MONETARY POLICY IN CANADA

THE NATURE OF MONETARY POLICY

AND

ITS APPLICATION TO THE CANADIAN ECONOMY

By

JOHN EDMUND COLEMAN

A Thesis

Submitted to the Faculty of Graduate Studies

in Partial Fulfilment of the Requirements

for the Degree

Master of Arts

McMaster University

December, 1965

MASTER OF ARTS (1966)
(Economics)

McMASTER UNIVERSITY
Hamilton, Ontario

TITLE: The Nature of Monetary Policy and its Application to the Canadian Economy

AUTHOR: John Edmund Coleman, B.A. (St. Francis Xavier University)

SUPERVISOR: Professor R. Craig McIvor

NUMBER OF PAGES: vii, 142

SCOPE AND CONTENTS: The concept, objectives, and techniques of monetary policy, the constraints under which monetary policy must function, and a survey of Canadian monetary policy from 1955 to 1965.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF CHARTS

PREFACE

The object of this paper is two-fold. Firstly, it endeavours to present a general study of monetary policy. Secondly, it attempts a detailed description or analysis of a particular period. Chapters one and two consider the nature of monetary policy, chapter three, the circumstances surrounding its implementation and chapter four is a survey of Canadian monetary policy from 1955 to 1965. The plan is to proceed from the general to the particular. Thus, when the actual events are presented in chapter four, it is possible to derive an appreciation of the underlying factors and complexities so that any conclusions one may wish to form can be done with perspicacity. Chapter five is a concluding chapter which serves as a summary to the paper, an outline of the salient points, and a statement of the observations made and the conclusions arrived at.

Monetary policy has been the object of considerable discussion in recent years. Within a period of five years, from 1959 to 1963 inclusive, the United Kingdom, United States, and Canada prepared major studies of their financial systems. The studies (Commissions) were undertaken in response to the growing concern over the ability of financial systems to contribute to the economic advancement of their countries. Monetary policy is an integral part of the whole of the financial structure. And as the financial system progresses and new elements are introduced, monetary policy must take account of such changes and introduce its own new elements. In addition to the many studies carried out by these Commissions

the literature on the subject is indeed abundant. The dominant characteristic of the writings on monetary policy is controversy. Controversy stimulates discussion but unfortunately not always illumination. It is hoped that what follows can serve to shed some light on the intricacies of monetary policy.

My thanks are due to Dr. R.C. McIvor and Dr. R.W. Thompson.

CHAPTER I

THE CONCEPT AND OBJECTIVES OF MONETARY POLICY

The Concept of Monetary Policy

Monetary policy may be defined as the use of central bank techniques in the management of the money supply directed towards the influencing of the rate of money expenditures to achieve broad economic objectives. In the preamble to the Bank of Canada Act, it is indicated that the Bank is to:

> ... regulate credit and currency in the best interests of the economic life of the nation, to control and protect the external value of the national monetary unit and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment so far as may be possible within the scope of monetary action, and generally to promote the economic and financial welfare of the Dominion.[1]

Monetary control, therefore, is the regulation of credit and currency. The central bank controls the cash reserves of the banking system and this enables it to determine the general level of total chartered bank assets and the money supply. It follows, therefore, that monetary policy refers to those courses of action or plans designed to regulate the money supply. The money supply is defined as currency outside banks plus chartered bank deposits. The present Governor of the Bank of Canada pointed out that "the trend of chartered bank assets and

---

[1] Bank of Canada Act (July 3, 1934), Ch. 43.

the money supply is of major concern to the Bank of Canada not as an end in itself, but rather as a means through which it can influence credit conditions".[2] Credit conditions refer to cost and availability of credit including such factors as the level and structure of security prices and yields, interest charges on loans, deposit rates, credit-worthiness, collateral security, margin requirements, repayment period, and so on. By influencing credit conditions the central bank can in turn influence the level of demand for goods and services and thus contribute to the achievement of the broad economic objectives.

The orthodox or traditional approach to monetary policy centers on altering the size of the cash base of the financial system and making it easier and cheaper or more difficult and expensive to borrow. Monetary policy operates through the money supply, M. Various developments, however, over the past years have led a number of people to look with disfavour upon this approach. The monetary authorities have been made increasingly aware of these developments but, nevertheless, feel that monetary policy is mainly a process of operating through M. The most eloquent of the critics of this approach is the Radcliffe Committee. This report asserts that central bank authorities should direct their attention not just to the supply of money but to the entire liquidity position of the economy. This is because it is the "whole liquidity position that is relevant to spending decisions".[3] It is the structure of interest

---

[2] L. Rasminsky, Introductory Remarks Before The Royal Commission On Banking And Finance (January 9, 1963), p. 5.

[3] Committee On The Working of the Monetary System: The Radcliffe Report (London, 1959), Para. 389.

rates, that is, the levels and differentials of interest rates, that is important for monetary control and it is felt that if the authorities were given considerable leeway in the manipulation of interest rates they would exert a powerful influence on the entire liquidity position. In the United States the leading voices of criticism are those of John G. Gurley and Edward S. Shaw.[4] Their argument is quite similar to that of Radcliffe. It is concerned with liquidity. They would like to see the monetary authorities broaden their view with regard to the build-up of liquidity in the economy due to the rapid growth of financial intermediaries. In Canada the implications of these arguments have been brought to light by R.C. McIvor.[5] But, as mentioned before, what may be termed the "unorthodox" view is still confined to the academic world. This does not imply that such views have not influenced monetary authorities. On the contrary, much concern has been generated along with a growing awareness that steps must be taken to enhance monetary policy and make it more effective. Nevertheless, the "orthodox" view still prevails in the world of policy.

---

[4] John G. Gurley, "Liquidity and Financial Institutions in the Post-War Period", a submission to the Joint Economic Committee - Study of Employment, Growth, and Price Levels (Washington, January 25, 1960); also Gurley and Shaw, "Financial Intermediaries And the Saving-Investment Process", Journal of Finance, XI (1956), 257-276.

[5] R. Craig McIvor, "The Radcliffe Report: Some Recent Reflections on Monetary Policy", Canadian Tax Journal, VIII (1960), 189-198; also McIvor, Some Aspects of Canadian Financial Intermediaries. (Unpublished).

A policy of monetary ease or restriction is reflected in changes in the availability of credit and interest rates. Considerations of availability of credit to a borrower may often be more important than interest rate considerations.[6] A borrower may be willing to pay a higher interest rate but if the funds are not forthcoming he may have to curtail his spending plans. The concept of availability has been discussed a great deal in the past decade or so. In fact the "Availability Thesis" has been put forth in major defence of monetary policy. When it was being argued that spending is quite insensitive to interest-rate changes there were those who pointed to availability as being the relevant factor in monetary control. This "thesis" or "doctrone" has important implications for monetary policy. Consequently it will be dealt with in some detail.

> Even if the interest elasticity of investment is found to be low, the conclusion does not necessarily follow that monetary policy is ineffective. If banks decline to liquidate securities to meet demands for loans, availability rather than interest rate may become the major restraining factor on credit expansion.[7]

The availability doctrine is based on significant imperfections in the capital market and the "locked-in" effect. Banks ration credit rather than allocate it by the price mechanism as they might have done by lending to the highest bidder. Various explanations can be advanced. One is the 6 percent ceiling that banks must comply with. Another would be the maintenance of customer loyalty. An important factor is

---

[6] Bank of Canada, Submissions to The Royal Commission On Banking and Finance, (May 31, 1962), p. 5.

[7] Paul Wonnacott, "The Height, Structure and Significance of Interest Rates", Working Paper prepared for the Royal Commission on Banking and Finance (November, 1962), p. 80.

the "locked-in" effect, that is, fear of taking a capital loss in selling off securities. With reference to this it has been noted that:

> The doctrine places emphasis upon the willingness, rather than the ability, of the lender to lend. The argument thus relies upon changes in interest rates at the central bank as its chief impelling force, but these "changes" may take the form of increased uncertainty with respect to the prices at which the central bank will buy and sell assets.[8]

The importance attached to the doctrine by monetary theorists, as Scott sees it, is a result of the emphasis placed on the role of the lender. This has been criticized on the grounds that it presents a too narrow view of the doctrine.[9] Availability, argues Guttentag, refers to a condition of the market and is influenced by both supply and demand.[10] "Hence, a decline in credit availability is consistent with a stable or even with an increasing supply of credit if demand is increasing faster."[11] Guttentag observes that "one possible source of the confusion between availability and supply is the emphasis given in the literature on the availability doctrine to the operations of lenders."[12]

Availability is a rather vague concept. Guttentag offers a definition: "By the availability of credit we mean the complex of non-interest-rate lending terms prevailing in the market at any time."[13]

---

[8] Ira Scott, Jr., "The Availability Doctrine: Development and Implications", Canadian Journal of Economics and Political Science, XXIII (1957), 535.

[9] Jack Guttentag, "Credit Availability, Interest Rates, and Monetary Policy", Southern Economic Journal, XXVI (1960), 219-228.

[10] Ibid., p. 222.

[11] Ibid.

[12] Ibid.

[13] Ibid.

But we must be careful here. Interest rates have a role to play but not as a cost factor per se in the borrowing of money. It appears that there are two basic factors that must be considered when explaining just what availability is. One is that banks and other financial institutions do not like to take a capital loss on government securities when interest rates change. They are "locked-in" or "pinned-in". The second concerns imperfections in the financial market. An increase in yield makes government securities more attractive relative to alternative investments because the rates on other assets are kept from rising by institutional rigidities in the market. Lenders, therefore, will ration credit to private borrowers, and some willing borrowers will not be accommodated. For example, convention will keep the rate charged by banks to their customers from rising and loans will be refused. The thread that connects these two factors is interest-rate changes in government securities. Small increases in yields on government securities can limit and even curtail the expansion of private credit. The theory thus has an obvious attraction. It offers the hope that monetary policy can be effective without large increases or fluctuations in interest rates.

John H. Kareken gives a detailed explanation of the availability doctrine[14] which can be summarized with reference to the following six points:

---

[14] John H. Kareken, "Lenders' Preferences, Credit Rationing, And The Effectiveness of Monetary Policy", Review of Economics And Statistics, XXXIX (1957), 292-302.

(1) Changing institutional structure of the supply side of the whole loanable funds market. Here it can be seen that the secular increase in the volume of funds handled by institutional non-bank lenders has to some extent increased the sensitivity of the market to changes in relative yields. The portfolios of these institutions are managed by market-wise professionals who are more anxious and better qualified than individual lenders to take advantage of small changes in relative yields. Because of this, more weight must be given to the specific asset preferences of these institutional non-bank lenders.

(2) Growth of the public debt which has put more government securities into more portfolios and the increase in the range of maturities covered by government securities. Widespread holding of public debt has made the capital market more sensitive to changes in monetary policy. The proponents of the doctrine would then argue that monetary control is facilitated by the transmission of interest-rate changes throughout the economy.

(3) Banks hold a secondary reserve or "liquidity hedge" in the form of government securities as a safeguard against a sudden loss of demand deposits. A reduction in the market value of these securities would render the reserve inadequate. This would induce the banks to increase their holdings of government securities to restore their reserves and make them reluctant to acquire private securities or debt though

the existent spread yield may favour such action. These government securities are also looked upon as a riskless earning asset which is an attraction to financial institutions and not banks alone.

(4) The "pin-in" effect, that is, reluctance to accept a capital loss.

(5) Borrowers' expectations. An increase in interest rates is interpreted as a sign of tighter credit conditions just ahead. This leads to a "wait and see" attitude. Included here is that this movement in yields creates uncertainty for underwriters. They suspect that this increase in yields on government securities means higher private yields in the near future and thus prefer also to "wait and see".

(6) Credit rationing due to imperfections in the financial market. Prevailing yields are regarded as not being competitively determined but are rather administered and inflexible. Thus the existence of an "unsatisfied fringe" of borrowers - or, in other words, Kareken observes, a positive excess demand at the prevailing yield - which is held to be typical of an inflationary situation, does not mean that there will be an increase in yields sufficient to clean the market.

There appears to be an inconsistency between the uncertainty argument and the inflexibility argument. Kareken argues that if there is inflexibility in the market then the uncertainty effect noted above is not operative, for why should there be a "wait and see" attitude beyond that

provided by the possibility that yields on government securities might change still more. What might serve as a defensive argument, however, is that emphasis that one may place on one aspect could be much less or greater than the emphasis someone else may wish to place on it.[15]

M.L. Burstein points out that in the early stages of credit restriction, credit availability is likely to be more important than changes in the cost of credit. Ultimately, higher interest rates will become more important but how soon and to what degree is debatable.[16] He argues that the availability thesis is difficult to test and this is es-

---

[15] It is interesting to note that if the availability thesis is considered to be an important element in monetary policy the 6 percent ceiling on loans that Canadian banks must comply with can be put forth as an argument in support of more effective monetary policy in that, for example, in a period of credit restraint the banks cannot compete equally for funds and must, therefore, ration their lending; also it is conceivable that the 6 percent maximum restrains banks from moving out of medium and longer term issues because they cannot be adequately compensated for doing so because the money obtained from such switching can only earn 6 percent interest. On the other hand, such a restriction makes it more difficult for banks to compete with non-banks partly resulting in the growing importance and influence of the latter in the financial market thereby creating more problems in monetary policy for the authorities. Thus the consequence of removing the ceiling would put the banks in a more favourable competitive position and, for example, check the tendency of those who are refused credit by the banks from turning to non-banks, and, possibly making monetary policy more effective. These latter considerations will be dealt with in detail in chapter three.

[16] M.L. Burstein, Money, (Massachusetts, 1963), p. 212.

pecially so with regard to the alleged imperfections and rigidities in the financial market. Lack of empirical evidence seems to be the major criticism levied against it.

> ... The data appear to tell a story of strongly linked markets of a considerable degree of perfection permitting banks to unload holdings of government securities rather rapidly. The data [1955-57] also suggest banks to be less subject to locked-in effects in handling their government security portfolios than has been claimed. The new theory does not seem to survive the rigors of empirical test.[17]

In the Canadian environment a similar conclusion was indicated by E.P. Neufeld who stated that banks have shown little or no reluctance in selling bonds in order to accommodate their loan customers even if they had to sustain capital losses.[18] Paul Samuelson is sceptical of the doctrine and remarks: "I think all monetary policy must pass through the eye of this needle of interest rates."[19] An appropriate end to the present summary of this controversy is the following quote from the Submissions by the Bank of Canada to the Royal Commission on Banking and Finance which more or less reconciles these diverse views:

> In general the fewer the rigidities and imperfections in financial markets the more are credit conditions mainly a matter of the cost of money. The more widespread the rigidities and imperfections the more important become considerations of availability.[20]

There are two approaches which the Bank of Canada could take to exert its influence on credit conditions. It may do this indirectly through variations in cash reserves avoiding any action which might have

---

[17] Ibid., p. 259.

[18] E.P. Neufeld, "The Bank of Canada's Approach to Central Banking", C.J.E.P.S., XIV (1958), 340.

[19] Paul Samuelson, Testimony before the Patman Committee - quoted by Burstein, op. cit., pp. 260-261.

[20] Submissions, p. 12.

a direct impact on interest rates except at the very short end of the market. The alternative approach involves affecting the level and structure of interest rates directly. The central bank would maintain a particular set of buying and selling prices for various issues of government securities. This would result in the abandonment of orthodox monetary policy - monetary policy as we know it, that is, a process of cash management, refraining from directly interfering with interest rates except perhaps at the very short end of the market. It would require "the virtual fusion of monetary policy and debt management operations".[21] In fact debt management would be monetary management; they become one and the same. The general concern of debt management is with the choice of maturities and offering prices of its issues of securities. If the Bank of Canada were to maintain a particular set of buying and selling prices for government securities it follows that monetary management and debt management "fuse". The approach of the Bank of Canada to monetary management is much closer to the first one, that is, a process of cash management.

> In most circumstances the aims of public financial policy can be pursued effectively without the central bank intervening in the Government securities market on a broad front with precise objectives for bond prices and interest rates, and without resorting to regulations or pressures designed to influence the allocation of credit in particular ways or through particular channels.[22]

---

[21] Ibid., p. 27.

[22] Ibid., p. 28.

There is a direct relationship between the implications in the above quote and the availability thesis. This is seen once we realize that the key factor in the availability thesis is that small increases in yields on government securities can limit or curtail the expansion of credit. Thus, there is no real need of "intervening in the Government securities market on a broad front with precise objectives for bond prices and interest rates".

An important consideration in monetary policy is the "rules versus authorities" debate. Should human judgment and discretion rather than a set of rules and formulae be used to conduct monetary policy? As monetary policy has been traditionally concerned with short-run economic stabilization - the damping of cyclical fluctuations - it follows that authorities has prevailed in the conducting of monetary policy. Canada is no exception. In the Report of the Royal Commission On Banking And Finance the following point is made: "We believe discretionary policy, wisely used, can improve our economic performance and that reasonable economic objectives are not beyond our ability to attain by such means".[23]

Henry Simons argued for the establishment of a monetary system governed by definite rule.[24] Milton Friedman now carries the torch. Simons indicated that:

---

[23] Report of the Royal Commission On Banking And Finance (Ottawa, 1964), p. 537.

[24] Henry Simons, "Rules Versus Authorities In Monetary Policy", Journal of Political Economy, XLIV (1936), 1-30.

> An enterprise system cannot function effectively in the face of extreme uncertainty as to the action of monetary authorities or, for that matter, as to monetary legislation. We must avoid a situation where every business venture becomes largely a speculation on the future of monetary policy. In the past governments have grossly neglected their positive responsibility of controlling the currency; private initiative has been allowed too much freedom in determining the character of our financial structure and in directing changes in the quantity of money and money-substitutes. On this point there is now little disagreement. In our search for solutions of this problem, however, we seem largely to have lost sight of this essential point, namely, that definite, stable, legislative rules of the game as to money are of paramount importance to the survival of a system based on freedom of enterprise.[25]

The following quote illustrates the opposite view:

> ... the major difficulty confronting the authorities is, that of assessing the emerging situation and judging what measures are necessary to handle it. We have tried to stress that this is a matter of discretion, not of formulae. Each set of economic circumstances has its unique qualities, and remedies which work in one situation will fail in another.[26]

The Royal Commission believes, therefore, that in this matter of human judgment and central banking, it is better to have no fixed rule and to tolerate the blunders of discretion than to blindly accept a rule. This is what has been and this is what has worked reasonably well. The question is to a great extent one of degree. An important consideration involves the realization of the fact that there are many complexities in our monetary system and the central bank, realizing this, argues that discretionary monetary policy is the most feasible approach.

---

[25] Ibid., p. 3.

[26] Report of The Royal Commission On Banking And Finance, p. 526.

The Objectives Of Monetary Policy

According to the Royal Commission the broad economic objectives are:[27]

(1) Rising productivity and economic growth.

(2) A high and stable level of employment.

(3) Stable price levels.

(4) A sound external financial position.

It is well to bear in mind before the section gets under way the warning of the Royal Commission that "any extended discussion of economic objectives must avoid the danger of becoming either a carefully contrived model of arithmetic unreality or an eloquent exercise in generalized vagueness."[28] Generalities are notorious for their unwarranted implications. The purpose of the following discussion is to examine the nature of these objectives and their implications for monetary policy.

The broad objectives of monetary policy are those of public economic policy generally. The Royal Commission explains that "these objectives are not ends in themselves but means of enhancing economic, social, and individual well being and of offering reasonable opportunities to all who wish to take advantage of them."[29] This is in harmony with our philosophy of a free society and the promotion of measures to obtain the greatest amount of welfare for our people. And welfare here implies an equitable sharing of the economic benefits and the maintenance of a

---

[27] Ibid., p. 398.

[28] Ibid., p. 397.

[29] Ibid., p. 399.

high degree of economic freedom. These latter concepts are stated explicitly in the Bank of Canada's Submissions to the Royal Commission,[30] and the introduction of the First Annual Review, Economic Goals for Canada to 1970.[31]

Rising real productivity may be regarded as rising real output per employed person, more specifically, real output per man-hour. Combination of sustained high employment and sustained advances in productivity together provide the basis for sustained economic growth. The concept of output in relation to the manpower required to produce it is the one emphasized by the Economic Council as a measure of advances in productivity.[32] The Royal Commission follows along somewhat similar lines.[33] G.L. Reuber indicates that:

> Economic growth as we choose to regard it, means that as the volume of goods and services supplied to the product market expands, the input of productive factors increases less than proportionately, i.e., the ratio of input to output diminishes.[34]

There is considerable debate concerning the role of monetary policy in economic growth. Professor P.A. Samuelson remarks that monetary policy has some influence on productivity trends insofar as they are dependent on capital investment and capital investment is sensitive to the cost of borrowed funds. Faster growth, if it can be achieved at all, he continues, must depend upon monetary policies designed to stimu-

---

[30] Bank of Canada, op. cit., p. 9.

[31] Economic Council of Canada, Economic Goals for Canada to 1970 (Ottawa, 1964), p. 1.

[32] Ibid., p. 12.

[33] Royal Commission, op. cit., p. 403.

[34] G.L. Reuber, "The Objectives Of Monetary Policy", Working Paper prepared for the Royal Commission On Banking and Finance (December, 1962), p.84.

late a long-term deepening of capital.[35] Part of the confusion over this topic appears to be a result of trying to differentiate the short-run from the long-run. Professor H.G. Johnson points out that monetary policy, as traditionally conceived, is concerned with short-run economic stabilization. This is expressed in the pursuit of price stability and high employment. In recent years the objective of economic growth has been added but Johnson argues that in practice this can be identified with the general goal of economic stabilization.[36] The Economic Council feels it is desirable to avoid excessive preoccupation with short-run cyclical behaviour. It emphasizes the need for longer term growth of the money supply approximately in step with expanding production under conditions of reasonable price stability.[37]

There seems to be a consensus that the objective of a high and stable level of employment should be the one foremost in the minds of the authorities, and that "full employment", in the sense in which the term is used in rational discussion of policy, does not mean 100 percent employment. The one is a function of the Great Depression, John Maynard Keynes, and Public Opinion. The other, that is concerning "full employment", is a recognition of the fact that in a complex industrial economy a minimal amount of frictional, structural, and seasonal unemployment is normal and natural. The Economic Council of Canada has indicated that we should strive to attain a 3 percent rate of unemployment and that this is a realistic objective for the 1960's.

---

[35] Royal Commission, op. cit., p. 530.

[36] Harry G. Johnson, The Canadian Quandary (Toronto, 1963), p.188.

[37] Economic Council, op. cit., pp. 192-198.

Concern over inflation has been a somewhat persistent theme in Canadian economic affairs. This has been reflected in the relatively high degree of price stability actually recorded in Canada over the past decade. By definition, stable prices means keeping prices at a constant level though this is not stated explicitly in the Royal Commission. The consumer price index has been chosen as the indicator of final prices and the fact that this has shown an upward trend, though very gradual in the past decade, suggests that the broad economic objectives, stated as such, must be interpreted rather generously. Nonetheless, one finds now and then those who believe exactness is a virtue as is depicted by the statement that "price level stability in a growing economy means that the average level of prices in the product market remains constant as the volume of goods and services bought and sold in this market increases".[38] The interpretation of the above comments on the meaning of price stability that is reasonable and practical is one of viewing the actions of the authorities in resisting price changes to the best of their ability realizing that there are forces that will, for example, push prices up.[39] The Economic Council indicates that a flexible price system can be an important contributing factor to sustained and balanced growth.[40]

The Royal Commission argues that because there are so many factors involved in the promotion of the objective of a "sound external financial

---

[38] G.L. Reuber, op. cit., p. 86.

[39] The phenomenon of "cost-push" inflation will be dealt with in chapter three.

[40] Economic Council, op. cit., p. 188.

position" it is unable to give a definition that summarizes this objective. Rather it explains that "the best way for us to maintain a sound external financial position will still be to have a soundly-managed economy at home".[41] Perhaps, however, a tenable balance-of-payments position could suffice as a definition. The fact that Canada now has a "pegged" exchange rate restricts the freedom of its monetary policy. It is necessary to give special attention to the maintenance of a rate which may only fluctuate one percent in either direction. Externally-generated inflationary or deflationary pressures can no longer be eased by adjustments in the exchange-rate. "In the final analysis, it is not the exchange-rate system in use but domestic policy designed to keep the economy efficient and adaptable which is the essential condition of achieving a sound and viable external financial position", argues the Royal Commission.[42]

Conflict Among The Objectives

There is a certain degree of incompatibility among the objectives of economic policy. Policy is a compromise among ends. The real problem is not how to pursue some particular objective but in how to achieve all our objectives with a minimum of over-all sacrifice. Because of conflicts among the objectives, the question of priorities among ends assumes considerable importance especially with the realization that while one objective that properly demands primacy today may not tomorrow. Conse-

---

[41] Royal Commission, op. cit., p. 503.

[42] Ibid., p. 492.

quently, a decision is inevitably made about how far to pursue each objective of policy. In order to make this judgment with any degree of accuracy it is necessary to have some idea of the "trade-offs" among objectives. The term "trade-off" refers to the cost and benefit of pursuing one objective at the expense of another. In other words, there is an opportunity cost involved. The question, therefore, is how much of one commodity (one of the objectives) must be given up to get more of the other.

> It is a rare occurrence when the structure of our economy and the nature of policies are such that the pursuit of one objective leads automatically to the achievement of another.[43]

> There is no single purpose -- whether it be stability of the purchasing-power of the currency, stability of its exchange value, full employment or what not -- that can rightly be accorded primacy at all times.[44]

Research into the subject of "trade-offs" has been carried out in a study by G.L. Reuber for the Royal Commission.[45] An examination of his analysis follows.

Chart I is a graphical illustration of the "trade-offs" between price stability and employment in a theoretical framework. AA is a Phillips curve. The philosophy underlying the Phillips curve analysis assumes that financial policies exercise their influence on prices and employment through their influence on the level of aggregate demand and that they do not affect prices and employment independently of their

---

[43] Ibid., p. 417.

[44] W.F. Crick, "Principal Memoranda of Evidence Submitted to The Committee on the Working of the Monetary System", V.3, Radcliffe Report, p. 57.

[45] G.L. Reuber, op. cit.

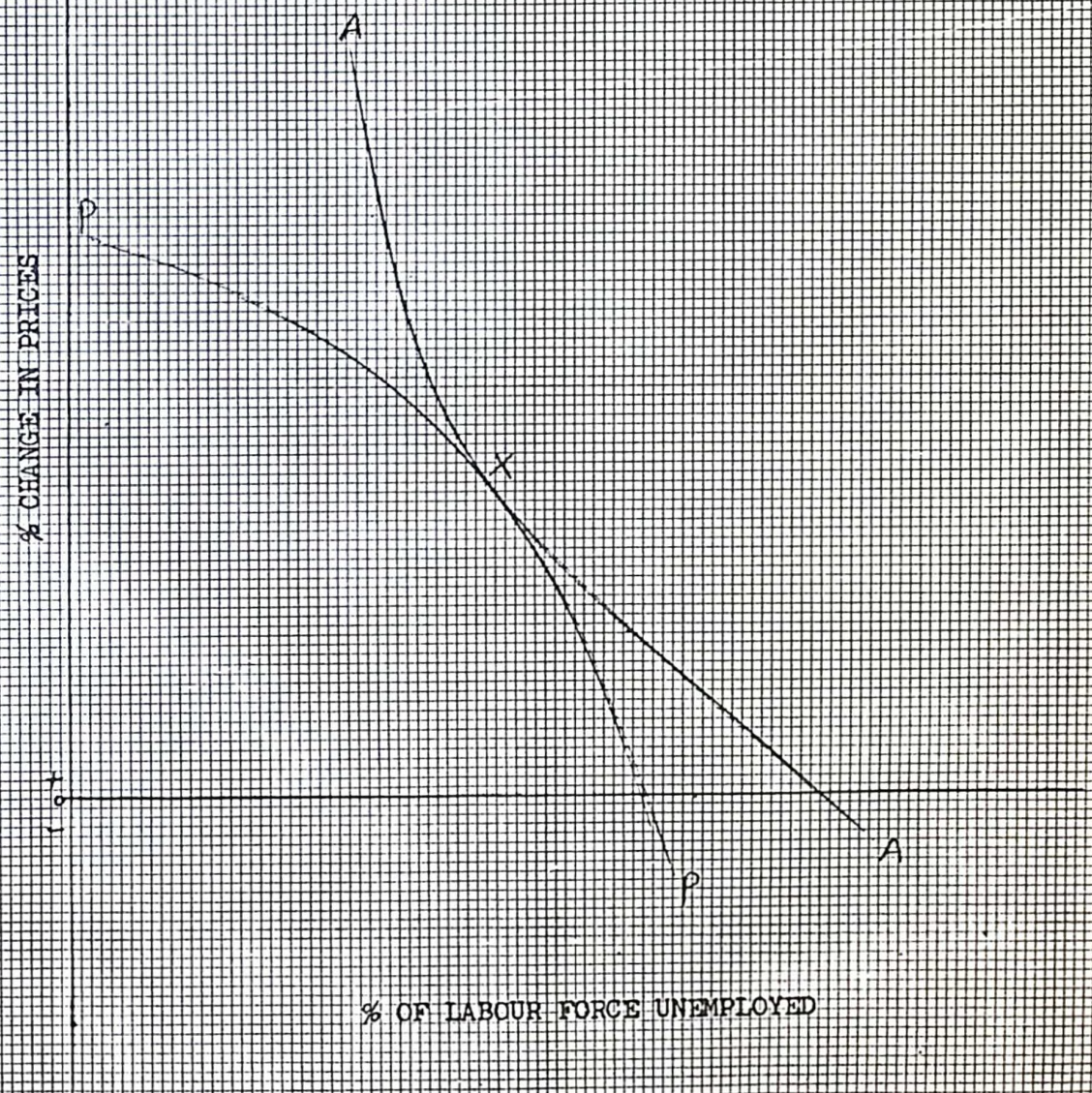
influence on aggregate demand. AA, a maximum possibilities line, relates two policy objective variables, employment and prices. It illustrates an "opportunities function" which serves as a basis for evaluating policy. Such a function defines consistent and attainable combinations of various policy objectives and any movement from any point on the curve to another point involves a "trade-off". Thus, it describes maximum possibilities in the sense that from any point on the curve any further movement toward the ideal (origin) of one objective will be at the expense of the other objective. The shape and position of the curve reflect the underlying structural elements of the economy such as technical knowledge and institutional arrangements, and, policy instruments available for use, their impact on the structural elements, and the interrelationships among various policy instruments. In the absence of conflicts between objectives, AA would collapse and the optimal policy combination would be attained ideally.

PP is a "preference function" representing combinations of two objectives that are equally acceptable to society, that is, society is indifferent as between combinations on any point on PP. Thus PP depicts a family of indifference curves reflecting diminishing marginal rate of substitution - greater price stability is achieved at the expense of increased unemployment.

Now where on AA policy should aim depends ultimately on the preferences of the government (assuming that they are the preferences of society) illustrated by PP. The optimal policy objective is combination X. It could be said therefore, that AA denotes objectivity and PP subjectivity. It is quite apparent, therefore, that the "trade-offs" between

CHART I

TRADE-OFFS BETWEEN EMPLOYMENT AND PRICE STABILITY



SOURCE: G.L. Reuber, op. cit., p. 28.

objectives can never be measured only in economic terms because they involve political and social considerations as well. The relative weights given to the objectives must depend upon a value judgment in the final analysis. This would be so even if the judgment were to be made solely in economic terms for someone would still have to decide to what degree to pursue one objective relative to another.

There appears to be nothing in the record of Canada and other countries to support the view that rising productivity is incompatible with the other objectives. There is the suggestion that long-run growth be left to means other than those of monetary policy such as more government aid to universities and institutes of technology, increased public investment in resources (for example, development of offshore mineral projects), and encouragement of new and growing industries.[46]

There is a definite conflict between employment and price stability. The Royal Commission remarks that "the evidence we have studied indicates that the likelihood of conflict between the goals of full employment and absolute price stability is much greater than that between productivity and the other goals, at least in the short run".[47]

The major domestic goals are most likely to come into conflict with the international objective, i.e. a tenable balance-of-payments position, if world demand or prices for Canadian exports changes fundamentally, if there are continuing inflationary or deflationary develop-

---

[46] Ibid., pp. 10, 123, see also pp. 88-93 for evidence to support the belief that there is no incompatibility between productivity and the other objectives.

[47] Royal Commission, op. cit., p. 418.

ments in the main trading countries, particularly the United States, or if weaknesses in international currency arrangements restrict trade and limit the scope of domestic financial policy. In attempting to combat excessive demand, monetary restraint might be limited because of the consequent capital inflows due to high interest rates.

If an unemployment rate below 3.5 percent were attempted, Reuber argues that pressure on domestic price levels would seem likely to become so great that compensation through the exchange-rate, increased capital inflows, or foreign inflation would be required to maintain a viable balance-of-payments. Foreign inflation is beyond our control; thus shooting for a low level of unemployment, given stable prices abroad, implies either an accelerating rate of capital inflow or a continuous depreciation of the exchange-rate. At present, the exchange rate is pegged.

Reuber estimates that if international prices are assumed to increase 2 percent annually unemployment in Canada would have to be about 8 percent to stabilize Canadian price levels; and with a 3 percent level of unemployment (what the Economic Council considers as a minimum to strive for) prices would increase 3 percent per year. The Canadian price level might be expected to remain approximately constant if the level of unemployment were 5 percent and international prices remained constant. With 3 percent unemployment and constant international prices the Canadian price level would increase at an annual rate of about 1.7 percent.[48]

---

[48] G.L. Reuber, op. cit., pp. 8-20.

In view of the above analysis and observing what the authorities actually did in the implementation of their policies over the period studied by Reuber (1949-1961), the authorities allowed for trade-offs among the objectives that have been inaccurate. But if it is assumed that they were alert and arrived at reasonably accurate estimates about the trade-offs, then they showed a bias toward price stability relative to unemployment. This reflects the view, Reuber argues, that the economic costs of price inflation are high relative to the costs of unemployment.

> ... the point that "considerations of equity argue strongly in favor of price stability, for inflation is widely regarded as being very unjust in its effects" (Bank of Canada, Submissions, p. 21), does not face the relevant issue of whether the distributive injustice of more stable prices and greater unemployment is less than the distributive injustice of less stable prices and less unemployment.[49]

It goes without saying that difficult choices have to be made. The authorities can either scale down or temporarily abandon one or more of the objectives or, preferably, improve and extend policy instruments at their disposal. In the very short-run only the first course may be open. Here circumstances will help to decide what course of action to take. Thus if unemployment has exceeded 3 percent in the past several years it should receive greater priority.

> Since policy combinations always involve choice, virtually never are without their drawbacks, and usually must be applied to a changing environment, we can offer no immutable formula by which the authorities should be guided.

---

[49] Ibid., p. 267.

> We do, however, wish to stress the importance of making as careful a calculation as possible of the costs and benefits of following one course rather than another, having in mind their longer-term effects.[50]

The next chapter considers the means that the monetary authorities can use to achieve the ends or objectives of policy.

---

[50] Royal Commission, op. cit., p. 420.

CHAPTER II

THE TECHNIQUES OF MONETARY POLICY

Open-Market Operations And Debt Management

The Bank of Canada's open-market operations relate to its transactions in federal government securities. Net purchases of such securities by the Bank provide the banking system with additional reserves which may be used as a basis for credit expansion, while net sales reduce bank cash and may restrict bank loans and investments. It is primarily through these transactions that the Bank is able to exercise monetary control over the financial system. It is the principal technique of monetary control. Transactions may include the buying or selling of securities from and to either the chartered banks or investment dealers or general public. A purchase of $14 million in securities from the banks can possibly lead to an expansion of their deposits by an amount equal to 14.3 times the amount of the purchase.[1]

In carrying out open-market operations to vary cash reserves, the Bank of Canada generally chooses to deal in relatively short-term securities in order to minimize the direct price impact of its transactions on the market. This is in line with its basic philosophy of monetary control as outlined in the previous chapter. Chartered banks hold their liquidity in the form of cash plus money market earning assets (day-to-day loans,

---

[1] This assumes that the cash reserve ratio is 7 percent - 7 percent being the new ratio proposed by the Finance Minister on May 6, 1965. It also assumes no leakage of cash into the hands of the public, which is very unlikely.

treasury bills, and short-term government bonds), and their initial response to changes in cash reserves is usually to add to or reduce these earning assets. This, however, does not preclude the central bank engaging in medium and long-term securities transactions. The sensitivity of capital movements to changes in interest rates in countries is a reason for the authorities to operate in a particular area of the market. For example, we may wish to keep short-term rates relatively high so as to attract foreign capital, but at the same time allow long-term rates to fall in order to induce more investment to stimulate the economy. There are times when action must be taken to cope with shifts of assets associated with large-scale private or public debt operations. As the Bank of Canada noted: "The need to co-ordinate central bank operations with Government debt management operations is another reason why the Bank of Canada feels it should not rigidly restrict itself to dealing only in short-term securities."[2]

Debt management, which is taken to mean the management of that part of the government's debt which takes the form of direct and guaranteed securities outstanding, has an important place as a supplementary instrument to vary credit conditions. One of the main areas of decision in debt management is the term of securities to be issued. Such decisions have an important effect on the structure of interest rates, that is, on the relative yields of securities of different terms to maturity. This will in turn affect credit conditions throughout the economy.

---

[2] Bank of Canada, Submissions, p. 30.

> With debt management policy and monetary policy conducted on the basis of common views regarding the kind of credit conditions which are appropriate to the economic circumstances there is much that each can do to complement the other. The choice of maturities and offering prices and the general handling of new securities issues as well as the operation of debt management accounts can support the efforts of the central bank to exercise an appropriate influence on credit conditions. Similarly, cash reserve management and the open market operations of the central bank can help to moderate short-term fluctuations in the level and structure of yields and to assist the smooth and orderly marketing of new issues.[3]

It is not easy to draw a sharp line of demarcation between debt management and monetary policy. A distinction between the two was attempted by the present governor of the Bank of Canada.

> Debt management decisions have their influence on credit conditions by affecting the characteristics and the amounts of the various types of Government securities that are outstanding, thereby affecting the terms on which investors will hold them. Monetary policy exercises its influence in part by affecting the distribution of the outstanding Government securities between banks and other holders.[4]

If one regards debt management as including all measures that affect the size and composition of the stock of outstanding claims against the government, including the central bank, open-market operations would be included. The Royal Commission defines the federal debt as including all outstanding securities, wherever held.[5] According to the Commission, changes in the state of the debt held by the public may result from sales and purchases of securities by the Bank of Canada as well as debt issue, retirement or market transactions carried out for the government. Such central bank operations are treated as an integral part of debt management.

---

[3] Ibid., p. 49.

[4] L. Rasminsky, Introductory Remarks, p. 14.

[5] Royal Commission, op. cit., p. 450.

W.L. Smith defines debt management as including all measures which affect the composition of the publicly held debt.[6] Here defined, debt management does not include operations affecting the money supply. Decisions concerning the magnitude rather than the composition of central bank open-market operations come under the heading of monetary policy. Debt management in this sense includes the following kinds of decisions:[7]

(1) Decisions by the government concerning the types of securities to issue to finance deficits and to refund outstanding debt. Included here is "advance refunding", that is, issuance of new securities in exchange for securities that have not yet matured.

(2) Decisions by the government concerning the types of debt to retire with cash surpluses.

(3) Decisions by the central bank concerning the kinds of securities to buy and sell in the open market in its implementation of monetary policy. "Swapping operations", that is, central bank simultaneously buying one kind of security and selling another causing no change in M, would be included.

In Smith's definition, measures which affect the size in contrast to the composition of the publicly held debt are included under the heading of monetary or fiscal policy. Thus, borrowing to finance a budget deficit and the use of a surplus to retire debt are regarded as by-products of fiscal policy, while decisions by the Bank on open-market operations are part of monetary policy. Debt management operations are reduced to the sale of one type of security and the use of the proceeds to reduce another type.[8]

---

[6] Warren L. Smith, "Debt Management In The United States", Study Paper No. 19 prepared in connection with the Study of Employment, Growth, And Price Levels (January 28, 1960), p. 80.

[7] Ibid., p. 80.

[8] Ibid., p. 7.

It is not too difficult to see that there is somewhat of a muddle here. This is inevitable because debt management and monetary policy overlap both on the administrative end and in their effects on credit conditions and economic objectives. If one wishes to make things a bit clearer in one's mind it seems that it is necessary to fall back on our original definition of monetary policy. Doing this and synthesizing what has been said in the last few pages, it may be said that monetary policy is concerned with affecting a change in the money supply, M, and this includes the use of open-market operations, while debt management involves the management of the government's outstanding debt and this includes operating in the open-market. This has perhaps been the major reason why open-market operations and debt management were discussed as a unit.

An investigation into the relationship between debt management and monetary management becomes clearer when we consider the two criteria of debt management. Firstly, there is counter-cyclical management of the debt whereby the public's debt holdings would be lengthened in periods of credit restraint by the issue of new long-term securities and sales of existing long-term debt from official accounts - including the central bank - in exchange for shorter maturities. This tends to raise the whole level of interest rates with particular pressure being exerted on long-term rates, to which expenditures are thought to be especially sensitive. Debt operations would thus reinforce the effects of monetary policy working through cash management and the banking institutions. Conversely, during periods of credit ease, public's debt holdings would be shortened and this would assist in easing credit conditions. This is referred to as

the orthodox theory of debt management. Debt management is used as an instrument of stabilization policy. Warren Smith argues that debt management is a cumbersome instrument of stabilization policy because it is difficult to time in a flexible way, and because the government is almost unavoidably concerned too much about its success in borrowing money and keeping its costs down. The second criterion is minimization of the interest and other costs of government borrowing. Proponents of this policy (and W.L. Smith is one of them) argue that long-term securities should be issued during recession periods when long-term interest rates are low and refrain from offering the same during boom periods when interest rates are high. If the government sells longer-term securities during recessions while, if possible, reducing the short-term debt, this could be advantageous to economic stability, argues Smith. Reducing the supply of short-term securities causes their rates to fall. This will make such securities less attractive to banks thus increasing the incentive for the banks to extend loans which is what is needed in times of recession. But at the same time, however, they will invest in the more attractive longer securities, and to the extent that they cannot find borrowers, this is made all the more real. This will only tend to aggrevate the recession. Smith, nevertheless, reasons that since these securities will probably be somewhat less shiftable in the ensuing recovery period, the banks will find it more difficult to switch and thereby frustrate central bank policy. Thus, monetary control will probably be more effective, he concludes.[9]

[9] Monetary control might be more effective in the ensuing recovery period but perhaps at the expense of intensifying the present recession. To take measures in one period to make monetary policy more effective in the next period is like someone who puts away his winter clothes in January so he will not have to do it in May. In the meantime he freezes.

The point has been made that:

> The policies followed in Canada since the war do not fall clearly into any one of these two categories. However, they come closer to the interest minimization pattern than the counter-cyclical techniques for most of the period.[10]

The Royal Commission expresses the opinion that an attempt to follow any rigid programme of debt management would be undesirable. It does suggest that we should consider entering the long end of the market more often than has previously been the case. In the final analysis it depends on the circumstances at the time.[11]

The American Commission asserts that "budget policy should be countercyclical, moving toward a deficit during periods of potential unemployment and a surplus during periods of potential inflation".[12] The Radcliffe Committee holds that debt management lies at the heart of monetary control and that it should be used to help achieve our economic objectives. Consequently, in recession it would be appropriate to combine a cash deficit with lower interest rates, allowing the debt to become more liquid, while to combat inflation a cash surplus and higher interest rates to reduce liquidity would be in order. This assumes that rising rates (falling bond prices) will stimulate demand for long-term securities.[13] The money supply has little to do with affecting interest rates. Changes in these rates of the magnitude deemed practicable hardly affect spending. Spending is influenced by liquidity. Debt management policy designed to influence the structure of interest rates which tends to control liquidity in turn will influence spending. A rise in interest rates, for example,

---

[10] Royal Commission, op. cit., p. 452.

[11] Ibid., pp. 450-459.

[12] Report of the Commission on Money and Credit (New Jersey, 1961),

[13] The Radcliffe Report, Paras. 562, 563, 603.

will slow down lending through the "locked-in" effect. But they warn that seeking to improve monetary policy through an improved structure of the national debt must not disrupt financial markets.[14]

Cash Reserve Requirements

The 1954 amendment to the Bank of Canada Act empowered the Bank to vary the legal minimum cash reserve-ratio of the chartered banks between 8 percent and 12 percent, but required the Bank, however, to give one month notice, and to limit the change to not more than one percent per month. On May 6, 1965, the federal government proposed that the minimum Canadian cash reserve of the chartered banks be reduced from 8 percent to 7 percent of Canadian deposits. While changes in this ratio can be a powerful instrument of monetary control, this has not in fact been resorted to. Reasons given for this are that it is too drastic and abrupt an instrument, that raising of the ratio would decrease the banks' earnings because they would have to hold more cash which is a non-earning asset, and that frequent changes could engender uncertainty in the financial market and cause harm to an orderly financial market and consequent harmful effects on monetary policy. And because cash reserve management is a process of gradual approximation and day-to-day adjustment, any changes in the ratio should as a result be infrequent. With an 8 percent cash ratio changes in bank deposits will be roughly 12.5 times the change in their cash reserves. With a 7 percent ratio it will be approximately 14.3 times the change in cash reserves. The cash reserve

---

[14] Ibid., Paras. 374, 389, 393, 491.

ratio for the current month is computed from three figures:

(1) The amount of the banks' deposits, computed as the average on four consecutive Wednesdays ending with the last Wednesday but one in the preceding month, that is, ending with the second last Wednesday of the preceding month.

(2) The amount of the banks' holdings of Bank of Canada notes, computed as the average holdings on four consecutive Wednesdays ending with the second last Wednesday of the preceding month.

(3) The amount of the banks' deposits with the Bank of Canada, computed as the average amount on each legal business day of the current month.

Now at the beginning of the month of say August a bank already knows (1) and (2) apply to the month ahead. During August the bank need watch only the portion of its reserves deposited at the Bank of Canada and adjust it so that the average reserve for August, as computed from the three figures above, turns out to be at least 8 percent (or 7 percent according to the proposed change in the Bank Act). Thus, the bank knows at the beginning of each month the amount of Bank of Canada deposits it must hold on average during the month. Changes in its liabilities do not alter the required amount of reserves until they enter the formula in the following month.[15]

---

[15] If at the beginning of August a bank knows that the figures for the Wednesdays of July are bank deposits of $1 million and Bank of Canada notes of $30,000, then the bank knows that total cash requirement for August is 7 percent of $1 million, which is $70,000 and the average deposits it must keep at the Bank of Canada during August is $70,000 minus $30,000 = $40,000. The reserve ratio for any month can be calculated thus - having the deposits at the Bank of Canada and Bank of Canada notes, as calculated and described above, in the numerator, while putting the deposits of the bank in the denominator. In the example, therefore, the ratio = $\frac{30,000 + 40,000}{1,000,000} = 7\%$.

Some controversy has emanated from the manner of calculating cash reserve requirements and to whom they should apply. In the former case, the argument centers about the one month period of adjustment of cash reserves. The Bank of Canada has expressed dissatisfaction with the existing formula for it permits slow responses and results in "unduly large discontinuities in reserve requirements".[16] The Royal Commission argues that the use of a lagged requirement does not allow banks to escape the central bank's control. It believes that the lagged requirement should be maintained. As it is now, the banks are able to move around a bit and when they do have to adjust it will not be done too abruptly.[17] Concerning the latter controversy, the Royal Commission has recommended the application of reserve requirements to financial institutions such as trust companies, loan companies, and credit unions, and that all institutions doing a banking business (defined by the Royal Commission as those institutions issuing demand claims or liabilities maturing within 100 days) should be required to hold their reserves, other than till money, at the central bank.[18]

Varying the cash reserve-ratio is not looked upon favourably as an instrument of monetary control as was previously mentioned. The point has, nevertheless, been made that the use of such a weapon should receive closer inspection: "the variation of reserve requirements is not devoid of all merit as an instrument of monetary control, particularly in a world

---

[16] Bank of Canada, Submissions, p. 34.

[17] Royal Commission, op. cit., p. 463.

[18] Ibid., pp. 390-394.

of open economies".[19] The reference to open economies relates to capital flows and pressure, inflationary or deflationary, from abroad; a large capital inflow in an inflationary period could be offset by a higher reserve requirement.

The Bank Rate

The minimum rate of interest at which the central bank makes advances is called the Bank Rate. Since June of 1962 the central bank has operated under a fixed rate, while leaving the rate applied to money market dealers, through purchase and resale agreements, on a floating basis related to the treasury bill tender as before. Under this dual system the "official" rate at which it lends to banks is fixed from time to time while money market dealers may obtain funds under repurchase agreements at the lower of this rate and the "Money Market Rate" which is set 1/4 of 1 percent above the average successful bid at the most recent treasury bill auction. From 1956 to 1962 the single Bank Rate "floated" 1/4 of 1 percent above the treasury bill rate.

> The practical differences between these various techniques should not be exaggerated because the central bank has very close control over treasury bill rates: they do not move significantly unless the authorities initiate or acquiesce in the change. Changes in a floating Bank Rate thus provide an indication of the central bank's policy just as do adjustments of a fixed rate. On the other hand, neither one can invariably be taken as an unambiguous signal of coming monetary policy.[20]

---

[19] Joseph Aschheim, "Open-Market Operations Versus Reserve-Requirement Variation", Money and Economic Activity: Readings in Money and Banking, ed. Laurence S. Ritter (Boston, 1961), p. 312.

[20] Royal Commission, op. cit., p. 464.

In view of this closely guarded statement it is not too presumptuous to state that the real significance of the Bank Rate lies in the fact that other rates of interest move up and down with it. Raising the rate is generally a signal that restrictive monetary measures are in the making while a lowering of the rate tends to be associated with monetary ease. The Rate is an indicator. It tells the public what the central bank intends to do with regard to monetary policy and its techniques of monetary control.

Central bank advances play a rather limited role in the present system of monetary management. Nevertheless, they are useful in that banks and money market dealers are provided with an "underlying assurance of liquidity".[21] In making such advances the Bank of Canada acts as a lender of last resort. Each advance is made for a period of a week. The first advance made to a bank in any calendar month (up to a certain amount specified for each bank) bears interest at the Bank Rate. A second advance to the same bank, or the renewal of an advance, or an advance exceeding the specified amount bears interest at a rate higher than the Bank Rate.

> Provided that arrangements for access to central bank credit are subject to adequate restrictions and involve paying a penalty rate of interest, they need not in practice weaken the central bank's control over the total of cash reserves.[22]

---

[21] Bank of Canada, Annual Report (1956), p. 45. Also the Submissions, p. 35.

[22] Ibid., p. 35.

In June, 1954, the chartered banks introduced day-to-day loans as a method of finance for money market dealers. These loans are highly liquid and the banks can demand repayment at any time.

The Bank of Canada's "lender of last resort" facilities take the form of purchase and resale agreements or arrangements with the fifteen investment dealers called "jobbers". The Bank stands ready to buy treasury bills and government bonds of under three years' maturity from these dealers, subject to an agreement by the dealer to repurchase the securities within thirty days at a rate equal to the 1/4 of 1 percent above the current treasury bill rate or at the Bank Rate, whichever is lower.

Treasury bills are obligations of the Government of Canada auctioned each week for a 13 week term. Sealed tenders are received from banks and investment dealers. The Bank of Canada also submits a tender. It normally holds a sizeable amount of the bills maturing each week. It varies its purchase of these bills according to the monetary situation. And, if through the treasury bill auction, undesirable changes in the money supply are caused, the Bank may wish to take offsetting measures, say, through open-market operations. A tightening of money is reflected in the tendering for fewer bills, offering a lower price for them (expecting a higher yield), resulting in a lower average price and a higher yield. The following week this may be accentuated and if the central bank wishes to continue its tight money policy it will have to move its reserve bid down.

This brief excursion into the Bank's money market was interjected to depict the relationship or connection between the Bank Rate, money market instruments, and monetary policy - for the money market (where short-term funds are temporarily employed) is one of the first places to show the results of a change in central bank policy.

Moral Suasion

> The term "moral suasion" relates to central bank initiative in developing, in consultation with the banks, measures that will help to make over-all monetary policy more effective and permit a more flexible use of such policy in dealing with situations in which particular elements of imbalance appear.[23]

The term is rather imprecise. In some instances it refers to general exchanges of view with the banks or other financial institutions concerning the over-all financial position of the economy. In other instances it means efforts by the Bank to achieve, through suggestion, discussion, and persuasion, specific changes. Perhaps the most obvious example of this latter approach is the minimum 15 percent ratio of liquid assets (cash, day-to-day loans, and treasury bills) to deposits which the banks were asked in late 1955 to achieve by May of 1956 and thereafter to maintain on a monthly average basis.[24] This line of action,

---

[23] Arthur Smith, "Monetary Control in Canada", The Canadian Banker, LXIII (1956), 134.

[24] Provision will be made in the proposed changes to the Bank of Canada Act, as outlined in the House of Commons on May 6, 1965, calling for the replacement of the present liquid asset ratio by another ratio which the Bank may impose from time to time and vary between 6 percent and 12 percent of Canadian deposits. When such secondary reserves are ordered, the initial step would be from zero to 6 percent. Upward revisions beyond that to 12 percent would be in stages of 1 percent a month.

actually a rather extreme case of moral suasion, has stimulated considerable controversy.

> ... it was made mandatory for the Canadian banks, and lacking any statutory basis, it appears to have been a heavy-handed approach, subject to the usual shortcomings of all direct controls. In particular it interfered with the capital market, in that the banks were thereby required to maintain a distribution of assets different from what they would voluntarily have chosen, and it was of course introduced after certain undesirable trends in the economy had become well established.[25]

Moral suasion is an effective instrument in Canadian monetary management. This is due to our branch banking system and of course to the realization on the part of the banks that any suggestion or "hints" by the Bank of Canada has official backing, and the Bank means business. A related concern here is that the clearer the banks know what the intentions of the central bank are the more effective will be

---

[25] R.C. McIvor, Canadian Monetary, Banking and Fiscal Development (Toronto, 1961), pp. 242-243. The Royal Commission does not appear to be too sympathetic with liquid asset ratios. Although the Bank of Canada has suggested that a variable liquid asset ratio would be a useful supplement to its ordinary techniques of control (Submissions, pp. 34-36), the Royal Commission argues that there is a danger that the "power of persuasion" by the authorities will be used unnecessarily to impose a particular pattern of investment on financial institutions (its Report On Banking and Finance, p. 475). It also indicates that "we do not believe that statutory liquidity ratios should be imposed for the purposes of public protection by the banking legislation" (p. 395). Also the Bankers' Association, in its submissions to the Royal Commission, is critical of the liquid asset ratio (its Submissions, pp. 104-106). They contend that emphasis should be on bettering financial markets for making open-market operations more effective rather than on devising new methods of control.

monetary policy. This brings home all the more the realization of the fact that a certain amount of finesse is required in such matters. It is not too surprising then that central banking is sometimes referred to as an art.

Selective Controls

Selective credit controls affect the direction of lending, that is, they tend to interfere with the allocation of credit. The techniques already discussed are usually referred to as general instruments, though if one pushes this matter of distinction far enough he could encounter the allocative factor on all accounts. The relevant consideration, however, seems to be that selectivity, implying specification, refers to that which is direct. Such controls are aimed at specific channels of credit.

In general, the Bank of Canada is reluctant to ask financial organizations to act in a manner contrary to that indicated by the market forces confronting them.[26] This view is widely accepted in policy circles. Only in extreme situations should they be resorted to. The Canadian Bankers' Association feels quite strongly on the matter, having written that "we believe that any form of selective controls on bank lending would reduce the flexibility of the Canadian banking system which has been one of the strongest factors in the growth of the economy".[27] H.G. Johnson explained that:

---

[26] Bank of Canada, Submissions, p. 38.

[27] Canadian Bankers' Association, Submissions, p. 23.

> ... The important economic question is not so much whether they /controls/ are effective enough to justify their inequity, as whether the leverage gained by discriminating occasionally against efficient financing methods is worth the possible long-run loss of economic efficiency that this discrimination may produce.[28]

Warren Smith believes that monetary policy could be made more effective by moving in the direction of greater selectivity. He argues that we do not necessarily want equal effects everywhere at all times.

> Serious consideration should be given to the development of selective credit controls in sectors of the economy which are the major sources or potential sources of instability, such as consumer durable goods, inventory investment, and residential construction.[29]

Smith's argument concerns the implications for monetary policy of imperfections in the market and of institutional factors. He argues that as a result of these factors the incidence of general monetary controls which change the supply of money and bank credit is uneven, some sectors of the economy feeling it more than others, and some even being left untouched. Thus, according to his reasoning, "the distinction between 'general' and 'selective' credit controls is largely an illusion since so-called general controls have selective effects".[30]

Government Deposit Account

The Government of Canada maintains deposit accounts with the Bank of Canada and the chartered banks. This procedure prevents sharp fluctuations in chartered bank reserves. If the account at the Bank of Canada

---

[28] Harry G. Johnson, The Canadian Quandary (Toronto, 1963), p.211.

[29] Warren L. Smith, "The Effects of Monetary Policy On The Major Sectors of the Economy", Money and Economic Activity by Ritter, p. 195.

[30] W.L. Smith, "Debt Management In The United States", op. cit. p. 121.

were the only one it would tend to fluctuate with the daily ebb and flow of Government receipts and payments. Thus, if the Government's receipts exceeded its expenditures, bank reserves would decrease by the amount of the excess and the money supply would fall. If expenditures exceeded receipts the opposite would occur. Because the flow of these receipts and expenditures is uneven sharp fluctuations in bank reserves would result agitating the monetary situation. Problems would be created for the monetary authorities necessitating offsetting measures. In order to avoid this the Government maintains deposit balances at both the Bank of Canada and the chartered banks and permits the Bank to transfer balances between the chartered banks and the Bank. Government receipts are deposited with the chartered banks and there is no effect on bank reserves. Government expenditures are made by cheques drawn on the Bank of Canada. To prevent the clearing of these cheques from affecting bank reserves, the Bank of Canada, with the concurrence of the Minister of Finance, transfers an equivalent amount from the Government's accounts with the chartered banks to the Government's account at the Bank of Canada. Consequently the Government's account at the Bank can be maintained at approximately the same level and bank reserves are not affected.

> The Bank of Canada normally follows this practice and in this manner offsets the potential effect on cash reserves of Government revenue and expenditure. In order to assist in the day-to-day management of chartered bank cash reserves the level of the Government's balance at the central bank may be varied within a moderate range but does not go outside this range frequently or for long.[31]

---

[31] Bank of Canada, Submissions, pp. 39-40.

Varying the balance at the Bank of Canada can, therefore, be regarded as a tool of monetary management. If the Bank transfers more funds to itself than are necessary to compensate for cheques currently being cleared, it is tightening monetary conditions. If it reduces the size of the central bank account, it is easing monetary conditions.

CHAPTER III

CONSTRAINTS ON MONETARY POLICY

This chapter will consider five constraints on the utilization of monetary policy in Canada. These constraints or limitational factors restrict the freedom of action of the monetary authorities in their use of the instruments of monetary policy; they are operational limitations. In suggested order of importance, they are:

1. The openness of the Canadian economy.
2. Lags in the implementation and effects of monetary policy.
3. Financial intermediaries.
4. Relationship between the structure of the debt and monetary policy.
5. Central Bank - Government relations.

The Openness of the Canadian Economy

The high degree of "openness" in the Canadian economy requires a special need for appropriate reconciliation between domestic policy and the international environment. There are two relevant factors - the volume and nature of the transactions between Canada and the rest of the world, and the exchange-rate system. Approximately 20 percent of the goods and services produced in Canada are exported and about the same proportion of goods and services used by Canadians are imported. The

main feature in the Canadian current account of its balance of international payments is its persistent deficit which is financed by inflows of capital chiefly for long-term investment. Long-term capital inflows include such leading types as direct investments in Canadian industry initiated by non-resident companies, and inflows arising from borrowing abroad by Canadians. The greater part of these transactions are with Americans. Because of our great dependence on the United States it is not too difficult to see why our monetary policy cannot diverge greatly from American monetary policy. For example, owing to the sensitivity of capital movements to interest-rate differentials, the Canadian interest-rate structure is above the American so as to attract the needed capital. Chapter four will show the considerable influence of the United States in shaping Canadian economic policy. But it should be mentioned that in the ordinary course of events, that is, when things are running smoothly, this is not a problem. However, there still remain instances in which certain events appear that must be coped with. The July 18, 1963 announcement by the United States of its proposed interest equalization tax was such an instance. Foreign long-term borrowing was to be subject to a tax. This would have meant that inflows of long-term capital from the United States into Canada would have been substantially reduced, and Canada needs such capital to help pay for its imports of goods. Fortunately, Canada was exempted. In turn, Canada was not to allow its foreign exchange reserves to rise above a certain level. But in September, 1965, this "ceiling" was reached and in fact penetrated, causing embarrassment to the Canadian government. What will become of this remains to be seen.

The 1962 so-called "exchange-crisis" necessitated a sharp rise in Canadian interest rates (widening the Canadian-American differential) to check the outflow of capital. Domestic policy had to be subordinated to the maintenance of the "pegged-rate" of exchange at a time when slackening conditions were evident in the Canadian economy. In light of these observations it is plain to see that the exchange-rate is the most important single price in Canada.

> The international flows of goods and services and of capital are so large that they have important effects on almost every aspect of Canadian economic life, and the foreign exchange rate is almost certainly the most important single price in Canada.[1]

At present, Canada has a "pegged" exchange-rate. It is necessary now to give special attention to the maintenance of the rate which may only fluctuate one per cent in either direction. Externally generated inflationary and deflationary pressures can no longer be eased by adjustments in the exchange-rate. This makes all the more real the fact that the international situation imposes considerable constraints on monetary policy.

The direct responsibility for foreign exchange policy rests with the government. Decisions regarding the determination of the exchange-rate and the management of official foreign exchange operations are government decisions. These operations are executed by the Exchange Fund Account with the Bank of Canada buying and selling foreign exchange on its behalf, managing the Exchange Fund's portfolio of United States Treasury bills and other short-term securities, engaging in gold dealings, opening accounts

---

[1] Bank of Canada, Submissions to the Royal Commission on Banking and Finance (May 31, 1962), p. 56.

in central banks abroad, maintaining accounts with central banks in a number of countries, and acting as agent, depository or correspondent for other central banks and international institutions.

Under fixed exchange rates attention focuses on reserves, while, with flexible exchange rates, it is the rate itself that draws one's attention. In this context the adjustment mechanism will be described. Fixed rates will be considered first.

Assume an increase in demand for Canadian exports. This increases income. It also increases our foreign exchange reserves and unless offsetting domestic policy is undertaken an expansion of credit is likely to take place. Domestic prices and costs will tend to rise. Imports tend to increase due to increased incomes and higher competitive domestic prices. Since Canada is a country with many investment opportunities, it seems likely that in a period of prosperity foreigners would be willing to invest in our country. And as it is probable that domestic savings in Canada will be insufficient to finance the desired volume of investment, Canadian financiers would welcome this needed investment. Thus, capital will flow into Canada and this leads to an induced increase in imports. It is to be expected that part of these induced imports will be consumption goods in order to release factors in Canada for investment purposes. The foregoing analysis helps to explain why Canada experiences a large deficit in its balance of payments in a period of prosperity.[2] This is quite briefly the adjustment process. It should

---

[2] A detailed analysis of the adjustment mechanism can be found in Dr. R.W. Thompson's Ph.D. thesis, The Balance of Payments and The National Income In A Dependent Economy, 1926-38, (Unpublished), Chapter I.

be mentioned that a very similar process occurs under flexible or variable exchange rates. In essence, the fixed exchange-rate system keeps foreign exchange rates steady while internal factors - the money supply, income, prices, monetary and fiscal policy - are expected to keep some sort of international balance. This is the situation in which Canada finds itself at the present time. Fixed rates provide a relatively small degree of autonomy for domestic economic policy.

Now assuming a flexible exchange-rate, the country undergoing an increase in its exports will find its exchange-rate appreciating, that is, the demand for the country's currency will raise the value of its exchange-rate relative to the value of other countries. This makes imports cheaper and tends to increase their purchase. Exports become more expensive for other countries to buy. Also, the increase in exports tends to increase incomes which in turn leads to the purchase of imports. If there is an expectation that appreciation of the exchange-rate will be reversed there will be a tendency for an outward flow of short-term capital to develop which will tend to inhibit further appreciation. Such capital outflows can restrict money and income in our country and to the extent that this happens and the exchange-rate appreciation is resisted imports will fall and this secondary effect has then started a new chain of events opposite to the original one. It is important to note that here the authorities do not have to worry to the same extent about an accumulation or loss of their foreign exchange reserves and the consequent effect on credit conditions as they must under a fixed rate. They have more freedom to move around. The question of the relative merits of both systems is not so much the effectiveness of each. Rather, notes the Royal Commission, it

is "the freedom of action of the financial authorities".[3]

International liquidity considerations are a direct concern in this discussion. Economies today are pledged to full employment policies and stable exchange rates. Balance of payments equilibrium through domestic inflation and deflation is usually not likely to be resorted to. It follows, therefore, that countries must have an adequate supply of reserves since resort also to trade restrictions and exchange controls is looked upon with considerable disfavour in the international circles of finance and trade. In this context, that is, on the question of the intimate relationship between "freedom of action", short-term capital movements, and interest-rate differentials, the following comment has been made:

> Given the importance of short-term capital movements in the contemporary world, and their volatility in responding to interest-rate differentials or speculative sentiments, a country on a fixed exchange rate is likely to be obliged to conduct its monetary policy primarily by reference to the effects of domestic interest rates on international capital movements, and this may well necessitate the pursuit of a monetary policy contrary to that indicated by the objective of domestic stabilization.[4]

Perhaps the most common argument against a fluctuating exchange-rate is that it engenders the element of uncertainty to speculation in international transactions. Charles P. Kindleberger indicates, however, that if monetary and fiscal policy are competent, a flexible exchange-rate system will probably work well and speculation will be stabilizing

---

[3] Ibid., p. 490.

[4] H.G. Johnson, The Canadian Quandary, pp. 194, 5.

and rate changes limited.[5] Of course this also assumes healthy economic conditions. This was more or less the Canadian experience in the 1950's until 1958. Fritz Machlup denotes:

> The chief and most frequently mentioned argument of the opponents of exchange-rate flexibility concerns the risk of foreign trade under fluctuating exchange rates. Reference to the possibility of hedging on better-developed forward markets does not completely answer this objection; more telling is the reference to the probability that the risks of exchange restrictions imposed to "protect" fixed exchange rates may be greater than the risks of exchange fluctuations in free markets, and that the effects of restrictions may weigh more heavily than the cost of hedging against the risk of fluctuations.[6]

The arguments for and against fixed and flexible exchange rates have only been touched on for purposes of illustrating their implications for monetary policy. As far as the relative merits of fixed and flexible rates in relation to speculation are concerned, Kindleberger argues that this cannot be settled by recourse to theoretical arguments. Thus, he asserts that Milton Friedman's contention that speculation is stabilizing due to well informed speculators is but mere theorizing. Prompted by this belief of speculation being stabilizing, Friedman argues for an automatic device in flexible exchange rates to balance his automatic mechanism of a fixed money supply in domestic policy.[7]

Fiscal policy comes to occupy a relatively more important position in domestic economic policy under fixed exchange rates. Other things being equal, a government deficit tends to raise interest rates and a surplus lowers interest rates. Then during a deficit (expansionary

---

[5] Charles P. Kindleberger, "Flexible Exchange Rates", Research Study prepared for the Commission on Money and Credit, Monetary Management, p. 417.

[6] Fritz Machlup, International Payments, Debts and Gold (New York, 1964), p. 360.

[7] Kindleberger, op. cit., p. 415.

fiscal policy) the higher interest rates attract capital. If the exchange-rate is flexible the inflow of capital will tend to appreciate the rate causing a decrease in exports and increase in imports, offsetting, at least to a certain extent, the expansionary policy. If there is a fixed exchange-rate there would be no appreciation of the rate (or depreciation if a surplus, tending to offset a restraining policy). Under a fixed exchange-rate effects of this kind would influence the level of reserves. The Royal Commission observes that the "offset" example above is not too far removed from conditions in the years after 1957,[8] and helps to explain why the relatively large government deficits in this period, without the support of appropriate monetary and debt policies, did not produce the desired effect on the economy.[9]

---

[8] Royal Commission, op. cit., p. 490.

[9] One writer, having presented the case for flexible exchange rates, argues that Canada's troubles with its flexible exchange system cannot be attributed to the rate, itself, but instead to inappropriate monetary policies at home which eventually led to the abandonment of the rate. It is argued that in face of the high interest rates and capital inflows in the latter 1950's the correct course of action pursued should have been the lowering of the whole structure of interest rates. Such a policy would have reduced the premium on the Canadian dollar and improved the trade balance and the level of employment. "The Canadian flexible exchange-rate is gone now, victim not of its own malfunctioning but of squarely inappropriate monetary policies." Richard E. Caves, "Flexible Exchange Rates", American Economic Review (Papers and Proceedings), LIII (1963), 120-129. The Royal Commission adheres to a similar view (p. 490), but indicates, however, that: "In any event, the reduced effectiveness of monetary policy under a fixed rate system and the enhanced power of fiscal policy under such a system means that the latter must be used more actively to achieve domestic objectives".

Lags In The Implementation And Effects Of Monetary Policy

The lags relevant to any economic stabilization programme can be broken down into three types:

(1) Recognition Lag - the time that elapses between the need for action and recognition of the need.

(2) Administrative Lag - the time between the recognition of a need for action and the taking of action.

(3) Operational Lag - the time between the taking of action and the impact of that action on the economy.[10,11]

For discretionary monetary and fiscal measures the recognition lag is generally independent of the particular measures used. The administrative lag is shorter for monetary policy than for fiscal policy. This is directly related to the fact that one advantage monetary policy has over other forms of policy lies in its flexibility. It can be adjusted almost from day to day, whereas policies affecting public expenditures, taxation, and debt management are less flexible requiring more time to introduce and implement. In this context it has been observed that:

---

[10] W.L. Smith, "On The Effectiveness Of Monetary Policy", Money and Economic Activity, ed. L.S. Ritter, pp. 334-337.

[11] The recognition and administrative lags have also been referred to as the "inside" lag and the operational lag as the "outside" lag. H.G. Johnson, "Lags In The Effects Of Monetary Policy In Canada", The Canadian Quandary, pp. 169-187.

> The argument for using monetary policy is usually expressed in terms of the "flexibility" of monetary policy, by which is often meant no more than that monetary policy can be changed quickly. But the real issues are whether the monetary authorities are likely to take appropriate action at the right time, and whether the effects of monetary action on the economy occur soon enough and reliably enough to have a significant stabilizing effect.[12]

However, the operational lag may be considerably longer for monetary than for fiscal policy for the advantage of the latter lies in its direct impact on the income stream while monetary policy has its first impact on credit conditions (cost and availability) and through this indirectly on the income stream. If monetary policy is to act as a stabilizer on the economy it is quite necessary that its influence takes effect with a comparatively short lag. Otherwise, instead of stabilizing, monetary policy may destabilize the economy.

It is necessary to specify some indicator or indicators of changes in monetary policy and the need for a change in policy if one is to have some idea of how long it takes monetary policy to affect the economy. Thus, for example, we go from the economy (e.g. consumer price index tells us that winds of inflation are blowing) to policy (action taken to combat inflation - restriction of the rate of increase in the money supply) to the economy (visible signs of a cutback in expenditures). The chain of events, therefore, involves the alertness of the authorities to detect the need for a change in policy and the ensuing effect on the economy of the action actually taken.

---

[12] H.G. Johnson, "Monetary Theory And Policy", American Economic Review, LII (1962), 368.

Milton Friedman argues thatmonetary policy acts with so long and variable a lag that any attempt to use it actively may aggravate rather than mitigate economic fluctuations. On the basis of this, he prescribes a constant growth in the money supply in preference to any actively anti-cyclical monetary policy. In his testimony on this before Congress, he indicated that:

> Monetary and fiscal policy is rather like a water tap that you turn on now and that then only starts to run 6, 9, 12, 16 months from now. It is because of this long lag in the reaction to policy that you have this tendency for policy in fact to have an effect opposite to that intended.[13]

What Friedman emphasized, therefore, is but a corollary of his previously mentioned views on monetary policy. His argument is that discretionary actions will in general be subject to longer lags than the automatic responses, resulting in greater and more frequent destabilization effects.[14] Friedman's lag is the interval between the peak rate of change in the money supply and the resultant peak change in general

---

[13] Milton Friedman, Hearings - Employment, Growth And Price Levels, U.S. Congress, Joint Economic Committee, Part 4 (86th Congress, 1st Session, 1959), and quoted by J.M. Culbertson, "Friedman On The Lag In Effect Of Monetary Policy", Journal of Political Economy, LXVIII (1960), 617-621.

[14] M. Friedman, "The Lag In Effect Of Monetary Policy: Reply", J.P.E., LXIX (1961), 447-466, especially p. 465; also Friedman, A Program For Monetary Stability (New York, 1959), particularly p. 23.

business activity. This, more or less, corresponds to the operational lag. He indicates that peaks in the rate of change in the stock of money tend to precede peaks in general business activity by about 16 months and troughs in the rate of change in the stock of money to precede troughs in general business by about 12 months.[15] Friedman's position is summarized in his own words:

> What we need is not a skilled monetary driver of the economic vehicle continuously turning the steering wheel to adjust to the unexpected irregularities of the route, but some means of keeping the monetary passenger who is in the back seat as ballast from occasionally leaning over and giving the steering wheel a jerk that threatens to send the car off the road.[16]

---

[15] Friedman, Program, p. 87. J.M. Culbertson is highly critical of Friedman's analysis. He believes that we are dealing with the common analytical problem of isolating the effect of one variable among many that are entangled in complex interrelationships. There is a concomitance of factors. He argues, therefore, that for example, a restriction of money growth early in a cyclical expansion when the economy has a strong upward momentum could scarcely be expected immediately to produce a downturn. He also questions Friedman's lag and argues that comparison between different points of change (not necessarily the peak rate of change, say, in M) could give a different measure. Thus, comparison between absolute peaks between M and income Y, would give a shorter lag. He concludes: "So far as I can see, they (lags) leave the question quite as open as it ever was". J.M. Culbertson, "Friedman On The Lag", op. cit., p. 621; also Culbertson, "The Lag In Effect Of Monetary Policy: Reply", J.P.E., LXIX (1961), 467-477.

[16] M. Friedman, Program, p. 23. W.H. White argues along the same lines as Culbertson in opposition to Friedman's views. He believes that, despite the lags, there is a need for anticyclical policy and such policy is not destabilizing. He suggests that the lag problem in anticyclical policy is too small to require hesitancy in using, or abandonment of cyclical stabilizing measures. W.H. White, "The Flexibility Of Anticyclical Monetary Policy", Review of Economics And Statistics, XLIII (1961), 142-147.

H.G. Johnson, in his study for the Royal Commission, estimated that the influence of the quantity of money on aggregate income ranged anywhere from 6 months to 2½ years. This illustrates that timing of policy and lags in the effects of policy are indeed significant factors which the authorities must constantly take into consideration. Although their control over the outside (operational) lag may not be very great,[17] this only emphasizes the more the need for quick action by the authorities to shorten the inside lag. Johnson admits that his findings are rather inconclusive and it is difficult to say anything definite on this. Nevertheless, it is his contention that monetary policy has little influence on short-run economic stabilization and "that the effect of monetary policy on the Canadian economy is imprecise, slow, and variable".[18]

The Royal Commission, though realizing the limitations imposed on monetary policy by the lags, remarked:

> ... the evidence seems to indicate that for all but the very shortest of cyclical fluctuations, the actions of the authorities can play a useful stabilizing role, although the variable nature of some of the lags means that there is a risk that the effects of previous policies may exert some restraining influence after conditions have changed and ease is called for.[19]

---

[17] This needs to be qualified for to the extent that the authorities are able to take more vigorous action than normal, for example, bringing about wider fluctuations in interest rates, they are able to exert more control over the outside lag.

[18] H.G. Johnson, "Lags", op. cit., pp. 186, 187.

[19] Royal Commission, op. cit., p. 438.

The Radcliffe Committee's assessment of the subject suggests that the use of monetary policy in economic stabilization leaves a good deal to be desired.[20] The American Commission expresses somewhat of an opposite view: "... the Commission believes that monetary policy is a valuable and effective instrument of stabilization policy".[21]

There remain two topics to be discussed in this second section and they are but an extension of the discussion on the operational or outside lag - sensitivity of spending to changes in credit conditions and cost - push inflation. As the Royal Commission explained: "The effect of monetary and debt policies on real economic activity of course depends on the ability of the authorities to influence credit conditions as well as on the influence of credit conditions on expenditure."[22]

Research into the impact of credit conditions on expenditure was carried out by the Royal Commission.[23] Their evidence was derived primarily from short-term rather than long-term changes in credit conditions covering the period from about 1955-1962. It was found that business investment was quite insensitive to changes in credit conditions. A major reason for this, as one would expect, is that a good deal of investment is financed through retained earnings and depreciation allowances. Government expenditure on goods and services also tends to be relatively in-

---

[20] Radcliffe Report, paras. 436-529, especially paras. 460, 464, 498, 521.

[21] Report of the Commission On Money And Credit (New Jersey, 1961), p. 57.

[22] Royal Commission, op. cit., p. 425.

[23] Ibid., pp. 423-448.

sensitive. Principal reasons given for this are that certain government expenditures must be undertaken, and fear of the political consequences of failing to meet them. Consumer expenditure is not affected a great deal by increases in the rate of interest. However, they do show significant responses to changes in the amounts of down-payments or monthly payments or related measures following from changes in the period of repayment of loans. A substantial change in expenditures on new residential construction was observed when there was a lack of availability of NHA mortgage funds.[24] When credit conditions are relatively easy institutional investors have found NHA mortgage lending a profitable outlet for funds. If, however, long-term interest rates rise and no change is made in the NHA rate the yield differential between NHA mortgages and other investments becomes unattractive and investors tend to withdraw from NHA lending.[25] The Royal Commission indicated that attempts to stimulate the economy depicted more or less the converse of the effects on the economy resulting from restrictive measures. In fact, measures to ease credit conditions did not produce as significant results as measures to tighten credit conditions. Attempts to stimulate investment, for example, would be frustrated by such factors as pessimism concerning the slump conditions at the time and low expected profitability. With regard to credit ease, the following view has been expressed:

---

[24] There was a 20-25 percent reduction in planned housing outlays, for example, in the 1956-57 period when NHA funds were scarce. Ibid., p.440.

[25] The impact of reduced availability of mortgage funds on housing will in all likelihood be somewhat reduced by theproposed changes in the Bank Act concerning this. The proposal is that banks are to be permitted to make conventional mortgage loans at the going rate of interest and receive the same rate of interest on NHA mortgages as do other institutions.

> Such evidence as we have gathered suggests that the increase in domestic expenditure, other than housing, which has been brought forth by a decline in interest rates and increase in the availability of credit has been very small. This is in line with the frequently expressed view that monetary policy can be effective in restraining a boom but is less effective in stimulating a recovery.[26]

The Royal Commission believes that effects of credit conditions on expenditure are significant enough to be worth striving to achieve at the right time. It is their presumption that wider changes in credit conditions are likely to have more powerful effects on expenditures but that we cannot expect greater changes on expenditure than already experienced without greater changes in credit conditions.[27] The American, British, and Canadian Commissions were quite emphatic in trying to convey to the reader the significance of the "mix" of policies in that one cannot expect powerful effects from monetary policy alone.

This section will conclude with a discussion of cost-push inflation and the implications of this inflation for the exercise of monetary policy and the resultant effectiveness of monetary policy. The phenomenon of seller's inflation or cost-push inflation occurs when strong unions obtain wage increases in excess of increases in productivity. It also occurs when industry jacks up its profit margins in order to increase its share of national income. The essence of cost-push inflation is that costs increase causing prices to increase. It has been argued that this creates a dilemma for monetary policy owing to the fact that prices may rise with-

---

[26] Ibid., p. 434. This view parallels those of the Report of The Committee On The Working Of The Monetary System, para. 521, and the Report Of The Commission On Money And Credit, p. 54. The latter noted that "during recessions the prospective profitability of added investment may already be so low that thereduced credit costs provide an insufficient stimulus to borrowing and to capital formation".

[27] Royal Commission, op. cit., p. 446.

out an increase in demand.[28] If prices rise because of cost-push and restrictive measures are taken to combat the rise in prices the result will be a tendency for demand to decrease. But if aggregate demand was not excessive originally this will cause demand to be insufficient to maintain the present level of spending and employment. Monetary policy has a high level of employment as one of its objectives. On the other hand if restrictive measures are not taken prices will continue to rise. Monetary policy has as one of its objectives the maintenance of stable price levels. And even if restrictive measures are taken they may not be too effective in curbing this type of inflation.

Considerable controversy has centered around the "modus operandi" of seller's inflation and its relationship to other types of inflation - notably, demand - pull, the cause of which is attributed to excess demand in either the product or factor markets or both. The Royal Commission asserts that "we are not particularly impressed with the usefulness of drawing a distinction between cost-push and demand-pull inflation".[29] G.L. Reuber holds to the same opinion explaining that cost inflation is indicated if money wages rise faster than productivity but that this is equally true of a demand inflation. As far as wages pushing up prices -

---

[28] James R. Schlesinger, "The Role Of The Monetary Environment In Cost Inflation", Money and Economic Activity, pp. 353-362.

[29] Royal Commission, op. cit., p. 418.

such a causal sequence is quite hazy.[30] Alvin Hansen remarks that "it could quite well be the other way around: price and profit causing wage increases in excess of productivity gains".[31] The so-called "Chicago view" is that anxiety concerning cost-push is overdone - that the economic power of industrial unionism is not that great and that prices and wages are determined or administered in accordance with general demand conditions.[32] The interaction of cost-push and demand-pull suggests of course that the more successful monetary policy is in influencing demand (for this is how monetary policy achieves its objectives) the more successful it is in curbing cost-push. The Commission On Money And Credit's summary of its position on this will serve to tie together the ideas on this matter.

> Although sustained and prolonged general price rises are usually the result of the interactions of forces from the demand side and the supply side which have cumulative effects on each other, nevertheless the distinction between price increases from demand-pull on the one hand and from market power, demand-shift, and cost-push on the other is important. If the second group are dominant, monetary, credit, and fiscal measures which influence the level of demand may, if operating alone, face a serious dilemma because the actions taken to achieve greater price stability may add to the number of unemployed or retard growth.[33]

Financial Intermediaries

As the term "intermediary" suggests, the role of financial intermediaries is to bring borrowers and lenders together. They acquire

---

[30] G.L. Reuber, Working Paper, p. 164.

[31] Alvin Hansen, Economic Issues Of The 1960's (New York, 1960), p.10.

[32] Schlesinger, op. cit., p. 355.

[33] Report Of TheCommission On Money And Credit, p. 17.

funds by issuing claims against themselves and use the funds to acquire financial assets, issued chiefly by the non-financial sectors of the economy. Their operations help to determine interest rates, flows of saving and investment, and the level of national income. They facilitate the accumulation of real assets by business, consumers, and governments, exercising an important influence on the volume and composition of real-capital formation. They also provide the public with financial assets such as chequing and saving deposits, insurance policies, pension and annuity rights. Their contribution to economic efficiency and advancement is quite evident.

The chartered banks, also financial intermediaries, contribute significantly to the liquidity of the entire financial system because of their role as the main purveyors of short-term credit and chequable deposits to the economy as a whole. The main distinction between the claims created against banks and other financial intermediaries lies in the nature of their liquidity, the former being more liquid and more acceptable. Some of the liabilities issued by financial institutions provide the economy with the means of making payments, e.g. chequable deposit liabilities. Some, like bank chequable deposits, are acceptable to all; they are money. Others, like orders on local credit unions, may be acceptable only in a limited area. What mainly distinguishes the near-banking intermediaries from the banks is that the liabilities of the banks constitute the money supply while those of the near-banks do not. Nonetheless, the liabilities of the near-banks serve as money in the sense that they are widely acceptable.

It has seemed to be a distinctive characteristic of the banking system that it can create money, erecting a "multiple expansion" of debt in the form of deposits on a limited base of reserves. However, each type of near-banking intermediary can create credit, though not in monetary form. The banks must now hold cash reserves at the Bank of Canada equal to 8 percent of their deposits. For every $1 gained in reserves the banks can expand the money supply by $12.50, assuming no leakage. The near-banks keep their reserves in the chartered banks upon which they too can erect a "multiple expansion" of credit, but non-monetary credit. The near-banks, however, are not tied to any required legal reserve requirement as the banks are. They are also able to compete for funds on a more favourable basis than the chartered banks for they can offer better terms on their liabilities. The relevant consideration flowing from this is that the near-banking intermediaries are less inhibited in their credit creation than are banks in creating money.

It has been not only the Royal Commission that showed concern over the rapid growth of near-banking intermediaries.[34] The British[35] and American Commissions[36] also note that the banking system is hindered by these intermediaries.[37] Pioneer work in this field has been done by Americans John G. Gurley and Edward S. Shaw.[38] They have observed that

---

[34] Royal Commission, passim, and, for example, pp. 3, 358, 377, 396.

[35] Radcliffe Commission, passim, particularly paras. 401, 460, 504.

[36] Commission On Money And Credit, chapter 6, especially pp. 154-156.

[37] The Bank of Canada, Annual Report (1956), p. 30, makes reference to the same theme.

[38] Reference has already been made to their works. See chapter I of this paper.

liquidity expansion during the postwar years was predominantly in the form of the growth of non-monetary liquid claims on financial institutions. A very simple interpretation of their analysis is as follows: suppose the monetary authorities wish to pursue a policy of monetary restraint. They take measures to decrease the money supply. As a result interest rates increase. Now on the other side of the financial market the following sequence of events occur: the supply of non-monetary liquid assets has increased greatly over the past two decades due to the growth of non-monetary intermediaries. This has decreased the demand for money which lowers interest rates and may frustrate the above actions of the monetary authorities. More specifically, the appearance of high money substitutability of many of the instruments issued by the near-banks lessens the demand for money and lowers the equilibrium rate of interest. It is also thought that the elasticity of demand for money is increased.[39] Consequently, any change in interest rates which the Bank of Canada might wish to bring about will necessitate a corresponding greater change in the money supply. Gurley assigns a weight to non-monetary liquid assets equal to $\frac{1}{2}$ the weight of money. Supposing that the demand for money is reduced by $\frac{1}{2}$ the increase in the supply of each type of non-monetary liquid assets, then if non-monetary liquid assets rise by $100 and the money supply falls by $50, the market for money would remain in equilibrium at the same rate of interest. This has induced some rather dramatic comments, for example: "Variations in bank cash as the fulcrum of monetary

---

[39] Harry Johnson points out that the real question for monetary policy is whether financial intermediaries substantially increase the interest-elasticity of the demand for money. This is an empirical question and empirical evidence does not substantiate this view, Johnson states. H.G. Johnson, "Monetary Theory And Policy", p. 374.

control will become a progressively unsatisfactory mechanism;"[40] and again: "If credit creation by banks is miraculous, creation of credit by other financial institutions is still more a cause for exclamation;"[41] and finally: "Increased availability of monetary substitutes generally leads to increased elasticities of substitution, requiring larger operations for given effects on interest rates".[42]

Gurley and Shaw have directed the attention of the policy makers, financiers, economists, and other interested groups, toward these aspects of non-monetary intermediaries. Their analysis, however, has been the object of considerable controversy and criticism. J.M. Culbertson's criticisms are typical.[43] Contrary to Gurley and Shaw, he argues that money is unique, meaning that banks are the only private institutions whose debt serves as a generally acceptable medium of exchange, i.e. as money. Some others can substitute for it to some degree but there is no fully adequate substitute. "Because it creates money, the banking system can affect the volume of its liabilities and can create or extinguish credit, or loan funds in a way that no other financial institution can."[44] Gurley and Shaw reply:

---

[40] R.C. McIvor, Financial Intermediaries, p. 96.

[41] Gurley and Shaw, op. cit., p. 263.

[42] M.L. Burstein, op. cit., p. 121..

[43] J.M. Culbertson, "Intermediaries And Monetary Theory: A Criticism Of The Gurley-Shaw Theory", A.E.R., XLVIII (1958), 119-132.

[44] Ibid., p. 120.

> Money is unique in the sense that no other financial asset is exactly like it. But as much, or rather as little, could be said for any financial asset. The important consideration here for monetary, interest, and price-level theory is how the demand for money is affected by demand for and terms of supply of other financial assets.[45]

Gurley and Shaw have shown, therefore, that non-monetary intermediaries affect the demand side for money as opposed to the banks affecting the supply of money.

An alternative approach is to view the process from the point of view of the velocity of money. For example, if one assumes the supply of money as being constant and demand increases, velocity rises. Because non-monetary intermediaries affect the demand for money they affect velocity.[46] Credit restraint consequently could conceivably become self-defeating since it sets in motion institutional changes that lead to a more efficient use of a given money supply frustrating the intentions of the authorities.[47]

---

[45] Gurley and Shaw, "Reply", A.E.R., XLVIII (1958), 132.

[46] Money is demanded to purchase goods and services (transactions demand) and to hold as a store of value (speculative demand). This involves a division between active and idle money. Idle balances are inactive in the sense that they are not serving as a means of payment. A decrease in their demand (what was referred to in explaining the Gurley-Shaw analysis) increases the transactions demand (what is meant in the paragraph in the regular body of the text directly above) causing money to turn over at a faster rate, that is, an increase in the velocity of circulation of money. Non-monetary intermediaries activate idle balances. According to A.B. Cramp, the existence of such balances is essential to a Radcliffe-type credit expansion - a "Radcliffe-type expansion" - an increase in the activities of non-monetary financial institutions which makes some people (borrowers from intermediaries) feel more liquid, without making other people (lenders to intermediaries) feel significantly less liquid. A.B. Cramp, "Financial Intermediaries And Monetary Policy", Economica, N.S., XXIX (1962), 145-151.

[47] Chartered banks can also effect a direct increase in velocity in their "switching" operations through the transfer of funds from inactive to active holders (banks "switch" their assets by selling securities to the public in order to replace these assets with an increase in loans).

> . . . the notion of the "inherent instability of credit" may not refer so much to bank credit as to the relation between bank credit and non-bank credit, and that an increase in the velocity of money may occur not primarily because people decide to use their bank balances more quickly but rather because non-bank sources have decided to grant more credit and people have loaned some of their savings to these "nimble" intermediaries.[48]

The success of orthodox monetary policy, that is, monetary policy working through the money supply, is impeded. The Radcliffe Committee asserts that central bank authorities should direct their attention not just to the supply of money but to the entire liquidity position of the economy.[49] Dr. McIvor contends that the Radcliffe argument that monetary restraint cannot succeed in curbing spending because of a continuous and unimpeded rise in velocity is not applicable to the Canadian environment. He explains that "in our relatively less specialized financial markets the role of financial intermediaries in aggravating the difficulties of monetary control is a good bit less troublesome than in the British economy".[50]

The American Commission holds a view opposite to that of Radcliffe and in their brief discussion argue that velocity increases as an offset to monetary policy is insignificant.[51] The Royal Commission notes that non-monetary intermediaries play an important part in altering the velocity of money (the American Commission does not admit even this) but as far as velocity continually rising as Radcliffe believes - that is another matter. The Canadians argue that velocity will eventually

---

[48] McIvor, Financial Intermediaries, p. 99. The same case is also developed by R.S. Sayers, "Monetary Thought And Monetary Policy In England", Economic Journal, LXX (1960), 710-724.

[49] Radcliffe Report, para. 389.

[50] McIvor, "The Radcliffe Report: Some Recent Reflections On Monetary Policy", p. 197.

[51] Commission On Money And Credit, pp. 78-81.

come to a half "either when institutions and the public find the costs and inconvenience of running down their liquidity position excessive and cease to make funds available or when the rise in interest rates curtails the borrowers' demand for funds."[52]

Lawrence Ritter argues that it is conceivable that velocity may have a restraining influence on monetary policy.[53] Changes in velocity would provide the needed safety valve - "tempering and graduating the impact of monetary policy and thereby enabling the central bank to apply more restraint than it might otherwise risk".[54] In other words, velocity gives the authorities a necessary margin of flexibility allowing them to restrain the growth of the money supply without fearing a sudden financial crisis. Ritter, however, does make the point that when interest rates are low and idle balances large a small rise in rates is likely to result in a large transfer of funds from hoards to active circulation increasing velocity substantially. Here, there is considerable truth to the "offset" argument, Ritter indicates. But as interest rates continue to rise due to monetary restraint and persistent demands for funds, idle balances are likely to approach a minimum and velocity will reach a ceiling. He concludes his argument by remarking that "within limits, monetary policy can make a positive contribution toward this end [stability], in part because of-rather than in spite of-fluctuations in velocity".[55] Of course, there is the possibility, which Ritter does not mention, that

---

[52] Royal Commission, op. cit., p. 100.

[53] Lawrence S. Ritter, "Income Velocity And Anti-Inflationary Monetary Policy", A.E.R., XLIX (1959), 120-129.

[54] Ibid., p. 127.

[55] Ibid., p. 129.

there might be a reluctance to use monetary policy because a policy of restraint, for instance, will put the banks in a less favourable competitive position and eventually lead to a contraction in the banking system relative to the near-banks. This would seem to be more certain if monetary policy is as a powerful weapon as Ritter assumes it to be. In this context the relevant consideration is the type of public regulation to be imposed on these near-banking intermediaries and the removal of present restrictions on the chartered banks. Regarding the latter, the Royal Commission believes that the prohibition on conventional mortgage lending by chartered banks and the interest-rate ceiling are the most serious barriers to free market forces in the present set up and give the near-banks a considerable advantage over the banks and, therefore, limit the use and effectiveness of monetary policy.[56] Concerning the former, the Commission argues that federal regulation should be compulsory for all institutions doing a banking business and that other institutions should be prohibited from accepting funds from the public in demand form or short-term accounts.[57]

---

[56] Royal Commission, op. cit., p. 364. The present 6 percent ceiling on interest rates will be retained, unless as Finance Minister Gordon remarked: "If at some future time there should be a general rise in world interest rates, the Government would reconsider the 6 percent limit". Text of the Bank Act statement made in the House of Commons, May 6, 1965. It is proposed, however, to allow banks to make conventional mortgage loans at the going rate of interest, and to permit them to receive the same rate of interest on NHA mortgages as do other institutions.

[57] According to the Royal Commission, p. 378, banking should be taken to include institutions accepting deposits with an original maturity of less than 100 days. Apparently this definition is at variance with the view of the courts which have indicated that banks are those institutions accepting deposits which are transferable on demand by cheque or similar instrument. Nothing definite on this has been worked out yet.

The following viewpoint put forth by the Canadian Bankers' Association in its submission to the Royal Commission will serve as an appropriate summary to this particular section and also help to put things in their proper perspective:

> If the growth in other depositories who offer banking services, relative to the growth of chartered banks, should show the same trend in the years to come as over the past five years, the size of the deposit and banking institutions outside the influence of the central bank eventually will become greater than those within it. Based on the trends of recent years, this is likely to take place if existing limitations imposed on the chartered banks continue, and it would follow that rigidities in the market would impair the free working of the monetary system. Under these circumstances the influence exercised by the central bank in its monetary policy would gradually diminish.[58]

Relationship Between The Structure of The Debt And Monetary Policy

This section is but an extension of the topic on open-market operations and debt management discussed in the first part of chapter two. The extension involves a consideration of the perennial problem of reconciling monetary policy with debt management policy. Implementation of monetary policy may conflict with the objectives of debt management policy and vice versa. For instance, among the several reasons given why monetary restraint in 1956 did not seem to reach the desired level of limiting credit expansion was the maintenance of an orderly financial market, that is, the Bank of Canada found it necessary to purchase securities in the face of falling security prices resulting in an attenua-

---

[58] Canadian Bankers' Association, Submissions To The Royal Commission On Banking And Finance, p. 133.

tion of monetary restraint. It is possible, therefore, that, for example, the monetary authorities might not wish to pursue a vigorous policy of monetary restraint for fear that it causes great harm to the securities' market - even though the circumstances of the time calls for monetary restraint. Another related example is a case involving monetary ease. Let us assume a period of recession. Lower interest rates are called for. This means increasing the money supply. However, this could incite fears of inflation, particularly among the holders of fixed term debt. If it is believed that the money supply will rise significantly, holders of such debt might be discouraged from adding to their present holdings or even from holding any such debt in the near and distant future. The result would be damaging to the securities market. There is the possibility, therefore, that expectations of inflation may make fixed dollar debt unattractice preventing the desired fall in interest rates.[59,60]

---

[59] This second example demonstrating the problem of perverse expectations arising out of a policy of considerable monetary ease is discussed by Paul Wonnacott, op. cit., p. 83.

[60] A certain amount of anxiety has been shown concerning the effect of inflation on fixed term debt and savings. The purpose, for instance, of "index" bonds, the value of which is linked in some way to changes in the prices of goods and services, is to offset the so-called erosion of savings. The Royal Commission rejects the issuance of such bonds, partly on the ground that "such bonds are in reality an admission of the government's failure to achieve one of its main economic goals, and their sale can only complicate the task of achieving it" (p. 458). Alvin Hansen asserted: "The point I wish to stress, however, is the fact that alarmist talk about the erosion of family savings in America is just not true. The plain fact is that the purchasing power of accumulated personal savings was never so high as now", Alvin Hansen, Economic Issues Of The 1960's (New York, 1960), p. 30.

There are now two very important points that must occupy our attention for the remainder of this section. One is the relationship between short-term debt and monetary policy. The other is the relationship between long-term debt and monetary policy.

A large short-term debt implies frequent financing and during such financing periods the Bank cannot use its credit controls as freely as at other times or as it would wish. The Royal Commission explained that:

> ... an excessive reliance on short financing will lead to problems of continuous refinancing. This will inevitably give rise to almost continuous disruptions in financial markets associated with the sale and delivery of new issues and may seriously inhibit efforts to influence credit conditions.[61]

Since it is mainly through open-market operations that the Bank of Canada influences credit conditions, then if monetary policy is to promote its objectives, it is not too difficult to see why an orderly financial market is quite essential. The Royal Commission, seemingly aware of the dilemma of reconciling its "philosophy" of monetary control in Canada and the need for more effective Bank action through greater participation in the financial market so as to exert a more powerful influence on interest rates, notes that "the problem of reconciling the goal of broad, self-reliant markets with the need to establish precise levels of interest rates or to curb excessive market swings from time to time is not an easy one".[62]

---

[61] Royal Commission, op. cit., p. 457.

[62] Ibid., p. 324. The same theme is developed in the Submissions by the Bank of Canada to the Royal Commission, pp. 29, 30.

A greater reliance on long-term debt would produce greater effects on interest rates which would assist monetary policy in that credit conditions would be more strongly influenced thereby causing a greater reaction from the economy than is usually brought about. But there still remains the fear that such a policy might disrupt financial markets and harm the capital market. With regard to producing wide fluctuations in interest rates and credit conditions, the following observation has been made:

> There may be hesitation to alter security prices so drastically that dealers and financial institutions are disrupted. An excessive concern for the stability of asset values need not stand in the way of vigorous policy: experience has shown that institutions and markets are well able to withstand very substantial shocks, although this is not to say that policy should ever deliberately court the danger of provoking crises.[63]

If the public debt does consist mainly of short-term securities, monetary controls may not take effect very strongly because it is relatively easy for financial institutions and other economic units to mobilize funds for spending through transactions in short-term securities. Since these securities are close substitutes for money, it is likely that buyers can be found for them among holders of idle cash balances without producing sufficient changes in interest rates to have an appreciable influence on expenditures. The presence and issuance of longer-term securities would tend to inhibit such shifting. Warren Smith has pointed out that "a debt consisting predominantly of long-term securities may act as a kind of automatic stabilizer contributing to the stability of the economy and the effectiveness of monetary policy."[64]

---

[63] Ibid., p. 472.

[64] W.L. Smith, "Debt Management In The United States", p. 9.

The relevant consideration in this section is that owing to the intimate relationship that exists between the structure of the debt and monetary policy, action by one will of necessity influence the course of action to be pursued by the other, implying that there are reciprocal constraints on the activities of both. The following reasoning may help to clarify this even to a greater extent than this section has already attempted to do and at the same time serve as a summary to this section. There is the consensus that monetary policy should be more effective. This means exerting more pressure on credit conditions. One way of doing this is through debt management, more specifically, through a greater participation in the long-end of the market. The Bank usually, though, not always, chooses to deal in relatively short-term securities in order to minimize the direct impact of its transactions on the market - which is in keeping with its approach to monetary control. Thus the constraint on this type of debt management operation can be found in the Bank's professed "philosophy" of monetary control. And also, because the Bank sometimes finds it necessary to support the bond market - this can conflict with its own policies. This means a less effective monetary policy in the final analysis.

Central Bank - Government Relations

This section is concerned with relations that exist among institutions. The previous section and everything else in this paper was about economics and economic relationships. It was thought, therefore, that a separate section was required.

It is a basic fact that cooperation among people is essential to harmonious relations, the achievement of objectives, and ultimately - survival. This presupposes the acceptance of responsibility by people for certain matters. The pertinent consideration in this section is who is responsible for monetary policy. A situation, for example, in which the Government disclaimed responsibility for monetary policy could instil a certain amount of fear into the Bank of Canada in that the Bank would be reluctant to implement a particular policy because of a lack of support from the Government. More important is the effect that an open show of conflict between the Bank and Government, not only over responsibility but anything else on the implementation of policy, has on the general public. Indeed, the resulting lack of confidence in the authorities would lead to a lack of acceptance of policy measures complicating the implementation of policy.

Because of the events surrounding the muddle over this very topic in 1959, 1960 and 1961, Mr. L. Rasminsky, on assuming the office of the Governor of the Bank of Canada in 1961, attempted to rectify the situation and indicated that:

> (1) In the ordinary course of events, the Bank has the responsibility for monetary policy, and (2) if the Government disapproves of the monetary policy being carried out by the Bank it has the right and the responsibility to direct the Bank as to the policy which the Bank is to carry out.[65]

This was accepted by the Government and the current position seems to be that:

---

[65] Bank of Canada, Submissions by the Bank of Canada to the Royal Commission, p. 23.

> ... the Bank accepts full responsibility for its policy while the government which is kept fully and continuously informed - does not disclaim its responsibility.[66]

> The main reason, however, for conferring some measure of autonomy on the central bank has been the historical tendency of governments of all forms to develop the habit of inflating the currency.[67]

The dual system of responsibility as outlined by the Governor is to be extended and clarified by the issuance of a directive by the Minister of Finance to the Bank in rather specific terms, applicable for a specified period, and the Bank must comply with it. This measure, having been recommended by the Royal Commission (p. 543) is among the proposed changes to the Bank Act. The intention is that the directive is to be a measure of last resort, turned to only after all attempts to reach agreement have failed.

Conclusion

Most of the controversy over monetary policy appears to be a function of the factors considered in this chapter. In chapter one we saw what the ends of monetary policy were. In chapter two the means that are used to attain these ends were discussed. Chapter three took account of the environment in which the means that are used to attain the ends of monetary policy must be effected. A listing of these constraints in an assumed order of importance was made. It must be admitted that a listing of this nature did not come too easily. There was not much difficulty in ranking the international constraint as number one. The

---

[66] Royal Commission, op. cit., p. 540.

[67] Ibid., p. 541.

openness of the Canadian economy enormously influences the actions of the Canadian officials. The existence of the pegged rate of exchange reduces even more so the autonomy of our monetary policy. The interest-rate differential between Canada and the United States is of great concern to us and this will be made explicit in the following chapter. The "lags" were ranked second in importance because they cover actually the whole of the working of discretionary monetary policy. It is extremely important that the timing of policy be right and that when action is taken it gets rather prompt responses. Otherwise, monetary policy could destabilize the economy rather than stabilize it and we supposedly use monetary policy with countercyclical intentions. Financial intermediaries, and more specifically near-bank intermediaries, were ranked third because the rapid growth of near-banks relative to the banks means that monetary policy which works primarily through the latter must of necessity lack the "bite" that it would have if all financial intermediaries were banks. Even the banks, themselves, can frustrate the actions of the monetary authorities through their switching operations. However, the relationship between financial intermediaries and effective monetary policy is hazy in important respects such as, for example, the degree of interest-elasticity of the demand for money. Debt management and monetary management have reciprocal effects and constraints but there is much each can do to assist the other and achieve the ends of economic policy and considerable progress has been made toward this. Thus, this factor was considered less important a constraint than the previous three but more

important than central bank-government relations owing to the fact that the latter really only has very infrequently shown what failure to maintain good relations can mean for monetary policy, and secondly, because of an inherent belief that intelligent people desire to come to some agreement in such matters.

The general conclusion is that there is much that monetary policy can do in achieving the objectives - and even help to stabilize the economy which is actually its chief work. One can pick from all the controversy over monetary policy perhaps only one item where general agreement does exist. There is a consensus that maximization of the effectiveness of monetary policy, subject to the constraints imposed on it, is the chief concern in the minds of monetary analysts.

CHAPTER IV

CANADIAN MONETARY POLICY: 1955-1965

The purpose of this chapter is to survey Canadian monetary policy in the past decade. The chapter will be divided into periods of credit ease and credit restraint. From mid-1955 to mid-1957 there was a policy of credit restraint. From mid-1957 to about mid-1958 Canada was faced with a recession and credit was easy. However, from about the summer of 1958 to the early part of 1960 there was a policy of credit restraint which was not in harmony with economic conditions. There was a period of credit ease from early 1960 to mid-1962 which was in tune with the recession during this time. Credit continued to be relatively easy through to the present time of writing, the summer of 1965. But in the summer of 1962 the so-called exchange crisis occurred which marred the recovery Canada was undergoing at this time. This will be considered in a separate section. Though the choice of such periods is somewhat arbitrary, nevertheless, a break-down of a particular era into periods of credit ease and credit restraint facilitates the understanding of monetary policy when that policy is studied over a number of years on a year by year basis which is the procedure to follow.

Mid-1955 - Mid-1957

In the early part of 1955 Canada had been experiencing a recession and monetary policy was one of ease. On February 14 the Bank Rate

was reduced from 2 percent to 1½ percent and the money supply was steadily increasing. In the second quarter economic conditions started to improve. Bank loans increased and this trend carried on through the year such that chartered banks' general loans were up 11.5 percent over 1954. The Canadian recovery from the 1954 recession was greatly influenced, as one would expect, by similar developments in the United States.

By June of 1955 the cash ratio for banks had fallen to 8.3 percent and tightening monetary conditions were reflected in rising yields on day-to-day loans, treasury bills, and short-term government bonds. Bank credit continued to expand rapidly in the third quarter, and "the objective of monetary policy became one of increasing resistance to further expansion".[1] On August 5 the Bank Rate was increased to 2 percent, then to 2 1/4 percent in October, and to 2 3/4 percent in November.

Credit expansion speeded up in October. With monetary conditions becoming more stringent the banks resorted to switching on a substantial scale. The sale of Government bonds by the banks amounted to $69 million in the third quarter of 1955 and $544 million in the fourth quarter. Chartered bank total loans increased by $250 million in the third quarter and by $350 million in the fourth quarter. In light of such developments the Bank of Canada relied on its technique of moral suasion to a significant extent in the latter part of 1955. This took the form of advising the banks that they should curb their lending, that banks should cease making new commitments for term lending,[2] and finally "the Bank urged

---

[1] Bank of Canada, Annual Report (1955), p. 9.

[2] Term lending refers to the making of loans to business corporations where the time of payment is deferred beyond that of ordinary bank loans, or purchasing a security issue negotiated directly with the customer as distinct from buying a publicly issued security in the market.

the adoption of a standard practice regarding the maintenance of a minimum ratio of liquid assets (cash, day-to-day loans and treasury bills) to deposits".[3] The banks agreed to adopt this. Governor Coyne remarked:

> I believe the adoption of such an operating principle will make for a financial system which will respond more quickly, smoothly and predictably to measures of monetary restraint when these are required in the future and which will thus be better able to serve the national interest.[4]

Consumer credit increased greatly in 1955 - an increase of $114 million in 1954 to an increase of $350 million in 1955. This growth was reflected in a 64 percent increase in bank loans to instalment finance companies and a large increase in personal loans. Finance Minister Walter Harris stated that "by virtually every standard, 1955 was a year of exceptional economic advance".[5]

In 1955 and 1956 "inflationary pressures grew by a cumulative process rather than by a sudden outbreak".[6] There occurred a boom in investment, particularly business investment in resource development, construction, and expansion of equipment. Foreign investment took the lead in developing Canadian resources.

Fiscal policy and direct controls were not used in 1955 or 1956 as anti-inflationary weapons. Instead "the main emphasis was on monetary policy".[7] The Bank of Canada indicated that:

---

[3] Bank of Canada, Annual Report (1955), p. 16.

[4] Ibid., p. 17.

[5] Hon. W. Harris, "Budget Speech", House of Commons Debates, XCVIII (May 20, 1956), 2325.

[6] Bank of Canada, Annual Report (1956), p. 4.

[7] Ibid.

> The monetary policy which has been followed in Canada for the past two years [1955 and 1956] has been designed to provide increasing resistance to the continuing expansion of credit, to encourage increased saving, and to offer some discouragement to increased borrowing.[8]

There was an unprecedented increase in business investment in plant and equipment in 1956. The total of such new fixed assets was about 25 percent larger in physical volume than in 1955. Investment expenditure on resource development was approximately 60 percent greater than in 1955. Consumer expenditure on durable and non-durable goods rose by 10 percent and 7 percent respectively. Imports of goods and services were 20 percent greater than in 1955. In light of this the Governor of the Bank of Canada expressed the view that total spending in 1956 was $1 billion greater than was desirable for promotion of general price stability and sound economic growth.[9]

Moral suasion once again played a prominent role in monetary control. The volume of credit used for stock market trading doubled between March 1955 and July 1956. The margin requirement was 50 percent. Though the Bank of Canada has no power to impose or alter margin requirements, it discussed this matter with the stock exchanges and general agreement was expressed that further credit used in stock market trading would be undesirable. The volume of such credit declined from the July peak. During 1956 the Bank met with the major instalment finance companies hoping to prevent any further significant increase in such credit but general agreement could not be reached. No agreement was reached concerning credit selling of durable goods by the major department and chain

---

[8] Ibid., p. 23.

[9] Ibid., p. 14.

stores. However, prior to the meeting between the Bank and major department stores the latter had already agreed to discontinue selling goods on a no down-payment basis.

The Bank Rate was raised to 3 percent on April 4, 1956, 3 1/4 percent on August 9, and 3½ percent on October 17. On November 1 it was announced that in the future the Bank Rate would be adjusted once a week in order to maintain it at a level of 1/4 of 1 percent above the average rate on treasury bills at the most recent auction of bills. At the close of 1956 the Rate was 5.92 percent, the average yield on 3 month treasury bills being 3.67 percent. During 1955 and 1956 interest rates on long-term Government bonds rose less than those on short-term rates. For example, at the beginning of 1955 the rate on three month treasury bills was below 1 percent but was 3.67 percent at the end of 1956; day-to-day loan rate rose from .75 percent at the close of 1954 to 3 percent by the end of 1956; yields on one year Government bonds rose from 1.6 percent to 4.41 percent during the period from the end of 1954 to the end of 1956. However, the yield on a twenty year Government only rose from 3.21 percent at the start of 1955 to 4 percent by the end of 1956. Reasons given for this include heavy sales of relatively short-term bonds made by chartered banks to expand their loans and increased sale of short-term loan notes by instalment finance companies. During 1956 the chartered banks sold $598 million of securities and made loans with the money received. This substantial switching does little to support the availability doctrine discussed in chapter one. Debt management policy was instrumental in moderating the increase in interest rates in 1956 which also helps to explain why long-term rates rose less than short-term. A glance at

Table VI shows that there was considerable debt retirement in 1956. In connection with this the following two official comments have been made:

> The Bank's participation in the market for Government securities, in conjunction with the retirement of debt by the Government, had the effect of moderating the rise in interest rates so that the level reached was lower than would otherwise have been reached under the pressure of demand.[10]

> ... the official purchases of long-term debt in 1956 undoubtedly served to lessen the increase in long-term rates, misguided though the policy may have been.[11]

During the period from mid-1955 to mid-1957 the Governor of the Bank stated that the monetary policy was "a sound money policy".[12] He also explained that "resource development was in fact the basic reason for the intensity of the 1955-57 boom in Canada - and for the degree of inflation experienced".[13] These remarks were in reply to complaints of "tight money".[14]

---

[10] Ibid., p. 25.

[11] Royal Commission, op. cit., p. 455.

[12] Bank of Canada, Annual Report (1957), p. 25.

[13] Ibid., p. 6.

[14] H.S. Cordon and L.M. Read argue that the monetary policy being pursued during this time was successful, and complaints made against the policy a sign of its effectiveness. H.S. Cordon and L.M. Read, "The Political Economics of The Bank of Canada", C.J.E.P.S., XXIV (1958), 465-482.

In light of the constraints discussed in chapter three it is now possible to relate them to events of the mid-1955 - mid-1957 period. Because monetary policy desires certain ends, the objectives will be briefly examined to see whether or not they have been achieved. An evaluation of monetary policy will conclude the section. The following periods will be dealt with in a similar manner.

The period was one of credit restraint as the monetary authorities sought to curb inflationary pressures. The external constraint did not present any serious problems. This is the usual case when the economy is proceeding at a favourable pace. Nevertheless, the openness of the Canadian economy is an ever present determinant of actions taken by the Canadian authorities even though this may not be apparent at times. One only needs to read through the Bank of Canada's Annual Reports to see how much space is devoted to Canada's position in the international environment. Suffice to point out that the increase in interest rates during this period was a stimulus to capital inflows. As a result, the exchange-rate appreciated. Imports increased and domestic industries were subjected to stronger import competition, and exporters found themselves in a less favourable competitive position. These effects on imports and exports were anti-inflationary. There appeared to be an administrative lag, that is, monetary restriction did not get under way quickly enough. As far as the operational lag is concerned, it has already been explained that, in a general context, a good deal of variability surrounds its length. This helps to explain why one cannot say with any great certainty whether or not the lag threatened the countercyclical measures taken by the authorities in this particular instance.

The presence of lags, however, reduces the effectiveness of counter-cyclical monetary policy. Financial intermediaries proved to be somewhat of a problem. There was switching by the banks in 1955 and 1956. And the instalment finance companies extended credit which was not in keeping with the Bank's restrictive measures. Large-scale retirement of the Government debt in 1956 conflicted with monetary policy. The monetary authorities were pursuing a restrictive policy but debt management operations tended to depress interest rates. Finally, relations between the Bank and Government did not present any problems for the implementation of monetary policy.

Inspection of the relevant tables in this chapter illustrates that economic conditions were good. Real gross national product grew at an adequate rate and unemployment was comparatively low. Though the deficit on current account grew appreciably, the balance of payments position remained manageable. However, prices were not stable but in the light of an expanding economy it does not seem that this was an extravagant sacrifice. In fact, between August 1955 and August 1957, consumer prices rose 5.3 percent, wholesale prices by 3.6 percent, prices on residential building materials, 2.7 percent, and non-residential building materials, 4.4 percent.

One may conclude that monetary policy from mid-1955 to mid-1957 should be given a passing grade. Granted there was room for improvement, but when monetary policy was implemented it proved to be effective.

Mid-1957 - Mid-1958

Rising employment and rising wages caused total labour income to increase steadily until September of 1957. Personal income from sources except farm operations also increased but consumer expenditures on goods and services rose less than in the previous two years. Business profit margins started to decline. Exports declined in latter 1957 and the rate of expenditure on resource development tapered off. Recession started to spread through the economy and pessimism concerning the future took hold.

The Bank took steps to ease credit conditions and stimulate the economy. From July 31 to December 31 chartered bank assets rose by $483 million and currency outside banks and chartered bank deposits increased by $486 million during this interval. Bank loans, however, levelled off and then declined. The Bank Rate rose from 3.92 percent at the end of 1956 to 4.33 percent in August of 1957, and declined to 3.87 by the end of the year, and to 3.11 percent by February of 1958 (recall that Rate was tied to 3 month treasury bill rate in 1956). In July of 1958 it went to a low of 1.12 percent. Reflecting the general easing in monetary conditions in the latter part of 1957, interest rates began to fall in August and declined substantially since. The chartered banks reversed their operations in the securities market in August, turning to net buying.

Two major features of the 1957-58 recession were the marked slow-down in the rate of inventory investment and the levelling of business capital investment, the sharpest decline in investment outlays coming in the field of export-oriented resource development.

TABLE I

CHARTERED BANK TOTAL LOANS,[1] SEASONALLY ADJUSTED: AVERAGE OF WEDNESDAYS SERIES

MILLIONS OF DOLLARS (END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	3851	4802	5131	5067	5426	5890	6229	6845	7428	8251	9500
June	3952	5039	5194	4947	5788	5900	6237	7317	7515	8559	9925
September	4202	5073	5186	4946	6120	5940	6342	7617	7603	8727	
December	4552	5122	5103	5096	5938	6206	6544	7372	7916	9075	
Dec.-Dec. Change	737	570	- 19	- 7	842	268	338	828	544	1159	
Percentage Change	19.34	12.52	-0.37	-0.13	16.52	4.51	5.44	12.65	7.37	14.64	

TOTAL CURRENCY OUTSIDE BANKS AND CHARTERED BANK DEPOSITS

SEASONALLY ADJUSTED: AVERAGE OF WEDNESDAYS SERIES

MILLIONS OF DOLLARS (END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	10562	11395	11476	11968	13308	13077	13883	15122	15575	16863	18271
June	10932	11473	11463	12290	13261	13268	13966	15540	15957	17176	18795
September	11217	11456	11467	13033	13184	13293	14461	14998	16165	17517	
December	11308	11425	11750	13153	13044	13680	14842	15267	16612	17610	
Dec.-Dec.Change	1022	117	325	1403	-109	636	1162	425	1345	998	
Percentage Change	9.93	1.03	2.84	11.94	-0.82	4.87	8.49	2.86	8.80	6.00	

[1] Excludes day-to-day loans, call loans and loans for the purchase of Canada Savings Bonds.

SOURCES: Bank of Canada, Statistical Summery, Supplement, 1962, Statistical Summary, June 1964, July 1965.

TABLE II

CANADIAN CASH RESERVE RATIOS

DAILY AVERAGES: (END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	8.6	8.2	8.2	8.1	8.12	8.15	8.11	8.10	8.09	8.12	8.08
June	8.3	8.3	8.2	8.2	8.18	8.12	8.13	8.19	8.10	8.08	8.09
Sept.	8.2	8.3	8.3	8.3	8.28	8.19	8.11	8.14	8.13	8.10	
Dec.	8.2	8.3	8.2	8.3	8.25	8.18	8.10	8.17	8.10	8.14	
Annual Average	8.4	8.3	8.2	8.2	8.20	8.17	8.12	8.14	8.12	8.10	

CANADIAN LIQUID ASSET RATIOS

DAILY AVERAGES: (END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	-	-	17.1	16.5	16.33	16.97	18.18	18.04	18.30	17.23	16.97
June	-	16.2[1]	16.7	17.4	16.61	17.60	18.31	16.05	18.50	17.47	16.39
Sept.	-	16.6	17.5	17.7	16.02	17.70	18.79	16.12	17.24	16.74	
Dec.	-	15.9	17.2	16.7	16.73	16.82	18.75	18.09	18.27	17.15	
Annual Average			16.8	17.2	16.43	17.27	18.31	17.10	17.96	17.20	

[1] Not available on daily average basis prior to June 1956.

SOURCES: Bank of Canada, Statistical Summary, Financial Supplement, 1958, Statistical Summary, January 1964, July 1965.

There were two periods of monetary expansion on a substantial scale in 1958. The first one occurred at the time of the May 1 new issue of Government securities. The second and larger increase in the money supply was associated with the Conversion Loan when the Bank of Canada became a buyer of bonds with such purchases being only partly offset by sales of treasury bills. These will be dealt with in turn.

In April of 1958 a Government issue of $950 million was offered, of which $600 million was to refund issues maturing on May 1. However, due to changing market expectations (interest rates had been falling) the general public did not wish to add to its holdings of Government securities at this time. The Bank of Canada and the chartered banks absorbed the securities bringing about an increase in the money supply. In the first half of the year the total amount of Government direct and guaranteed marketable securities outstanding rose by $516 million and Government accounts reduced their holdings by $237 million. Thus a total of $753 million of Government securities had to be placed with the general public, the chartered banks, and the Bank of Canada. The general public, instead of absorbing part of this, actually reduced their holdings of securities. The Bank increased its holdings by $107 million and the chartered banks absorbed the balance. In this period currency and chartered bank deposits held by the general public rose by $692 million on a seasonally unadjusted basis.

On July 15, 1958 the Conversion Loan was launched calling for the lengthening of the average maturity of the government debt by selling long-term bonds to the public in exchange for short-term Victory Loan issues they already held. The holders of $6.4 billion of 3 percent Victory Loan

Bonds due in 1959, 1960, 1962, 1963, and 1966 were asked to turn in their securities in exchange for 3 1/4 - 25 year bonds bearing interest at the rate of 3-4½ percent - representing a conversion of nearly one-half the total outstanding debt of the country. The Loan extended the average maturity of the public's holdings from 8 years to almost 15 years. Because there was selling of the newly acquired long-term bonds, pressure was placed on the bond market and the Bank had to step in to protect the market for the Bank had intended to facilitate the maximum degree of conversion even if this should cause a large increase in the money supply. In November it was conceded that the prices of long-term loan issues could not be maintained at prevailing levels without a further significant monetary expansion and Bank purchases were discontinued. The Conversion Loan was very successful in that 90 percent of the Victory Loan issues were converted. In praising the Conversion Loan the Governor of the Bank remarked that it was an "essential anti-inflationary achievement".[15] It should be mentioned, however, that this statement related to the improved structure of the government debt and "the contribution it [Loan] made to improving conditions for the sale of future issues of Government bonds to non-bank investors".[16] Nevertheless, it does illustrate Governor Coyne's great concern over inflation even in the face of depressed economic conditions. In a similar light but with different emphasis, W.L. Gordon remarked:

---

[15] Bank of Canada, Annual Report (1953), p. 5.

[16] Ibid.

> The net result of this /Bank of Canada's support of the bond market during the loan/ was two-fold. The Bank became loaded up with long-term government bonds and, as a result, found it increasingly difficult to control the market and to perform its function as a central bank. And secondly, large purchases of bonds by the Bank of Canada caused a further very substantial increase in the money supply, and hence the creation of still stronger fears of inflation. The money supply had been increased by about 6 percent between December 1957 and June 1958; it was increased by about another 6 percent in the following six months.[17]

The above points made by two eminent Canadians do not spell out the real issues. The fact of the matter is that the Loan was badly timed and reflected serious conflicts in policy. There were signs of an upturn in the economy and lengthening of the debt, reducing the liquidity of the economy and causing interest rates to rise, was certainly not helpful. Credit conditions tightened considerably despite the large increase in the money supply. This forced corporations, provinces, and municipalities into the United States capital market for their funds exerting upward pressure on the value of the Canadian dollar that certainly proved to be no stimulus to domestic expansion.

> ... it is now generally accepted that this massive operation created considerable difficulty and complicated the authorities' task subsequently. The major difficulty was that the liquidity of the economy was substantially reduced at a time when, despite some evidence of an economic upturn, the underlying economic situation was weak.[18]

The mid-1957 - mid-1958 (or a little thereafter) period was one of credit ease as the monetary authorities took steps to stimulate the economy. This period saw the beginning of certain undesirable features

---

[17] W.L. Gordon, Troubled Canada (Toronto, 1961), p. 61.

[18] Royal Commission, op. cit., p. 454.

which helped to aggravate the slackening economic conditions of the time and set the stage for the poor performance that monetary policy was to give in the following three years.

Debt management played the most prominent role in this period and herein lies the greatest constraint of the period. The Conversion Loan in the summer of 1958, included in this period, was an anomaly. This blunder had lamentable after-effects in that it was responsible for elevating the whole range of interest rates. The excessive concern by the Governor of the Bank over the maintenance of an "orderly financial market" blurred the real issue of the time. The real issue should have been the most appropriate means of stimulating the economy. The Loan was badly timed and in this context one may argue that the recognition and administrative lags were evident here. The after-effects of the Loan on the structure of interest rates caused capital inflows to be maintained at an excessively high rate and the consequent appreciation of the exchange-rate only aggravated the recession. Though economic conditions called for a decline in its value, the Canadian dollar remained persistently at a premium. Financial intermediaries and central bank-government relations did not present any difficulties by way of limiting the actions of the authorities.

As table VII illustrates, there were significant increases in prices while at the same time unemployment increased. Table VIII shows that during 1957 and 1958 the real GNP increase was the lowest in the decade studied. The value of the Canadian dollar stood at a level that was undesirable in light of the slackening economic conditions.

What has to be concluded is that monetary policy from the summer of 1957 to the end of the summer of 1958 left much to be desired. Monetary policy's compromise with debt management seriously reduced the effectiveness of the former.

Mid-1958 - early 1960

Retail sales in 1959 increased significantly over 1958. Corporate profits were on the rise and a build-up in inventories commenced. Consumer spending was 6 percent greater in 1959 than in 1958. Total exports for 1959 were 5 percent greater than in 1958 but merchandise imports were 9 percent greater which is not surprising since the Canadian exchange-rate appreciated to a substantial level, the average rate for 1959 being $1.04 U.S. The current account deficit was a record $1.5 billion. Unemployment improved over 1958 by 1 percent but was still a high 6 percent and reflected the fact that from mid-1958 to early 1960 Canada experienced a very weak economic expansion.

Interest rates rose significantly in 1959 as can be seen in tables III and V. As a result, "the general public added the extraordinary amount of $1750 million to its holdings of Government securities".[19] Demands for funds were great in 1959 and the chartered banks resorted to switching. On a seasonally adjusted basis, chartered bank total loans increased by 16.5 percent in 1959. "Most of the increase in bank loans appears to have financed higher levels of business inventories and receivables and consumer credit".[20] By mid-August the peak in bank loans was

---

[19] Bank of Canada, Annual Report (1959), p. 36.

[20] Ibid., p. 37.

TABLE III

AVERAGE YIELD ON THREE MONTH TREASURY BILLS

LAST WEDNESDAY OF MONTH

	1955 %	1956 %	1957 %	1958 %	1959 %	1960 %	1961 %	1962 %	1963 %	1964 %	1965 %
Jan.	.88	2.53	3.70	3.25	3.28	4.60	3.04	3.07	3.65	3.77	3.74
Feb.	1.13	2.56	3.76	2.86	4.07	4.61	3.11	3.21	3.68	3.88	3.74
Mar.	1.09	2.64	3.70	2.27	4.30	3.01	3.21	3.12	3.62	3.88	3.62
Apr.	1.25	2.89	3.75	1.58	4.76	3.26	3.28	3.07	3.66	3.70	3.77
May	1.30	2.72	3.76	1.54	4.90	3.01	3.14	3.52	3.19	3.58	3.90
June	1.44	2.52	3.81	1.72	5.11	3.07	2.57	5.45	3.24	3.59	3.93
July	1.43	2.65	3.81	0.87	5.47	2.92	2.55	5.47	3.43	3.67	4.05
Aug.	1.70	2.90	4.03	1.49	5.33[1]	2.01	2.26	4.95	3.71	3.80	4.08
Sept.	1.83	3.16	3.80	2.27	5.50	1.70	2.59	4.99	3.96	3.73	
Oct.	2.20	3.34	3.80	2.83	5.02	3.03	2.50	4.16	3.59	3.70	
Nov.	2.58	3.52	3.58	2.88	4.86	3.95	2.50	3.71	3.63	3.87	
Dec.	2.56	3.67	3.62	3.49	5.12	3.25	2.99	3.91	3.78	3.82	
Average for Year	2.27	2.92	3.76	2.25	4.81	3.20	2.81	4.05	3.56	3.75	

[1] On August 12, 1959 the treasury bill yield rose to a high of 6.16 percent and fell to 6.04 percent on August 19. This is not shown in Chart III.

SOURCES: Bank of Canada Statistical Summary, various issues.

TABLE IV

BANK RATE CHANGES

1. From October 1950 to February 1955, Rate was 2%
2. February 14, 1955, changed to 1½%
3. August 5, 1955, to 2%
4. October 12, 1955, 2 1/4%
5. November 18, 1955, 2 3/4%
6. April 4, 1956, 3%
7. August 9, 1956, 3 1/4%
8. October 17, 1956, 3½%
9. June 24, 1962, 6%[1]
10. September 7, 1962, 5½%
11. October 12, 1962, 5%
12. November 13, 1962, 4%
13. May 6, 1963, 3½%
14. August 11, 1963, 4%
15. November 24, 1964, 4 1/4%

[1] From November 1, 1956 to June 24, 1962, Rate "floated" 1/4 of 1% above the treasury bill rate (3 month). Since June of 1962 Rate is an administered one as described previously.

SOURCES: Bank of Canada, Statistical Summary, various issues.

TABLE V

YIELDS ON GOVERNMENT SECURITIES

SELECTED DATES TO MATURITY

(END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	3.20	3.49	4.20	4.01	4.88	5.32	5.18	4.86	5.07	5.25	5.11
June	3.20	3.47	4.19	4.22	5.08	5.08	4.99	5.23	4.91	5.20	5.20
Sept.	3.36	3.89	4.27	4.37	5.61	4.84	5.02	5.38	5.08	5.21	
Dec.	3.48	3.98	3.80	4.76	5.60	5.41	4.96	5.07	5.16	5.06	

[1] Date of issue was January 1, 1953 and date of final maturity is January 15, 1978, the earliest call date being January 15, 1975. Coupon rate is 3 3/4 percent.

SOURCES: Bank of Canada, SSS, 1958, pp. 61,63,67, 1962, pp. 69,72,77,82, Bank of Canada SS, March 1965, p. 166, July 1965, p. 440.

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	2.81	3.40	4.15	3.59	4.75	5.17	4.68	4.11	4.45	4.61	4.24
June	2.89	3.40	4.56	3.53	4.83	4.50	4.49	5.11	4.03	4.32	4.24
Sept.	3.10	3.88	4.66	3.83	5.30	4.09	4.41	5.08	4.32	4.49	
Dec.	3.39	3.98	3.66	4.48	5.37	4.74	4.17	4.39	4.42	4.14	

[1] Date of issue was June 15, 1950 and date of final maturity is June 15, 1968, the earliest call date being June 15, 1967. Coupon rate is 2 3/4 percent.

SOURCES: B.C. SSS, 1955, p. 44, 1958, pp. 61,63,66, 1962, pp. 68,71,76,81, BC SS, January 1964, p. 24, March 1965, p. 164, July 1965, p. 438.

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	2.62	3.33	4.13	3.55	4.59	5.30	4.58	4.00	4.47	4.40	4.01
June	2.65	3.42	4.62	3.79	4.88	4.47	4.19	5.37	4.06	4.16	4.00
Sept.	3.08	3.87	4.57	3.58	5.41	3.96	4.25	5.10	4.34	4.25	
Dec.	3.31	4.16	3.76	4.27	5.51	4.54	3.91	4.28	4.38	4.09	

[1] Date of issue was November 1, 1945 and date of final maturity is September 1, 1966, the earliest callable date being September 1, 1961. Coupon rate is 3 percent.

SOURCES: BC SSS, 1957, p. 48, 1960, p. 73, 1962, pp. 75,80, and BC SS, January 1964, p. 23, March 1965, p. 164, July 1965, p. 438.

TABLE VI

GOVERNMENT OF CANADA DIRECT AND GUARANTEED SECURITIES

MILLIONS OF DOLLARS, PAR VALUE: TOTAL OUTSTANDING

(END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	15,435	16,213	15,172	15,268	16,560	17,310	17,753	18,600	19,347	20,145	20,365
June	15,418	15,659	14,901	15,503	16,791	17,174	17,762	18,359	19,553	19,987	20,204
September	15,522	15,210	14,761	15,810	16,676	17,110	17,997	18,327	19,385	20,006	
December	16,000	15,234	15,165	16,416	17,135	17,747	18,636	19,448	20,276	20,733	
Dec. - Dec. Change	534	-766	-69	1,251	719	612	889	812	828	457	
Percentage Change	3.5	-4.8	-0.5	8.2	4.4	3.6	5.0	4.4	4.3	2.3	

SOURCES: Bank of Canada, Statistical Summary, Supplement, 1958, 1962, Statistical Summary, January 1964, March 1965, July 1965.

reached and then they started to level off and in fact decline. By April of 1959 the banks were becoming concerned about the rate of growth in their loans resulting in the issuing on May 14 by the President of the Canadian Bankers' Association a public statement to the effect that in the future the banks would exercise the utmost care in the handling of their credit facilities so as to avoid a further increase in the over-all total of bank loans but attempting, nonetheless, to look after the essential credit needs of small borrowers.[21] But loans still continued to rise sharply until mid-August. At the end of 1958 agreement was reached among the chartered banks providing for a stoppage of loans to business corporations in amounts exceeding $2 million where the time of payment was deferred beyond one year and equivalent security purchases direct from borrowers in this category. In 1959 the $2 million limit was reduced to $1 million. The prime commercial loan rate charged by the chartered banks was increased from 5 1/4 percent to 5½ percent in early March of 1959, and to 5 3/4 percent in late April.[22]

The money supply virtually froze in 1959. As can be seen in Table I total currency outside banks and chartered bank deposits, on a seasonally adjusted basis, fell by $109 million, a -0.82 percent change, the only yearly negative percentage change over the ten year period studied. Consumer prices only rose on average by 1.1 percent in 1959. Reflecting on the 3 percent December to December increase in consumer prices in the

---

[21] At the annual meeting of the Canadian Bankers' Association on June 2, 1959, the President reaffirmed his statement of May 14.

[22] Bank of Canada, Annual Report (1959), p. 69.

years 1956, 1957, 1958, on an average basis, and the excessively high levels of unemployment in 1958 and 1959, Finance Minister Fleming made the following statement:

> The task of preparing the budget this year has indeed been a challenge. The concurrent existence of higher than normal unemployment and a disturbing inflationary potential have puzzled and confused economic observers not only in Canada but in many other countries.[23]

There was no doubt about the fact of high unemployment. The existence of a "disturbing inflationary potential" in 1959 may be questioned. It does not seem that decreases in the money supply, record interest levels, and excessive capacity in the economy brings about increases in prices of a disturbing nature. In any event, whatever "disturbing inflationary potential" did exist at this time died for in the following two years the annual average increase in consumer prices was only 1 percent.

There seemed to be great anxiety over cost and price increases in Canada. "Inflationary dangers" were repeatedly asserted in the official reports - namely the Bank of Canada and Budget Speeches. In the Budget Speech of June 17, 1958, the Honourable D.M. Fleming remarked that:

> It is the duty of all groups and classes in our society to ensure that the prospects for a sound recovery are not dimmed by a spiralling of costs or that efforts to stimulate recovery do not lend strength to a new inflation. Inflation remains a very real danger against which we must remain on guard.[24]

---

[23] Hon. D.M. Fleming, "Budget Speech", House of Commons Debates, CIII (April 9, 1959), 2404.

[24] Hon. D.M. Fleming, Budget Speech (June 17, 1958), p. 6.

TABLE VII

TOTAL CONSUMER PRICE INDEXES 1949 = 100 (END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	116.0	116.4	120.5	124.3	125.5	126.9	129.1	129.7	132.1	134.6	137.7
June	115.9	117.8	121.6	125.1	125.9	127.6	129.0	130.5	132.8	135.3	139.0
September	116.8	119.0	123.3	125.6	127.1	128.4	129.1	131.0	133.4	135.6	
December	116.9	120.4	123.1	126.2	127.9	129.6	129.8	131.9	134.2	136.8	
Dec.-Dec. Change	0.3	3.5	2.7	3.1	1.7	1.5	0.2	2.1	2.1	2.6	
Percentage Change	0.34	2.99	2.24	2.51	1.34	1.17	0.15	1.61	1.59	1.93	
Annual Average	116.4	118.1	121.9	125.1	126.5	128.0	129.2	130.7	133.0	135.4	
Average Change	0.2	1.7	3.8	3.2	1.4	1.5	1.2	1.5	2.3	2.4	
Percentage Change	0.17	1.46	3.21	2.62	1.11	1.18	0.93	1.16	1.75	1.80	

UNEMPLOYMENT RATE (PERCENT) SEASONALLY ADJUSTED (END OF QUARTERS)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
March	4.9	3.6	4.1	6.9	6.0	6.5	7.6	5.9	5.8	4.7	3.9
June	4.4	3.2	4.2	7.8	5.6	6.7	7.5	5.9	5.8	5.2	4.5
September	4.1	3.1	5.4	7.1	5.5	7.5	6.9	5.8	5.4	4.6	
December	3.7	3.4	6.4	7.0	6.0	7.6	6.0	6.0	4.9	3.9	
Annual Average	4.4	3.4	4.6	7.0	6.0	7.0	7.1	5.9	5.5	4.7	

SOURCES: Dominion Bureau of Statistics, Annual Supplement to the Canadian Statistical Review, 1962, 1964, Price and Price Indexes, various issues, Canadian Statistical Review, monthly issues.

TABLE VIII

GROSS NATIONAL PRODUCT

Year	Millions of Current Dollars	Quantity Change	Percentage Change	Constant 1957-Dollars	Quantity Change	Percentage Change
1955	27,132	2261	9.1	29,018	2304	8.62
1956	30,585	3453	12.7	31,508	2490	8.58
1957	31,909	1324	4.3	31,909	401	1.27
1958	32,894	985	3.1	32,284	375	1.17
1959	34,915	2021	6.1	33,398	1114	3.45
1960	36,287	1369	3.9	34,200	802	2.40
1961	37,471	1184	3.3	35,081	881	2.57
1962	40,561	3090	8.2	37,411	2330	6.64
1963	43,180	2619	6.5	39,145	1734	4.63
1964	47,003[1]	3823	8.9	41,678	2533	6.47

PER CAPITA GROSS NATIONAL PRODUCT

	Current Dollars	Quantity Change	Percentage Change	Constant Dollars	Quantity Change	Percentage Change
1955	1724	123	7.68	1844	124	7.20
1956	1897	173	10.03	1954	110	5.96
1957	1913	16	0.84	1913	-41	-2.09
1958	1921	8	0.41	1886	-27	-1.41
1959	1993	72	3.74	1906	20	1.06
1960	2026	33	1.65	1910	4	0.20
1961	2051	25	1.23	1920	10	0.52
1962	2181	130	6.33	2011	91	4.73
1963	2282	101	4.63	2068	57	2.83
1964	2439	157	6.87	2163	95	4.59

[1] GNP in the first quarter of 1965 rose to a seasonally adjusted annual rate of $49.7 billion, 3.5 percent above the level of the preceding period, most of the increase in real terms.

SOURCE: Dominion Bureau of Statistics, National Accounts, Income and Expenditure, various issues.

The upward push in interest-rate levels came to a halt in the late summer of 1959. The yield on three month treasury bills, having reached a peak of 6.16 percent on August 12, 1959, started to decline appreciably and reached 5.12 percent by year end. In attempting to be somewhat of a prognosticator, Finance Minister Fleming indicated that "we are well on the road to recovery and we can look forward to a steady expansion of economic activity, employment and incomes".[25]

The period - mid-1958 - early 1960 was one of credit restraint. But a very weak economic expansion was in progress. Indeed the upturn in the economy in the latter part of the 1958 did not prove to be much partly because of the consequences of the Conversion Loan and inappropriate monetary policy.

The Conversion Loan was instrumental in increasing interest rates and this prompted the general public to add to its holdings of government securities which of course was not in keeping with economic conditions of the time. Table V shows that interest rates rose substantially in 1959. There was switching by the chartered banks but this was not an offset to monetary policy. When the authorities are attempting to combat inflation switching may complicate their task. This occurred in the mid-1955 - mid-1957 period. However, the economy was emerging from recession in the mid-1958 - early 1960 period. There was a need for loanable funds and the banks helped to meet the demand for loanable funds by creating a supply of them through their switching operations. But the switching only aggravated

---

[25] Hon. D.M. Fleming, "Budget Speech", House of Commons Debate, CIII (April 9, 1959), 2404.

the increase in interest rates. The excessive level of interest rates that maintained the large capital inflows led to appreciation of the exchange-rate, an overvalued Canadian dollar, and the record current account deficit that was experienced in 1959. The authorities realized that this was unhealthy but they failed to take corrective measures. In fact, Canadians saw their officials proposing inappropriate policies that were certainly not in keeping with good economic policy. Here we see a twist of the recognition and administrative lags. There was need for action but some other different need was recognized (curbing inflation) and the action that was taken was a restrictive monetary policy. During this period the seeds of dissension were planted in the field of central bank-government relations.

Prices were relatively stable in the mid-1958 - early 1960 period. The average unemployment rate was 7 percent in 1958 and 6 percent in 1959. The current account position worsened and the exchange-rate was an inappropriate one. The growth of real GNP, though an improvement over the preceding two years, was unsatisfactory in light of the excess capacity in the economy and in comparison with our achievements in 1955, 1956, and the years after 1961. Monetary policy must be given a failing grade.

Early 1960 - Mid-1962

Gross national product in constant (1957) dollars increased by 2.4 percent in 1960 compared with 3.4 percent in 1959. Real GNP per capita increased by only 0.20 percent. Unemployment was 7 percent of the labour force. During the second half of 1960 there developed a general liquidation of business inventories serving to check total output. The

major decline in capital expenditure occurred in residential construction where outlays were down $263 million. Expenditure on housing construction was 15 percent below the 1959 level. Canada was in a recession.

During the first three quarters of 1960 the money supply remained quite constant but began to rise noticeably in the fourth quarter as did the chartered banks' loans. At the same time government financing took place on a substantial scale tending to cause interest rates to rise. The total amount of Government of Canada direct and guaranteed securities outstanding held by the public increased by $614 million in the fourth quarter of 1960. This was not an expansionary policy as is depicted in rising interest rates. The three month treasury bill rate had gone down to below 2 percent in September only to rise again to 3.95 percent by the end of November. However, the money supply, on a seasonally adjusted basis, increased by $387 million in the fourth quarter of 1960.

Many references are made in the Bank of Canada's Annual Report for 1959 and 1960, and the Budget Speech of March 1960, concerning fears of inflation and foreign investment in Canada. Mention has already been made of the former and it only remains to be said that it can become very exasperating to be constantly reminded of what a bad thing inflation is and at the same time seeing the economy plunge into recession. If inflation is measured by price increases it is well to realize that Canada was experiencing a high degree of price stability at this time. Such comments as: "Inflation acts like a drug on the economic system. Even small doses breed a craving for more,"[26] and: "Inflation itself is one method of induc-

---

[26] Hon. D. Fleming, "Budget Speech", House of Commons Debates, CIV (March 31, 1960), 2673.

ing changes and adjustments in the use of physical resources and in the distribution of real incomes - but there must be more equitable and efficient ways ...",[27] miss the target. The emphasis must be on stimulating the economy in a recession. Considerations of foreign investment by the officials again depict a departure from the relevant issues. Anxiety was shown over the increasing foreign (American) domination of Canadian industry, and Canadians were called upon to invest more in their economy. The import surplus had tended to depress the economy due to the substitution of imports for domestic goods. Canadians were asked to become more efficient to enable them to compete with other countries on more favourable terms than those of the present. Concern was also displayed concerning capital inflows but there was the preference to cope with this problem with measures other than making "a substantial reduction in the entire interest rate structure".[28] And it was argued that "the inflow of capital for direct investment or equity investment in Canada would not be materially affected by lower interest rates in Canada".[29] What did not seem to be realized or, if so, not considered important, was that the high interest rates in Canada led to large capital inflows that appreciated our exchange-rate and tended to make imports cheaper and exports more expensive. The widening interest differential between Canada and the United States in 1959 and 1960 was an anomaly. A high interest-rate structure also tends to dampen the domestic economy in that it discourages borrowing and in-

---

[27] Bank of Canada, Annual Report (1960), p. 17.

[28] Ibid., p. 19.

[29] Ibid.

creases the cost of investment. The Governor of the Bank of Canada replies to statements of such substance by reminding us of the importance of debt management - that greater fluctuations in interest rates would seriously disturb the bond market. The explanation was given that "the arguments advanced for larger swings in long-term interest rates at rather short intervals, whatever their theoretical justification, ignore very important practical effects on the market for government bonds and other debt instruments".[30] In reply to the statement that lower interest rates tend to increase borrowing the remark: "It [lower level of interest rates] will not, of course, encourage the desire to lend, at least on the part of non-bank lenders, but if anything the reverse"[31] is given as the answer. And in any case, higher interest rates induce the public to save which is an important factor in producers' decisions to invest, Mr. Coyne believes.[32]

---

[30] Ibid., p. 20.

[31] Ibid.

[32] Mr. Coyne's economics is seriously questioned by D.C. Smith and D.W. Slater, "The Economic Policy Proposals of the Governor of the Bank of Canada", Money and Banking, Edited by E.P. Neufeld (Toronto, 1964), pp.318-332. They attack Mr. Coyne's views on five points:

(1) The relationship between savings and interest rates which Smith and Slater argue is not supported by economic studies.

(2) Mr. Coyne's proposition that decisions to invest are influenced to a significant extent by decisions to save. Decisions to save and invest are made by different people for different reasons, remark Slater and Smith.

(3) Mr. Coyne's belief that the easing of credit conditions will stimulate undesirable investment, that is, lead to unwarranted and false expectations concerning the future.

(4) Mr. Coyne's neglect of the multiplied effect that a change in investment or government expenditures has on income and the change in income and consumption in turn influencing the rate of investment.

(5) Mr. Coyne's underestimation of the extent to which foreign capital inflows are influenced by interest-rate differentials between Canada and the United States.

Unemployment, on a seasonally adjusted basis, was 8 percent at the beginning of 1961 but started to decline quite visibly as economic conditions started to improve. The most pronounced recovery in output occurred in the durable manufacturing industry - electrical goods, automobile production, and lumbering all recovered. The level of business inventories in 1961 remained constant until the fourth quarter when a substantial build-up took place. The total value of exports in 1961 was $5.9 billion compared with $5.4 billion in 1960, an increase of 8.5 percent. Between the first and fourth quarters of 1961 there was a rise of 30 percent in the seasonally adjusted rate of corporate profits. "In the first quarter of 1961, the recessionary tendencies which had checked the growth of the Canadian economy for about a year came to an end."[33]

Credit conditions eased noticeably around June of 1961. Interest rates fell and the money supply increased appreciably. In fact the money supply increased by 8.5 percent in 1961, most of the increase coming after June as Table I illustrates. Chartered bank assets rose by $1214 million in 1961, an increase of 9.5 percent. Bank loans increased by over $300 million. Bank Rate was 3.5 percent at the beginning of 1961, reached a low of 2.51 percent at the end of August (Rate was tied to 3-month treasury bill rate), and closed out for the year at 3.24 percent. The chartered banks built up their liquid assets in 1961, the liquid asset ratio being an average of 18.3 for the year. Regarding the large monetary expansion in the second half of 1961, the new Governor of the Bank of Canada, Mr. Rasminsky stated that:

---

[33] Bank of Canada, Annual Report (1961), p. 19.

> I believe that the monetary expansion that occurred in the second half of 1961 was appropriate in the circumstances of the time and that it was of material assistance in maintaining credit conditions in Canada which encouraged and sustained this phase of economic expansion.[34]

Following the Budget Speech of June 20, 1961, concerning the Government's intention to bring about "an appropriate adjustment of the exchange-rate",[35] the exchange-rate (U.S. in Canadian funds) quickly moved up from 100 to 103½. At the end of the year the rate was 104 11/32. The Government intended to work towards the reduction in the value of the Canadian dollar through operations of the exchange fund and reduction in interest rates. Mr. Coyne, however, argued:

> ... in my view we would do great damage to the Canadian economy as a whole and to many persons and enterprises in Canada by engaging in deliberate exchange devaluation or by utilizing the presumed powers of monetary policy with the definite object of putting the Canadian dollar to a discount. I do not suggest that it is desirable to maintain a premium on the Canadian dollar, and indeed would hope to see such a change in our economic arrangements as would prevent a premium from developing again, but this is quite a different matter from attempting to bring about the inflation of all prices and all costs which is the chief effect and avowed objective of deliberate depreciation of the national currency.[36]

The Government asked Mr. Coyne to resign on May 30, 1961. Mr. Coyne refused. The "Coyne Affair", the related muddle concerning who is responsible for monetary policy, and the misguided economic policies in the immediately preceding years must have shaken the confidence

---

[34] Ibid., p. 7.

[35] Hon. D.M. Fleming, Budget Speech (June 20, 1961), p. 12.

[36] J.E. Coyne, Senate Special Committee on Manpower and Employment (April 26, 1961), and reproduced in Money and Banking in Canada, Edited by E.P. Neufeld, pp. 308-317.

TABLE IX

UNITED STATES DOLLARS IN CANADIAN FUNDS
(AVERAGE NOON SPOT RATES)

Business Days	Average ¢	Selected Figures 1961	¢	1962	¢
1954	97.32	May	98.75	Jan.	104.50
1955	98.63	June	100.55	Feb.	104.88
1956	98.41	July	103.41	Mar.	104.94
1957	95.88	Aug.	103.15	Apr.	104.98
1958	97.06	Sept.	103.08	May	103.23[1]
1959	95.90	Oct.	103.03	June	108.79
1960	96.97	Nov.	103.57	July	107.89
1961	101.32	Dec.	104.27		
1962	106.89				
1963	107.85				
1964	107.86				

[1] On May 2nd the government announced a devaluation to 92.5¢ U.S., formal abandonment of the flexible exchange-rate, and adherence to the I.M.F.'s requirement to maintain rate within 1% on either side of the newly established par value of $1.081 Canadian for the $ U.S., with ultimate support points at $1.070 and $1.092.

SOURCES: Bank of Canada, Statistical Summary, Financial Supplement, 1962, and B.C. Statistical Summary, July, 1965.

CANADIAN BALANCE OF INTERNATIONAL PAYMENTS (MILLIONS OF DOLLARS)

	Current Account Balance	Total Long-Term Capital Movements	Short-Term Capital Movements[1]
1955	- 698	+ 410	+ 244
1956	-1366	+1424	- 10
1957	-1455	+1301	+ 49
1958	-1131	+1112	+ 123
1959	-1504	+1148	+ 345
1960	-1243	+ 900	+ 304
1961	- 982	+ 910	+ 362
1962	- 874	+ 668	+ 361
1963	- 557	+ 613	+ 90
1964	- 453	+ 727	+ 89
1st Quarter 1965	- 408	+ 148	+ 188

[1] Excludes change in reserves and I.M.F. position.

SOURCES: DBS. The Canadian Balance of International Payments, various issues.

of both Canadians and non-Canadians in the ability of the authorities to initiate appropriate economic policies.[37] Mr. Coyne eventually resigned on July 13, 1961, and on July 24, 1961, Mr. L. Rasminsky was appointed the new Governor of the Bank of Canada.

Although the early 1960 - mid-1962 period has been indicated as one of credit ease, it should be pointed out that the money supply hardly showed any increase until the last quarter of 1960. Interest rates started to decline sharply in early 1960 and this is the reason behind the choice of the span from early 1960 to mid-1962 as one of credit ease instead of the interval from the last quarter of 1960 to mid-1962. The three month treasury bill rate (see chart III) is a reflection of the general trend of interest rates and consequently a reflection of the credit conditions prevailing at the time. The monetary authorities did not take steps to either encourage or discourage market trends during the first three quarters of 1960. Interest rates declined due to market forces. The Bank should have complemented this with an increase in the money supply.

---

[37] The years 1957-61 have been referred to as "the dismal years", and that "for a full four years (1957-61) the Canadian economy decelerated to one of the slowest paces of the industrial countries of the world. James A. McCullough, "An American Economic Looks at Canada", The Business Quarterly, XXX (Summer, 1965), 27-35. Clarence Barber argues that the slowdown in the Canadian economy during this time, notwithstanding the slowdown in the North American economy, has been due to our large capital inflows. It is argued that when capital spending began to recede from the peak reached in 1957, a corresponding decline in the capital inflow and current account deficit did not take place, and thus Canada has been borrowing from abroad to finance the purchase of imports that could have been produced at home. He is critical of the economic policies pursued at the time and indicates that our interest rates were too high. Clarence L. Barber, "Canada's Unemployment Problem", C.J.E.P.S., XXVIII (1962), 88-102.

In the fourth quarter of 1960 debt management operations conflicted with monetary policy in that the former caused interest rates to rise. There was a continuing excessive preoccupation with inflation and foreign investment. The Bank of Canada was excessively concerned with the maintenance of an orderly financial market. During the early 1960 - mid-1962 period the unfortunate episode relating to Governor Coyne and the Minister of Finance erupted. Central bank-government relations reached an all-time low.

The economic indicators illustrated that the Canadian economy was giving a poor performance at least until mid-1961. There was considerable price stability during this period but unemployment remained a serious problem. The growth in GNP hardly showed any improvement over the preceding years but it did show a definite improvement in 1962. The exchange-rate remained overvalued. There was an important part that monetary policy could have played in alleviating the slackening economic conditions in 1960 and 1961. Unfortunately it failed to pass the test that it faced. More accurately, the authorities did not give monetary policy much of a chance to show what it could do.

The Mid-1962 "Exchange Crisis"

The most important single happening in the Canadian economy in 1962 was the so-called "exchange crisis". The immediate effect of the intentions of the Government to bring about an appropriate adjustment to the overvalued Canadian dollar in the summer of 1961 was a sharp depreciation of the dollar to just below 97¢ U.S., a drop of about 3 cents. During the autumn of 1961 the dollar displayed renewed strength and stability.

However, in November, 1961, it weakened and when speculation turned against it the resources of the Exchange Fund were used to curb the decline in the value of the Canadian dollar. United States dollar holdings by the Exchange Fund Account declined from $1110 million in November, 1961, to $605 million by May, 1962. The Exchange Fund Account's holdings of gold declined from $941 million in November of 1961 to $669 by July of 1962. On May 2, 1962, the rate was fixed at 92.5¢ U.S. Official holdings of gold and U.S. dollars declined further during May and June. On June 24, 1962, the Prime Minister issued a statement saying that Canada was faced with an exchange emergency and that measures would be taken to defend the rate at the level established in May. The measures were:

(1) Temporary imposition of graduated surcharges on certain classes of imports.

(2) Temporary reduction in the exemptions from customs duty accorded the Canadian tourists on goods broughtback to Canada.

(3) Reductions in government expenditure.

(4) Use of a portion of the government's cash balances to finance increases in foreign exchange reserves.

(5) International financial support in the amount of $1050 million in the form of cash and stand-by credits.

On the same day the Governor of the Bank of Canada issued a statement to the effect that the Bank Rate was being fixed at 6 percent and emphasizing the determination of the Bank "to protect the external value of the national monetary unit".[38] The immediate objective of monetary

---

[38] Bank of Canada, Annual Report (1962), p. 4.

policy was the restoration of confidence in Canada's ability and determination to maintain the exchange-rate at the pegged rate. As the Bank's Annual Report for 1962 asserted:

> Central bank operations were accordingly direct toward promoting and maintaining a level of interest rates in Canadian financial markets which would help in establishing a net inflow of capital large enough to cover the current account deficit in the balance of international payments and rebuild the depleted foreign exchange reserves.[39]

The direct effect of the emergency measures was the reversal of short-term capital movements. The inflow of such capital amounted to $460 million in the third quarter and the rate of the inflow slowed down in the fourth quarter. Long-term capital inflows were in the amount of $707 million in the second half of the year, the greater part of the inflow coming in the last quarter. At the time of the initiation of the emergency measures on June 24, Canada's official exchange reserves were $1100 million. They increased to $2650 million by the beginning of 1963. During this time the gradual retirement of the international short-term credits got under way.

The chief concern of the monetary authorities during the "exchange crisis" was "to protect the external value of the national monetary unit". The "crisis" was an excellent example of a case where external objectives of monetary policy get priority over domestic objectives. It is obvious, therefore, that this was a real constraint on the activities of the authorities. Although the economy was starting to make a revival and there was still a good deal of unemployed resources,

---

[39] Ibid., p. 4.

credit conditions became stringent so as to improve Canada's international position. Monetary policy had to subordinate its domestic objectives to the external one. And monetary policy played an important part in achieving this objective.

Mid-1962 - Present

Economic conditions improved in 1962. Real GNP increased by 6.6 percent. The unemployment rate was 5.9 percent compared with 7.1 percent in 1961. Consumer expenditure was a major source of demand strength. Index of industrial production in the fourth quarter was 5.5 percent greater than it was a year before. Output of iron, steel, chemical, and petroleum products rose. The production of textiles increased. The automobile industry had a record level of production in 1962. Corporate profits were 12 percent higher than in 1961. Manufacturing levels reached their highest since 1957. New residential construction was 8 percent higher than in 1961.

As the emergency measures surrounding the "exchange crisis" took effect the Canadian dollar became more stable, interest rates declined, and in total, monetary conditions became easier. Bank Rate was reduced to 5½ percent on September 7, 5 percent on October 12, and 4 percent on November 13.[40] The money supply, having declined by over $500 million in the third quarter, started to rise. The 91-day treasury bill yield, which reached 5½ percent earlier in the summer of 1962 and

[40] This cut was welcomed in financial circles and regarded as a sign that better times and easier credit conditions were in the making. "Easier money is back again after five months of credit restraint. It shows in the drop of chartered bank lending rates." Neville Nankivell and Dalton Robertson, "What Rasminsky's Bank Rate Cut Really Means to Business", The Financial Post, LVI (November 24, 1962), 25.

fluctuated around 5 percent from mid-August to early October, dropped sharply to about 4¼ percent in mid-October, and to about 3 3/4 percent in November.

Interest rates through the whole maturity range of Government securities were in the vicinity of 5½ percent by mid-July following the announcement of emergency measures and the fixing of the Bank Rate at 6 percent on June 24, 1962. The differential between Canadian and United States yields rose to more than 2¾ percent on treasury bills and to 1¾ percent on long-term government bonds. A strong non-bank demand for Government securities developed. This demand was mainly satisfied through bank sales of securities. The public's demand for mid-term and long-term bonds was met in part by sales from the Bank of Canada's portfolio with the Bank taking in exchange short-term bonds and treasury bills that came mainly from the chartered banks. Also, the government increased the supply of mid-term and long-term securities available to the market by offering new issues due in 1969 and 1980. The major concern of the authorities involved the preservation of the present structure of interest rates in light of international circumstances. The following explanation by the Bank sums up the situation.

> It was essential, for exchange reasons, that an increased supply of securities should be made available to meet this demand so that it would not result in a premature reduction of bond yields relative to those in external markets. There was, however, little change during this period in the total amount of Government securities outstanding, and the volume of new bond issues offered by other Canadian borrowers was also unusually small. In these circumstances the securities

> required to satisfy the strong demand of non-bank investors had to come from the banking system, and the monetary policy followed produced this result.[41]

As a result, there were heavy sales of securities by the banks in June, July, and August, and also so as to enable the banks to acquire funds for purposes of making loans. As Table I indicates the net increase in bank loans amounted to $773 million in the first half of 1962. In the third quarter loans increased by another $300 million. Liquidity of banks fell very sharply from a liquid asset ratio of 18.75 at the start of 1962 to 16.05 at the end of June and down to 15.53 by the end of July. The chartered banks' holdings of Government of Canada direct and guaranteed securities fell by $792 million during June, July, and August. However, loans decreased markedly in the fourth quarter and the banks built up their liquidity position and by the end of the year the liquid asset ratio stood at 18.09.

The Bank of Canada intermittently supported the bond market to mitigate disorderly market conditions or when disorderly conditions threatened to develop - for example, in June bond prices declined rapidly owing to measures taken to cope with the exchange crisis and again during the Cuban crisis in late October. In the latter case the Bank purchased $111 million of short, intermediate, and long-term Government bonds for cash in three days to steady the market. When market confidence recovered during the following days many of the purchased bonds were resold by the Bank. In June when bond prices were declining rapidly the Bank purchased

---

[41] Bank of Canada, Annual Report (1962), pp. 4, 5.

$150 million of short-term bonds, while at the same time the Government's Purchase Fund was providing support in the long end of the market. The increase in non-bank holdings of Government securities in the second half of 1962 was $1250 million. These operations in the summer of 1962 demonstrate the way in which co-ordinated monetary and debt policy can both work together towards the achievement of common objectives and help bring about smooth adjustments of credit conditions.

The economy continued to improve in 1963. Real output increased by 4.6 percent. Unemployment fell from an annual average of 5.9 percent of the labour force in 1962 to 5.5 percent in 1963. This was an improvement but the rate was still excessive. In his Budget Speech of June 1963, Finance Minister W.L. Gordon remarked that "it is the view of this government that unemployment is the most serious domestic problem facing Canada today".[42] Steel ingot production in 1963 exceeded 8 million tons - 14 percent above 1962's production. Passenger car production was about 25 percent greater than in 1962. Pre-tax corporate profits were 7 percent above the 1962 figure. Expenditure on new residential construction increased by 6.5 percent. On the international scene there was a notable improvement carrying over from the fourth quarter of 1962. Exchange reserves were being replenished. Exports were increasing faster than imports so that the current account position depicted a definite improvement. The current account deficit fell from $874 million in 1962 to $557 million in 1963, at least one-half of the improvement coming from wheat sales to the Soviet Union. The monetary policy followed in 1963

---

[42] Hon. W.L. Gordon, "Budget Speech", House of Commons Debates, CVIII (June 13, 1963), 997.

was "directed towards encouraging credit conditions and an external financial position which would help to sustain and strengthen the expansion of the Canadian economy".[43]

There was a moderate decline in interest rates during the first half of 1963. This was reversed in the summer but rates fell again in September and then rose gradually in the latter part of the year. Chartered bank assets increased by 9.5 percent in 1963, loans by 7.4 percent, and the money supply by a substantial 8.8 percent. On May 6, the Bank Rate was reduced to 3.5 percent in keeping with the general easing of credit conditions.

An announcement was made in the Budget Speech of June 13, 1963, that certain tax changes would be forthcoming in the field of foreign investment and enterprise in Canada, the objective being to encourage more Canadian participation in and ownership of foreign enterprise in Canada. The announcement made for the development of weakness in the securities market and the Bank had to step in and buy Government securities. The proposed changes were eventually modified and the controversial 30 percent "takeover" tax withdrawn. Further weakness in the bond market unfolded in the first two weeks of July owing to expectations of a rise in United States interest rates. The Bank of Canada once again became a buyer. On July 16 the U.S. discount rate was increased from 3 to 3.5 percent. Then on July 18 the U.S. announced its "interest equalization tax". Foreign long-term borrowing was to be subject to a tax that would add about 1 percent per year to the total costs of the borrower. This

---

[43] Bank of Canada, Annual Report (1963), p. 3.

action, taken to improve the American balance of payments, engendered considerable uncertainty in Canadian financial markets. Canada still had a large deficit on its balance of payments, "and market opinion recognized that it could no longer be taken for granted that the deficit would be matched by an inflow of capital".[44] An inflow of capital from the U.S. could only be expected if interest rates in Canada rose sufficiently to offset the proposed U.S. tax.

> The proposed tax thus raised the imminent prospect of either a dramatic rise in the whole structure of interest rates in Canada or another foreign exchange crisis, or both. On July 18 and 19 the official foreign exchange reserves suffered heavy losses and the securities market became disorganized with bond prices being marked down sharply.[45]

On July 21 it was agreed among American officials, in consultation with the authorities in Canada, that an exemption for Canada should be made and that draft legislation calling for tax free purchases of new issues of securities would be placed before Congress. This eased the tension in the market. However, there still remained uncertainty concerning the amount of tax liability American investors buying new Canadian securities would have to pay. In addition, there remained the possibility that an outflow of capital from Canada might occur because no exemption was allowed for outstanding securities, but this was minor compared to the proposed tax on new securities. As a result of these factors downward pressure on Government security prices developed in Canada. The Bank of Canada resisted such pressure through purchases in the long end of the market. On August 11, 1963, the Bank

---

[44] Ibid., p. 4.
[45] Ibid.

of Canada raised its Rate to 4 percent. The Governor described the change as a "technical adjustment related to the increased uncertainty and upward pressure on interest rates which had developed in Canadian securities markets during the past few weeks".[46] He emphasized that the change was not intended to signal a basic alteration in the Bank's monetary policy.[47] With the announcement in mid-September of large Canadian wheat sales to the Soviet Union came a significant strengthening of prices and a decline in yields in the market for Government securities. The interest-rate differential between Canada and the United States continued to be relatively narrow and to provide little inducement for short-term capital flows in either direction.

The Bank's Annual Report for 1963 made note of the continued rapid growth of non-banking financial institutions. Trust company assets rose by 19 percent in 1963, about the same as in 1962. Mortgage loan companies increased their assets by 15 percent. Sales finance and consumer loan companies had a growth of 16 percent in assets. Chartered bank assets expanded by 9.5 percent in 1963. In the light of these trends the Report stated that "many of the liquid asset instruments issued by non-bank financial institutions and not usually regarded as part of the stock of money in Canada are in fact not unlike chartered bank deposits from the point of view of the holder".[48]

The upward trend in economic activity in Canada continued in 1964. Real output rose by 6.5 percent and real output per capita a

---

[46] Ibid., p. 62.
[47] Ibid.
[48] Ibid., p. 57.

relatively high 4.6 percent. The average unemployment rate was 4.7 percent compared with 5.5 percent in 1963. At the close of the year the unemployment rate, on a seasonally adjusted basis, fell to 4 percent, the lowest rate since the spring of 1957. Business investment in plant and equipment rose by 18 percent. Total consumer expenditures were 7 percent over the 1963 level. Output of steel ingots increased 11 percent. Production of passenger cars was 5 percent greater than in 1963. Merchandise exports were 16 percent higher in 1964. The deficit in the current account of the balance of payments fell by $104 million to $453 million. The economy advanced at a rapid pace in 1964 and a feeling of optimism prevailed in Canada concerning future achievements.

The nervousness that accompanied the announcement by the U.S. of its interest equalization tax lost its intensity in 1964 with the implementation of the exemption of new issues of Canadian securities in the autumn of 1964. The "basic rationale of the exemption", as the Bank's Annual Report puts it, is to be found in the balance of payments reflecting a large current account deficit with the United States. Canada does not import enough capital from the U.S. to pay for its imports of goods and services. This balance must be paid out of other earnings. If the U.S. took steps to cut its exports of capital to Canada - as the interest equalization tax proposed to do - this would place a drain on Canadian reserves prompting the Canadian authorities to take action to reduce the current account deficit in Canada's balance of payments. But since 70 percent of our imports come from the U.S. any restrictive measures executed by Canada would mainly fall on the U.S. and thereby impede American efforts to correct its own balance of payments difficulties.

The Governor of the Bank of Canada stated that:

> I believe that the Agreement entered into 18 months ago [July 21, 1963] has accomplished what the two governments had in mind. On the one hand, the existence of the Agreement enabled Canada to avoid disruptive adjustments, including reductions of its imports, which would necessarily have followed from a sharp curtailment of capital inflow and which would have seriously affected the United States. On the other hand we have not borrowed in the United States on a scale which has resulted in an increase in our foreign exchange reserves.[49]

The monetary policy of the Bank of Canada in 1964 was one of maintaining credit ease to enable the rising demand for credit to be satisfied without bringing about credit stringency. The money supply increased by 6 percent in 1964 and chartered bank total loans by 14.6 percent. The average yield on three month treasury bills was 3.75 percent compared to 3.56 percent in 1963. This reflects the fact that there was not much difference in the level of interest rates in 1963 and 1964. As Finance Minister Gordon indicated: "... there has been a monetary policy which enabled the demands of economic growth to be met without a tightening of credit conditions".[50]

Part of the resources needed to accommodate the large increase in chartered bank loans was obtained through a reduction in their holdings of Government securities and otherliquid assets. Their "more liquid" assets (Government securities, loans to securities dealers, net foreign assets and cash reserves) declined by close to $300 million. As a proportion of total chartered bank assets, they fell from 35.4 per-

---

[49] Bank of Canada, Annual Report (1964), p. 9.

[50] Hon. W.L. Gordon, "Budget Speech", House of Commons Debates, CX (April 26, 1965), 428.

cent in December 1963 to 31.9 percent in December 1964. The Bank's Annual Report for 1964 remarked that this decline "brought them [banks] to a position where their lending policies could be expected to be sensitive to an appreciable further decline in their liquidity".[51] The Canadian cash reserve ratio fell from 8.12 at the end of the first quarter to 8.08 by the end of the second quarter but rose to 8.14 by year end. The Canadian liquid asset ratio stood at 17.23 at the end of March, fell to 16.74 in the third quarter, and rose to 17.20 at year end.

Large-scale market transactions in the securities' market for purposes of maintaining stable credit conditions hardly occurred in 1964. The only principal occurrence was on November 23 following the Bank of England's announcement that its lending rate would be increased from 5 percent to 7 percent. In Canada interest rates had been declining moderately since the summer and there was considerable speculation over what action not only the Canadian authorities but also the American authorities would take. Heavy selling of Government securities took place which necessitated Bank of Canada intervention to help stabilize the market and prevent an unduly sharp rise in interest rates. The Bank purchased $159 million of Government securities on that day. The Federal Reserve increased its rate from 3.5 to 4 percent as the market closed. This was followed in the evening by a statement issued by the Bank of Canada that its rate would be raised from 4 to 4.25 percent. Market confidence was restored, prices stabilized to the extent that the

---

[51] Bank of Canada, Annual Report (1964), p. 33.

Bank of Canada did not have to offer further support, and the moderate downward trend in Canadian interest rates continued.

The rate of economic expansion in 1965 is exceeding that of 1964. Gross national product in the first quarter of 1965 rose to a seasonally adjusted annual rate of $49.7 billion, 3.5 percent above the level of the preceding period, most of it in real terms. The unemployment rate for August, seasonally adjusted, was 4 percent.

In the first two quarters of 1965 total currency outside banks and chartered bank deposits, seasonally adjusted, rose by a substantial $1185 million and bank loans increased by $890 million. The three month treasury bill rate has continued to increase since April and in July rose to over 4 percent, the highest it has been since the last quarter of 1962.

Three years have passed since the 1962 "exchange crisis" interrupted our economic expansion. In concluding this section some of the more important events in this period from mid-1962 to the summer of 1965 will be listed and what association they have with the previous chapter brought to light.

The monetary authorities sought to promote and maintain a policy of credit ease. This was reflected in declining interest rates after the summer of 1962. There has been a definite improvement in the balance of payments although as 1965 moves along the current account deficit increases, a trend supported by high and rising incomes in Canada. The exchange-rate must be maintained in accordance with International Monetary Fund regulations. Although this is a constraint on our monetary policy and reduces its autonomy, it seems only fair to point out that Canada has

CHART II

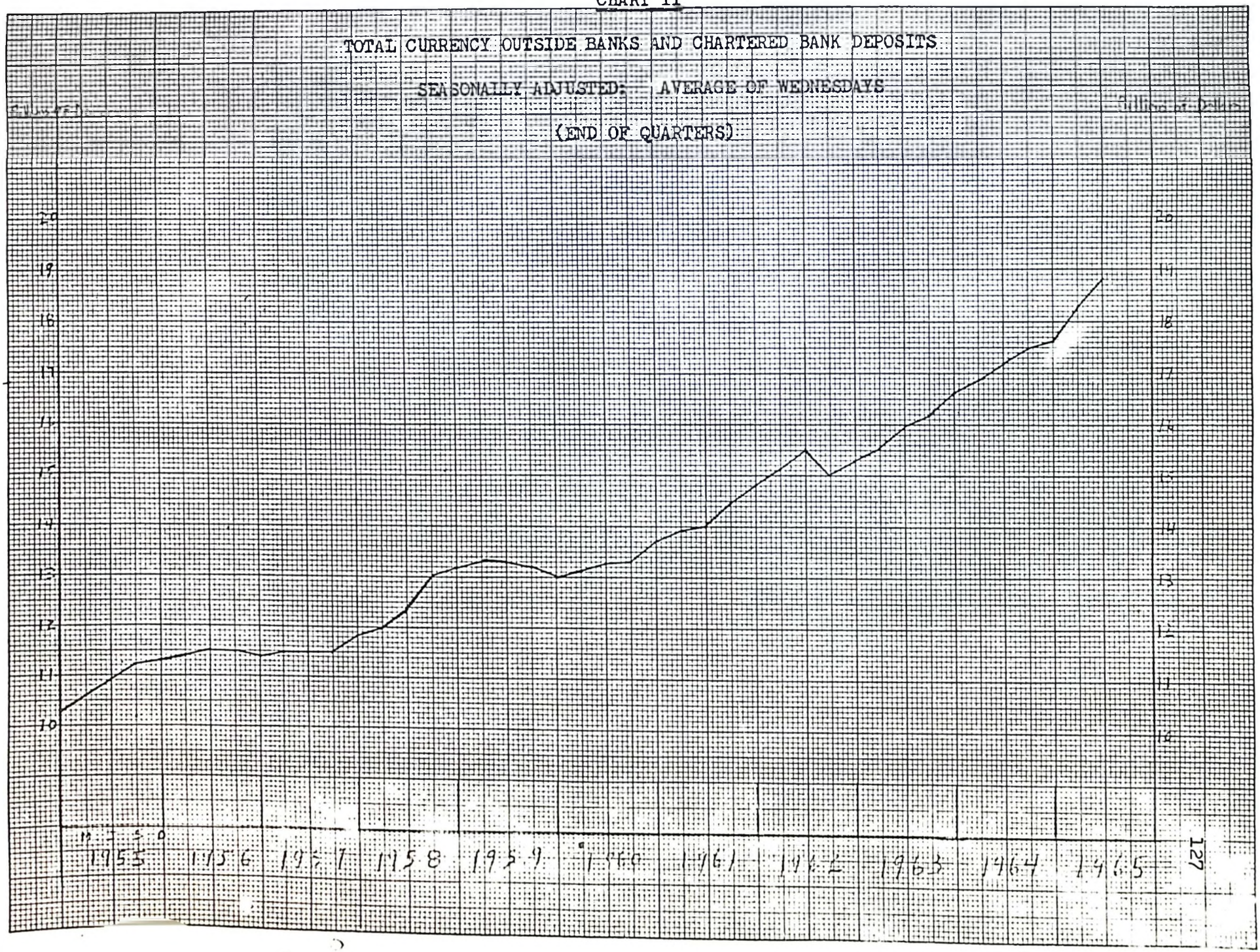
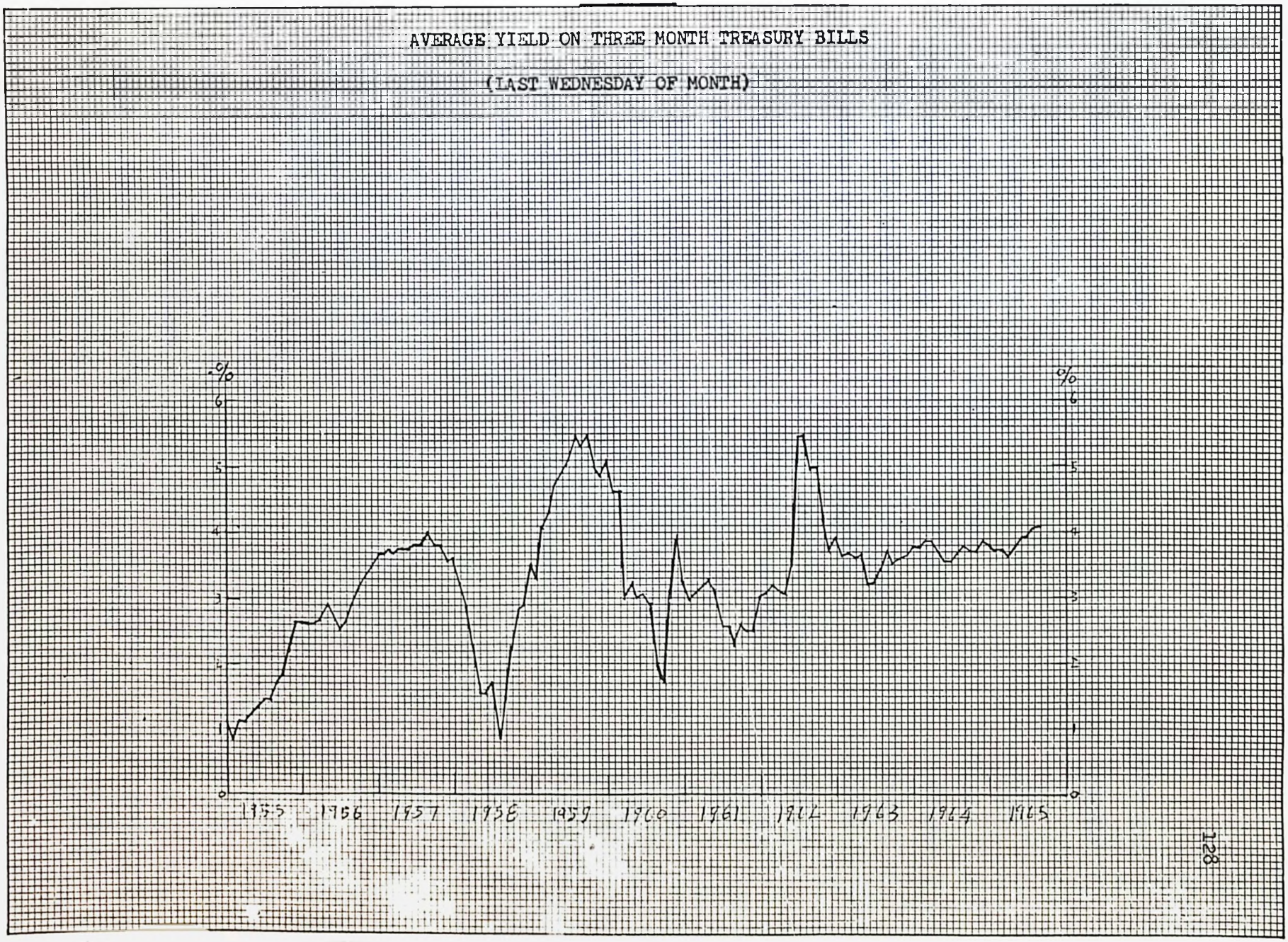

TOTAL CURRENCY OUTSIDE BANKS AND CHARTERED BANK DEPOSITS
SEASONALLY ADJUSTED; AVERAGE OF WEDNESDAYS
(END OF QUARTERS)
Billions of Dollars
20
19
18
17
16
15
14
13
12
11
10
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965

CHART III

AVERAGE YIELD ON THREE MONTH TREASURY BILLS

(LAST WEDNESDAY OF MONTH)



benefited from the pegged rate and the economy at the present time is in very healthy condition. The "interest equalization tax" could have caused trouble but this problem was met. The present problem concerns the Canadian build-up of foreign exchange reserves to and above the limit agreed on by Canada and the United States as a condition of Canadian exemption from the tax. The Bank of Canada furnished support for the bond market in the summer of 1962 in connection with the "exchange crisis", the autumn of 1962 when the Cuban crisis brought the world to the brink of war, the summer of 1963 in association with the interest equalization tax and the general uncertainty surrounding the U.S. balance of payments difficulties, and in the Autumn of 1964 following the increase in the Bank of England's rate. However, the Bank of Canada's operations in the bond market did not produce any lasting or dangerous conflicts with its other objectives and did not prove to be a significant constraint on its activities. The summer of 1962 was a good example of monetary and debt management policy working together to achieve common objectives. The Bank's Annual Report for 1963 made its readers aware of the implications that the growth of near-banks have for both the chartered banks and the monetary authorities. As far as Bank-Government relations are concerned, the past four years have seen the two parties working in close co-operation with one another.

As table VII illustrates, there have been price increases but this is no anomaly. The unemployment rate has steadily decreased and GNP has increased at a rate unequalled since the 1955-56 boom. Our balance of payments position has plainly improved over the last three years and on the whole our external financial position is a sound and manageable

one. Although achievement of the objectives is greatly a function of the general economic expansion North America has been experiencing, monetary policy must be given some credit. Its performance has been and is a satisfactory one.

In April of 1965 the three month treasury bill rate started a steady upward movement. It has risen from 3.61 percent on April 7 to over 4 percent in July and is steadily increasing. Credit is becoming more expensive and more difficult to obtain. The failure of the Atlantic Acceptance Corporation this summer shook the confidence of many money market participants and generally caused some scarcity of credit. As the Financial Post wrote:

> The Atlantic Acceptance Corporation failure and its repercussions are making borrowers and lenders aware that the climate for credit is now tighter than at any time since the foreign exchange crisis of mid-1962. Canada's long business expansion and capital spending boom has been putting increasingly heavy pressures on supplies of credit - despite regular and frequently substantial injections of new cash into the money stream. The money system is taut.[52]

In early August the Prime Minister announced cutbacks in federal expenditure and appealed to businessmen to consider deferring important construction schemes to resist impending inflation.[53] The argument was that the economy was becoming "overheated". Monetary policy appears to be injecting needed cash into the economy in its effort to promote a favourable climate to economic expansion. Nonetheless, it does seem

---

[52] The Financial Post (July 24, 1965), p. 23.

[53] In reporting this, The Globe and Mail had the following headline in its August 3rd edition: "Fears Runaway Inflation, PM Urges Cut in Building" - rather startling to say the least.

that we are entering a period of credit restraint. In conclusion, it is hoped that we can continue our prosperity and that there will be sufficient credit and money to allow this without becoming overly-concerned with rising prices. Canada has seen too much of this.

CHAPTER V

SUMMARY AND CONCLUSIONS

Each of the four major chapters may be regarded as an attempt to answer one of four questions. Chapter one answered the question: What is monetary policy and what does it hope to achieve? Chapter two was concerned with the question: How does monetary policy operate? The question - Under what constraints must monetary policy function? - constituted the subject-matter of chapter three. Finally, chapter four endeavoured to supply an answer to the question: What has been the record of events in the implementation of monetary policy in Canada from 1955 to 1965?

Chapter one was divided into two major sections - the concept of monetary policy and the objectives of monetary policy. The availability thesis and the rules versus authorities debate formed the core of the first section. It does not appear that the availability thesis can serve as an adequate defense of monetary policy. The fear of taking a capital loss does not seem to have been a significant deterrent to the banks engaging in switching operations. The other theoretical prop of the availability thesis, the existence of imperfections in the financial market, is difficult to demonstrate. As far as the rules versus authorities debate is concerned, it is very difficult to come to any conclusion about whether rules should be adopted or authorities. There is a tendency, however, to lean towards authorities. The record of events in

Canada in the past decade clearly point out that the performances of the authorities have left something to be desired. But there have also been instances when the authorities have pursued appropriate policies. One's conclusion on this matter is very much a function of one's philosophical beliefs concerning man and the part man plays in controlling his environment.

The other major section of chapter one had two important aspects. The first one is that it is well to recognize that monetary policy is only part of a wider policy structure. Only if we have the appropriate "mix" of policies can we expect to achieve our objectives. The second aspect pertains to the "trade-offs" among the objectives and the fact that sacrifices must be made. It is interesting to note that if Canada tries to reduce her unemployment rate below three percent prices start to rise rapidly, and that even if the authorities do have a fairly accurate idea of the magnitude and severity of the "trade-offs", they still must make a decision about how far to pursue each objective of policy. Unfortunately, good judgment was lacking in Canada in 1958, 1959, 1960, and 1961. These years illustrate that the preferences of the authorities have leaned heavily toward the objective of price stability and insufficiently in favour of the employment objective.

The techniques of monetary policy were analysed in chapter two. Various innovations are continually being made and will be made in the continual improvement of the tools of monetary control. No definite conclusions were arrived at here with the possible exception that perhaps more consideration and study should be given to the possibility of using

the now inactive instrument of varying the minimum cash reserve ratio. And insofar as liquid asset ratios are concerned, they have significant shortcomings. The banks are able to circumvent them by building up enough liquidity in a recessionary period to be able to switch in the ensuing inflationary period. They also interfere with the free allocation of resources and tend to build rigidities into the system.

The single most important topic in chapter two involved the intimate relationship that exists between monetary policy and debt management policy. There is indeed much that one can do for the other. There exists a growing movement to make monetary policy more effective by greater manipulation of interest rates and this would primarily be brought about through debt management policy. There is a great deal to be said for this. However, the Bank of Canada's approach to monetary control, that is, a process of cash management with little or no pressure being brought to bear directly on interest rates, would go by the boards. The fact that the Bank's approach to monetary control is by no means at all times applied consistently is worthy of notice. In 1958 the Conversion Loan was launched raising the structure of interest rates and monetary policy played a notable role in its success. For all practical purposes one can hardly separate monetary policy from debt management policy.

The constraints under which monetary policy must labour formed the subject-matter of chapter three. The constraint that appears to be the severest is the external one. This was suspected before this paper was started. The suspicion has now turned into a strong belief. This is not surprising since the United States plays such a vital role in shaping

Canadian economic policies and that the exchange-rate is the most important single price in Canada. But the United States must not serve as a scapegoat for the mismanagement of our own affairs.

The lags in the effects of monetary policy and the related factor of the economy's sensitivity or insensitivity to changes in credit conditions is suggested as being the next most important limitation of monetary policy. But it should be pointed out that probably more dispute centers about the lags than does all the other constraints combined. It is felt that the implications that lags have for monetary policy is not a sufficient reason to abandon countercyclical monetary policy, and this is directly related to favouring authorities rather than rules.

The relative importance of the remaining three constraints has been listed in chapter three as the first two constraints were but an additional point should be made in the present chapter. The implications that the growth of near-banks have for the banking system and monetary policy is mainly a question of projecting into the future. If present trends continue and the appropriate action is not taken the relative importance the banks now have in the financial system will diminish and monetary policy will become a less effective instrument of economic stabilization.

After each period was surveyed in chapter four a summary of that period was made along with a statement of the conclusions that were formulated. This was for purposes of continuity and coherence - the particular events and particular conclusions being assembled in one chapter. It only remains to be said that one cannot fail to be impressed with the considerable importance that is attached to interest rates and

more specifically the interest-rate differential between Canada and the United States. This was made quite explicit in the years after the Conversion Loan of the summer of 1958. Interest rates have also a great psychological effect on financiers and businessmen. One has only to recall the sequence of events that followed from the announcement of the interest equalization tax by the United States Government in the summer of 1963.

The overall position taken in this paper is an optimistic one. There is a place for discretionary monetary policy despite its obvious uncertainties and limitations. The record of events in Canada during the past decade has shown that discretionary monetary policy has left a good deal to be desired. But the record has also shown that discretionary monetary policy has contributed toward the achievement of our economic objectives.

BIBLIOGRAPHY

Official Publications

Bank of Canada. Annual Reports Of The Governors To The Ministers Of Finance. 1955-1964 (inclusive).

_____. Introductory Remarks By The Governor Of The Bank of Canada Before The Royal Commission On Banking And Finance. January 9, 1963.

_____. Statistical Summaries: Financial Supplements (various issues).

_____. Statistical Summaries (monthly, various issues).

_____. Submissions By The Bank Of Canada To The Royal Commission On Banking And Finance. May 31, 1962.

Canada. Budget Speeches And Budget Papers. 1955-1965 (inclusive).

_____. Dominion Bureau of Statistics. Annual Supplement To The Statistical Review. 1962.

_____. Canadian Statistical Reviews (monthly, various issues).

_____. Economic Council Of Canada. Economic Goals for Canada. December, 1964.

_____. Financing Of Economic Activity In Canada, by Wm. C. Hood. 1959.

_____. The Height, Structure and Significance Of Interest Rates, by Paul Wonnacott (working paper prepared for the Royal Commission on Banking and Finance), November, 1962.

_____. Monetary Policy And The Current Account Of The Balance Of International Payments, By Ronald A. Shearer (working paper prepared for the Royal Commission on Banking and Finance), November, 1962.

Canada. The Objectives Of Monetary Policy, by G.L. Reuber (working paper prepared for the Royal Commission on Banking and Finance), December, 1962.

_____. Report Of The Royal Commission On Banking And Finance. 1964.

_____. Report Of The Royal Commission On Banking And Finance: Appendix. 1964.

_____. Submissions To The Royal Commission On Banking And Finance, by The Canadian Bankers' Association and reproduced in the Supplement To The Canadian Banker, Spring, 1963.

United Kingdom. Report Of The Committee On The Working Of The Monetary System (Cmnd. 827), 1959.

United States. Debt Management In The United States, by Warren L. Smith (study paper No. 19 prepared in connection with the Study of Employment, Growth, and Price Levels), January 28, 1960.

_____. Flexible Exchange Rates, by Charles P. Kindleberger (research study prepared for the Commission on Money And Credit and reproduced in Monetary Management), New Jersey: Prentice-Hall, Inc., 1963.

_____. Liquidity And Financial Institutions In The Post-War Period, by John Gurley (submission to the Joint Economic Committee), January 25, 1960.

_____. Report Of The Commission On Money And Credit, 1961.

Books

Burstein, M.L. Money. Massachusetts: Schenkman Publishing Company, 1963.

Einzig, Paul. Monetary Policy: Ends And Means. London: Cox and Wyman Ltd., 1964.

Friedman, Milton. A Program For Monetary Stability. New York: Fordham University Press, 1959.

Gordon, W.L. Troubled Canada. Toronto: McClelland And Stewart Limited, 1961.

Hansen, Alvin. Economic Issues Of The 1960's. New York: McGraw-Hill Book Company, Inc., 1960.

_____. Monetary Theory And Fiscal Policy. New York: McGraw-Hill Book Company, Inc., 1949.

Johnson, H.G. The Canadian Quandary. Toronto: McGraw-Hill, 1963.

McIvor, R. Craig. Canadian Monetary, Banking And Fiscal Development. Toronto: The MacMillan Company of Canada, Limited, 1961.

_____. Some Aspects Of Canadian Financial Intermediaries (unpublished).

Machlup, Fritz. International Payments, Debts, and Gold. New York: Charles Scribner's Sons, 1964.

O'Brien, J.W. Canadian Money And Banking. Toronto: McGraw-Hill, 1964.

Articles And Parts of Books

Aschheim, Joseph. "Open-Market Operations Versus Reserve-Requirement Variation", Money And Economic Activity. Edited by Lawrence S. Ritter. 2nd ed., Boston: Houghton Mifflin Company, 1961.

Barber, Clarence L. "Canada's Unemployment Problem", Canadian Journal of Economics And Political Science, XXVIII (1962), 88-102.

Caves, Richard E. "Flexible Exchange Rates", American Economic Review (Papers and Proceedings) LIII (1963), 120-129.

"Controversial Issues In Recent Monetary Policy: A Symposium", Review of Economics And Statistics, XLII (1960), 245-282.

Crump, A.B. "Financial Intermediaries and Monetary Policy", Economica, N.S., XXIX (1962), 143-151.

Culbertson, J.M. "Friedman On The Lag In Effect Of Monetary Policy", Journal of Political Economy, LXVIII (1960), 617-621.

_____. "Intermediaries and Monetary Theory: A Criticism of the Gurley-Shaw Theory", AER, XLVIII (1958), 119-132.

_____. "The Lag In Effect Of Monetary Policy: Reply", JPE, LXIX (1961), 467-477.

Friedman, Milton. "The Lag In Effect Of Monetary Policy: Reply", JPE, LXIX (1961), 447-466.

Gordon, H.S. "Bank of Canada In A System Of Responsible Government", CJEPS, XXVII (1961), 1-22.

Gordon, H.S. and L.M. Read. "The Political Economics of The Bank of Canada", CJEPS, XXIV (1958), 465-482.

Gurley, John G., and Edward S. Shaw. "Financial Intermediaries And The Saving-Investment Process", Journal of Finance, XI (1956), 257-276.

_____. "Intermediaries and Monetary Theory: A Criticism of The Gurley-Shaw Theory: Reply", AER, XLVIII (1958), 132-138.

Guttentag, Jack. "Credit Availability, Interest Rates, And Monetary Policy", Southern Economic Journal, XXVI (1960), 219-228.

Johnson, H.G. "Monetary Theory And Policy", AER, LII (1962), 335-384.

Kareken, John H. "Lenders' Preferences, Credit Rationing, And The Effectiveness of Monetary Policy", RE Stat., XXXIX (1957), 292-302.

McCullough, James A. "An American Economist Looks At Canada", The Business Quarterly, XXX (1965), 27-35.

McIvor. "The Radcliffe Report: Some Recent Reflections On Monetary Policy", Canadian Tax Journal, VIII (1960), 189-198.

McLeod, A.N. "Tight Money, Easy Money - What Do They Mean?" Canadian Chartered Accountant, LXXXII (1963), 254-258.

Mankivell, Neville, and Dalton Robertson. "What Rasminsky's Bank Rate Cut Really Means To Business", The Financial Post, LVI (November 24, 1962), 25.

Neufeld, E.P. "The Bank Of Canada's Approach To Central Banking", CJEPS, XIV (1958), 332-344.

Ritter, Lawrence S. "Income Velocity And Anti-Inflationary Monetary Policy", AER, XLIX (1959), 120-129.

Schlesinger, James R. "Monetary Policy And Its Critics", JPE, LXVIII (1960), 601-616.

_____. "The Role Of The Monetary Environment In Cost-Inflation", Money and Economic Activity. Edited by Lawrence S. Ritter. Boston: Houghton Mifflin Company, 1961.

Scott, Ira. "The Availability Doctrine: Development And Implications", CJEPS, XXIII (1957), 532-539.

Simons, Henry C. "Rules Versus Authorities In Monetary Policy", JPE, XLIV (1936), 1-30.

Smith, Arthur. "Monetary Control In Canada", The Canadian Banker, LXIII (1956), 123-139.

Smith, David C., and David W. Slater, "The Economic Policy Proposals Of The Governor Of The Bank of Canada", Money And Banking In Canada. Edited by E.P. Neufeld. Toronto: McClelland and Stewart Limited, 1964.

Smith, Warren L. "The Effects of Monetary Policy On The Major Sectors of the Economy", Money And Economic Activity. Edited By L.S. Ritter. Boston: Houghton Mifflin Company, 1961.

_____. "On The Effectiveness Of Monetary Policy", Money And Economic Activity. 1961.

Tobin, James. "A New Theory Of Credit Control: The Availability Thesis", Money And Economic Activity, 1961.

_____. "Towards Improving The Efficiency Of The Monetary Mechanism", RE Stat., XLII (1960), 276-279.

Tobin, James, and William C. Brainard. "Financial Intermediaries And The Effectiveness of Monetary Controls", AER (Papers and Proceedings), LIII (1963), 383-400.

White, W.H. "The Flexibility of Anticyclical Monetary Policy", RE Stat., XLIII (1961), 142-147.

Woodlief, Thomas. "How Much Can Be Expected Of Monetary Policy", RE Stat., XLII (1960), 272-276.