From Tables XXVI and XXVII the predominance of Canadian Government obligations and those of banks and trust companies is apparent. Of the seventy-five firms investing in the latter, at least thirty-two held paper issued by banks. It was noted in Chapter III that the deposit receipt is an effective means of gaining a return on cash while continuing

TABLE XXVI

## CORPORATE HOLDINGS OF MONEY MARKET SECURITIES

<u>Instrument</u>	<u>Per Cent</u>
Government of Canada Bonds and Treasury Bills	32.3
Provincial	12.0
Municipal	3.2
Finance Company	10.6
Corporate Paper	5.8
Investment Dealer "Buy Back"	5.8
Banks and Trust Companies	26.5
U.S. Treasury Bills	<u>3.8</u>
	100.0
	<u><u>      </u></u>

Source: Response to Questionnaire

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TABLE XXVII

## NUMBER OF REPORTING FIRMS INVESTING IN INSTRUMENTS

<u>Instrument</u>	<u>Number of firms investing</u>
Government of Canada Bonds and Treasury Bills	57
Provincial	37
Municipal	13
Finance Company	43
Corporate Paper	26
Investment Dealer "Buy Back"	13
Banks and Trust Companies	75
U.S. Treasury Bills	5

Source: Response to Questionnaire

to maintain good banker relations, and this is the most logical explanation for the great interest in the instrument.

Issuers of Commercial Paper. A total of thirty-five firms reported issuance of commercial paper. Table XXVIII breaks them down by industrial category. It should be noted that all but three of the issuers had an AAA1 credit rating. A possible reason for the predominance of food manufacturing firms is their cyclical stability and thus safety of their obligations.

Reasons for Money Market Activity. The questionnaire asked for reasons for lending or borrowing in the money market, and Table XXIX breaks down the results by number of firms in each industry. Especially noteworthy in the table is the importance of "capital expenditures" as the reason for public utility participation and the seasonal peaks in most manufacturing industries and in merchandising.

Bank Borrowing and Other Questionnaire Items. Of the 137 non-participants in Table XXV, sixty-seven claimed bank borrowing, twelve claimed no bank borrowing, two mentioned that their cash needs were attended to by other members of their inter-corporate organization and no answer was received from sixty-six firms regarding their short-term borrowing position. Among the bank borrowers, one stated the use of acceptances and one had a loan outstanding from the Industrial Development Bank, in both cases to supplement bank borrowing.

TABLE XXVIII

## ISSUERS OF CORPORATE PAPER

<u>Industry</u>	<u>Number</u>
Food and Beverage	10
Iron, Steel and Non-Ferrous Metal	5
Merchandising	6
Oil and Pipeline	5
Textile	3
Construction	2
Public Utility	2
Electrical Equipment	<u>2</u>
Total	<u>35</u>

Source: Response to Questionnaire

TABLE XXIX  
REASONS FOR MONEY MARKET ACTIVITY

Industry	Number of firms <u>reporting</u>	Interest payments	Dividend payments	Capital expendi- ture	Sinking fund	Tax	Seasonal peaks
Property Development	1	1	-	-	1	-	-
Public Utility	20	5	4	18	4	3	4
Printing & Publishing	5	1	3	-	2	1	3
Iron, Steel and Non- Ferrous Metals	19	3	5	7	2	7	13
Mining	2	-	2	-	1	1	-
Oil and Pipeline	13	5	6	8	6	4	3
Pulp and Paper	4	2	3	2	3	2	3
Transportation	3	1	1	3	1	1	2
Electrical Equipment	5	-	-	-	-	-	5
Construction	9	4	1	4	2	1	4
Chemical and Allied	7	-	2	2	-	1	4
Textile	3	-	1	1	-	-	2
Food and Beverage	24	3	4	10	3	2	19
Merchandising	<u>20</u>	<u>4</u>	<u>2</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>19</u>
Totals	<u>133</u>	<u>29</u>	<u>34</u>	<u>58</u>	<u>28</u>	<u>25</u>	<u>81</u>

Answers to Section III, C do not lend themselves to meaningful tabulation as more than one-half of the respondents did not answer them and there was no consistency in the replies. For example, in the question regarding a ratio of cash to current liabilities, answers in the "Iron, Steel and Non-ferrous Metals" category ranged from 25% to 200%.

## SURVEY FORMS

Dear

As part of the work for my Master of Business Administration degree at the University of British Columbia, I am writing a thesis on The Canadian Corporation and Its Use of the Short Term Money Market. It will basically examine how firms obtain funds from, and put surplus cash to use in, these markets. In my study the financial instruments that comprise the short term market (paper with maturity up to three years) are those listed in parts I and II of the attached questionnaire.

As my research consists mainly of collating information from selected firms, including yours, I am asking you to be kind enough to supply me with some necessary data.

I realize that your time is valuable, so I have attached a questionnaire which should only take a short time to answer. The answers to questions requesting figures need only be approximations, so time-consuming examination into your accounts for exactness is unnecessary. In addition to the questionnaire information, the following items are also requested:

1. Annual Reports (or reprinted Financial Statements) for each of the years from 1952 to 1962. If all of these are not available, please send what you do have.
2. Copies of your lists of short term investments as at the end of October and/or November 1963; that is, surplus funds you are lending to the market and, if available, such lists at year end for the previous years. These lists would be most helpful if they showed maturity date, face value, book value, and description (that is, source, such as "Finance Company Paper,") You may wish to keep the actual firms you deal with confidential, so names are not requested.
3. The same as #2, but for short term borrowing by your Company (that is, funds you obtain from the short term market).

The lists mentioned above are actually the most important part of the information requested; so, even if you cannot send all I have asked for, the 1963 lists alone will be very helpful.

Also appreciated would be any statement of policy on your use of the short term market, any recent changes on this policy, or any other information you think would be helpful.

The data I am requesting are essential to the success of this thesis, so your assistance would be greatly appreciated. Even if you have no dealings whatever in the market, a simple statement to that effect and a reply to part C only of the questionnaire would be most helpful.

Thanking you in advance for your trouble and the cooperation I trust I shall receive, I remain

Yours very truly,

David Pascal

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## Q U E S T I O N N A I R E

You need not bother giving any information here that duplicates the lists you are enclosing under items #1 and #2 of my letter.

### I. USES OF FUNDS:

What are the approximate amounts you presently have invested in?

1. Government of Canada bonds of maturity under one year \_\_\_\_\_; 1 - 2 years \_\_\_\_\_; 2 - 3 years \_\_\_\_\_.  
Government of Canada Treasury Bills \_\_\_\_\_.
2. Provincial treasury bills \_\_\_\_\_; short term discount bonds \_\_\_\_\_; parity bonds \_\_\_\_\_.
3. Municipal bonds or other obligations up to three years maturity \_\_\_\_\_.
4. Finance Company notes or acceptance paper \_\_\_\_\_.
5. Commercial paper \_\_\_\_\_.
6. Investment Dealers' "buy backs" and loans \_\_\_\_\_.
7. Banks and Trust Company notes and guaranteed deposit receipts \_\_\_\_\_; interest earning bank deposits \_\_\_\_\_.
8. Bankers' acceptances \_\_\_\_\_.
9. U.S.A. and U.K. short term paper \_\_\_\_\_.
10. Grain Co. Paper \_\_\_\_\_.

### II. SOURCES OF FUNDS:

What are the approximate amounts you presently borrow by?

1. Commercial bank demand notes and overdrafts \_\_\_\_\_; Bankers' acceptances \_\_\_\_\_.
2. Promissory notes (other than to commercial banks). \_\_\_\_\_
3. Self-liquidating short term bank borrowing \_\_\_\_\_.
4. Borrowing from governments for research or development.
5. Finance Company loans \_\_\_\_\_.

### III. GENERAL:

A. For which of the following reasons, and in about what amount, do you place surplus funds in short term investments? Indicate where applicable.

1. Interest payments \_\_\_\_\_.
2. Dividends \_\_\_\_\_.
3. Capital expenditures \_\_\_\_\_.
4. Sinking fund payments \_\_\_\_\_.
5. Taxes \_\_\_\_\_.
6. Inventory and/or receivable peaks \_\_\_\_\_.
7. Other \_\_\_\_\_.

(continued)

Q U E S T I O N N A I R E (continued)

III. GENERAL (continued):

B. For which of the following reasons and in about what amounts do you engage in short term borrowing?

1. Dividends \_\_\_\_\_.
2. Capital expenditures \_\_\_\_\_.
3. Seasonal inventory fluctuations \_\_\_\_\_.
4. Taxes \_\_\_\_\_.
5. Other \_\_\_\_\_.

C. Please answer the following:

1. Would you say that you give much attention to putting surplus funds to use in the short term markets? \_\_\_\_\_
2. Do you advocate need for such attention in your industry? \_\_\_\_\_
3. If you have invested surplus funds in short term markets, about how much extra annual profit do you estimate this has added? \_\_\_\_\_
4. About what ratio of cash to current liabilities would you recommend for firms in your industry?  
\_\_\_\_\_
5. For purposes of confidence, would you prefer that I refrained from mentioning your Company's name in the thesis? \_\_\_\_\_

Please list below and on the reverse side any other information you think may be helpful. (For example, extent of fluctuations in short term lending and borrowing over the year, times and causes of peaks, and extent of cash forecasting.)

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University of British Columbia,

Dear

Mr. David Pascal is writing his thesis for the Master of Business Administration degree under a faculty committee of which I am chairman.

In the case of Mr. Pascal's thesis, as in many others, there is a requirement for the collection of data from business firms. Some of these data the firms may view as being confidential and, on behalf of the Faculty of Business Administration, I can add my assurance to that of Mr. Pascal's that any stipulation laid down by the companies who are good enough to assist Mr. Pascal will be carefully respected.

Sincerely yours,

H.L. Purdy.

Dear

With reference to a letter and questionnaire mailed to you recently (a copy of which is attached), I am now enclosing a letter of authorization from my thesis chairman, Dr. H.L. Purdy.

If pressures of time have delayed your answer, this second request is not intended to rush you, but several firms have refrained from replying for purposes of keeping the information confidential.

If the latter is the case, I do hope you will give it a second thought in light of Dr. Purdy's and my own assurance that any request for confidence you may have will be respected.

If your firm has no dealings whatever in the market, just a simple statement to that effect and a reply to part C only of the questionnaire would be most appreciated.

Yours very truly,

David Pascal.

encls.

Dear

Some time ago a letter and questionnaire were mailed to you requesting data for a thesis regarding your participation in the short term money market. From the response to previous second requests, it was learned that several firms did not reply originally because they had no short term investments of temporarily idle funds and/or no borrowings other than from commercial banks. If such is your case, I would very much appreciate your simply letting me know of this fact.

Several firms have expressed concern regarding the confidential nature of the information. May I assure you that the data are compiled in totals and no identification of specific firms will be revealed without the express permission of the company. Once the data are compiled the records will be destroyed.

Collection of these data are essential to the success of the thesis. If you have misplaced the original letter and questionnaire and would still like to aid me, please let me know and I shall send a second copy. For your convenience, several statements are listed below and it would be appreciated if you would tick the appropriate one and return this letter.

Yours very truly,

David Pascal

We have no short term investments or borrowings (other than bank borrowing) \_\_\_\_\_.

Send us another letter and questionnaire \_\_\_\_\_.

We have not yet been able to complete the original questionnaire but expect to do so \_\_\_\_\_.