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ALTERNATIVE GUIDING PRINCIPLES FOR THE USE OF MONETARY POLICY

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FRITZ MACHLUP, *Director*
International Finance Section

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Introduction

This paper is directed to the specific question: what should monetary policy seek to do in the Canadian economy?

Monetary policy as traditionally conceived is concerned with short-run economic stabilization, the damping of the business cycle. This function has come to be expressed customarily in terms of the pursuit of the two objectives of price stability and high employment. Insofar as prices and general economic activity tend to move upwards or downwards together, these two objectives do not conflict, but are essentially the same: a monetary policy directed at stabilizing either one of the price level or the level of unemployment would tend to stabilize both. The two objectives may, however, conflict if the level of unemployment considered desirable itself implies a rising trend of prices, or if the price level is rising for some reason other than an excessively low level of unemployment.* In recent years a third objective has been added to the list, the objective of economic growth; but for reasons that are too complex to be developed here, the objective of growth can in practice also be identified with the general goal of economic stabilization.**

In addition to the general objective of economic stabilization, expressed in the three goals of high employment, price stability, and economic growth, monetary policy has in practice another objective, resulting from the role of the central bank as fiscal agent for the government, the objective of assisting the government to borrow in the financial markets on the most advantageous terms obtainable. This objective, which becomes paramount in wartime, may conflict and in the past has in fact seriously conflicted with the use of monetary control for pur-

* This statement is phrased to avoid a final judgment on the issue of cost-push versus demand-pull inflation, and also to allow for the influence, important in Canada, of foreign price trends on the trend of domestic prices.

** This is not to say that a government pursuing the objective of growth would necessarily conduct monetary policy on traditional lines; rather, the point is that the scope for monetary policy alone to stimulate growth seems limited to whatever contribution economic stabilization can make to growth. This point is implicit in the rather unsatisfying discussion of objectives contained in the Report of the Commission on Money and Credit.

poses of economic stabilization. The problems raised by the conflict between the objectives of economic stabilization and cheap governmental financing, however, were most acute in the period before that with which the Commission is immediately concerned, and will accordingly be ignored for the most part in this paper.

More generally, this paper will ignore the possibilities of conflict between the objectives of monetary policy, important as they are to both the explanation of past policy and the formulation of future policy, and will instead be concerned with the use of monetary policy for the purpose of economic stabilization, defined in the very broad sense of damping cyclical fluctuations in the economy. The starting point of the argument is the assumption, presumed to be generally accepted, that the performance of monetary policy as an instrument for short-run economic stabilization in Canada in recent years has been definitely unsatisfactory.

It is not the purpose of this paper, however, to attempt to assign responsibility for the unsatisfactory record of Canadian economic policy with respect to economic stabilization in recent years. Instead, its purpose is to examine the merits and drawbacks of the alternative lines of action with respect to the guiding principles of future monetary policy that might be pursued by the Commission, in the light of the unsatisfactoriness of recent experience. For this purpose, it is sufficient to assume that the unsatisfactory record is the outcome of a combination of causal factors, which may include confusion in the minds of the government and the public with respect to the priorities of policy, insufficient coordination between the government and the Bank of Canada, errors on the part of the management of the Bank, and inadequate knowledge of the powers and limitations of monetary control of the economy on the part of all concerned.

Given the unsatisfactory nature of the record of the past, there are three main alternative positions that can be taken as to the conduct of monetary policy in the future. The first is to accept the record of the past as establishing that in practice monetary policy cannot achieve the degree of economic stabilization that has been expected of it, and to recommend that this fact be recognized by a corresponding writing-down of the standards for monetary performance to make them accord with what is achievable by monetary policy as operated in the past. The second is to take the record of the past as establishing that the performance of monetary policy with respect to economic stabilization could be improved by eliminating sources of error, and to recommend changes in the philosophy, institutional setting, and methods of monetary management that would help to improve performance. The third alternative

is to take the record of the past as establishing that monetary policy should not be entrusted with major responsibility for short-run economic stabilization, but should instead be directed to providing a stable long-run monetary environment, the responsibility for short-run stabilization being transferred to other instruments of economic policy. Broadly speaking, the second alternative corresponds to the approach of the American Commission on Money and Credit, and the third to the approach of the British Radcliffe Committee.

The main part of this paper is devoted to discussion of the arguments for and against these three approaches, and exploration of their implications for the reform of the Canadian monetary system. As a prerequisite to examination of these approaches, however, it is necessary to make explicit certain assumptions about the nature of central banking, the way in which monetary policy operates, and the philosophy of economic policy, since these assumptions are important to the argument. In addition, it is relevant to point out that the arguments concerning the various alternatives depend crucially on whether it is assumed that the country is on a fixed exchange rate or a floating rate, since the choice of a fixed-rate system imposes definite limitations on the freedom to use monetary policy for economic stabilization. Finally, whatever the approach adopted, it is necessary to consider the merits of various suggestions that have been made to give the monetary authority special powers of selective control over certain types of credit or certain kinds of credit institutions that are considered to play an especially destabilizing role in economic fluctuations. Accordingly, the paper begins with a statement of fundamental assumptions, goes on to comment on the relevance of the choice between fixed and floating exchange rates, discusses the three alternative approaches to future monetary policy, considers the case for and against various specific types of selective controls, and concludes with a summary section containing the author's personal judgments on some of the major issues.

Fundamental Assumptions

In order to discuss alternative approaches to the future conduct of monetary policy in a practically relevant way, it is necessary to take a position on three fundamental matters, all of which can be considered "practical" questions, though in different ways. These matters are the nature of a central bank as an institution, the way in which monetary policy affects the economy, and the philosophy of economic policy.

The importance of the institutional nature of a central bank derives from the fact that monetary policy is entrusted to its day-to-day man-

agement and influenced by its advice, rather than being managed directly by the government as an integral part of its general economic policy. The central bank is an independent corporation, not a government department; its personnel is selected by a different procedure than the Civil Service; and its routine activities bring it into intimate contact with one special sector of the economy, the financial system. It is only to be expected, therefore, that it will develop its own views on monetary policy, views that will be influenced in general by the habits of thinking about economic affairs prevalent in the financial community, especially by that community's concepts of "soundness" and of "financial morality," and in particular by the financial community's assessments of the nature of contemporary national economic problems and the policies appropriate to deal with them, whether these assessments are grounded in thorough economic analysis or not. Further, since the central bank is a national institution part of whose work brings it into contact with its opposite numbers in other countries, the central bank's thinking on domestic policy problems will be influenced by the thinking of other central banks about their own and its policy problems. Finally, since the central bank in its day-to-day operations must establish and maintain working relationships with the financial system of the country, and since its effectiveness depends on its ability to manipulate that system, it will naturally seek to conduct its operations so as to avoid disrupting the functioning of the financial system.

In these respects, the central bank is not of course uniquely differentiated from government departments; departments of labor and agriculture, in particular, typically share the attitudes of their clients and in part serve to represent the interests of those clients to the government. The difference, however, lies in the fact that the central bank is at least partially independent, and is entrusted to formulate and carry out national policies that may be in direct conflict with the interests of the financial institutions with which it is normally in close contact.

The institutional nature of the central bank imposes two important limitations on the possibilities for improvement of the conduct of monetary policy, so long as monetary policy is entrusted to the management of a quasi-independent central bank. In the first place, there are narrow limits on the extent to which a central bank can be converted into an institution that controls the monetary system according to principles and methods of analysis that are radically different from those understood and accepted by the financial community. Secondly, the central bank itself will inevitably generate strong resistances to the pursuit of a monetary policy that threatens to disrupt established financial rela-

tionships or expectations.* In short, if monetary policy continues to to be entrusted to the management of a central bank—an assumption that is axiomatic—this itself imposes limits both on how far and in what ways the management of monetary policy can be improved, and on how vigorous monetary policy can be made to be. Recognition of these limits, however, may lead to any one of the three alternatives previously mentioned: it may be argued that, given the institutional character of a central bank, one should not expect monetary policy to achieve a very high standard of economic stabilization; or that there is still a wide gap between the attainable and the attained, that could be significantly narrowed by feasible changes in central-bank management and operating procedures; or that the central bank could contribute more efficiently to the prosperity and growth of the economy if it were relieved of the responsibility for short-run economic stabilization.

To discuss alternative approaches to the conduct of monetary policy fruitfully, it is necessary to take a position not only on what can reasonably be expected of a central bank, but also on what monetary control can be expected to achieve. This necessitates a general view of how monetary policy affects the economy. The view that seems to emerge from the research and thinking underlying the *Reports* of the Radcliffe Committee and the Commission on Money and Credit can be summarized very broadly as follows. Monetary policy has a direct and observable influence on interest rates and credit conditions, and through changes in these variables has an observable effect on the flows of credit through certain markets, and notably on the volume of bank loans and on the demand for mortgage financing of new residential construction. But what matters for short-run economic stabilization is not control over interest rates and credit conditions, or even over the volume of particular types of lending, but control over the volume of expenditures. And except in the case of housing, where the situation is complicated by the large-scale intervention of the government as a guarantor of mortgages the terms of which make their attractiveness to institutional lenders vary countercyclically, it is virtually impossible to establish that monetary policy has a reliable, speedy, and quantitatively significant influence on final expenditure.

This difficulty has led some experts to conclude that monetary policy has no influence on the economy. On the other hand, the weight of

* Cf. Bank of Canada Submission II, §E, "Some Practical Considerations in Monetary Policy." This section amounts to the assertion that it is better to endure economic fluctuations than to counter them by a monetary policy that disturbs the financial system.

economic theorizing suggests that monetary policy ought to have some influence on economic activity; fragmentary evidence of such influence exists; and various well-known dramatic historical episodes testify that the influence of monetary factors can be significant, at least over the long run. Caution would therefore suggest the view that monetary policy does have an influence on economic activity, but that this influence varies with circumstances, with respect to both its magnitude and the time required for it to take effect. This view in turn suggests that the use of monetary policy for short-run stabilization is a difficult and hazardous enterprise.

This position, again, does not prejudge the issue between the three alternative approaches to the future conduct of policy. It can be argued with equal freedom that the central bank has done as well as could be expected, given the inherent difficulties of the task, and that there is no obvious way of improving its performance; or that the difficulties are a challenge to be overcome by more determined effort, requiring reform of the central bank to equip it better for an assault on the problems; or that the difficulties and risks of error are so great that the central bank would be better occupied with more modest responsibilities.

Finally, discussion of the alternatives requires a position to be taken on the general philosophy of control in a predominantly free-enterprise economy. Much of the discussion of monetary policy in the postwar period, and especially of "selective" techniques of control extending beyond the traditional "general" instruments of bank rate and open-market operations, has been concerned with questions of equity and consistency with the basic principles of a free-enterprise economy.* The position taken in this paper is the pragmatic one that the use of monetary policy, or for that matter any other "general" policy instrument, for the purpose of economic stabilization necessarily involves frustrating the plans of some sectors or individuals in the economy for the general good, and that in the economic world as it is this necessarily involves some inequity. Accordingly, the decision as to whether to supplement or substitute for traditional monetary policy by more selective methods of credit control should be taken on a balance of considerations of equity and effectiveness, rather than by reference to the pure principles of a competitive economy.

* These questions have even been raised with regard to the traditional instruments; in the United States it has been argued that control of the rediscounting privilege gives the central bank an undesirable degree of arbitrary authority; and both there and elsewhere the advocacy of "bills only" in open-market operations has been fundamentally a demand for fair competitive conditions for government-bond dealers.

The Relevance of the Exchange-Rate System

As previously mentioned, it makes a considerable difference to the argument concerning the three alternative approaches to the future conduct of monetary policy whether the country is assumed to be on a fixed or a floating exchange rate. A discussion of the issues involved in the choice between the two alternative exchange-rate systems is beyond the scope of this paper: this section is confined to the implications of that choice for what it is possible for monetary policy to attempt or attain. These implications are, however, relevant to the discussion of which exchange-rate system is preferable.

The point of most importance is the familiar one that a country on a fixed exchange rate is obliged to conduct its economic policy so as to keep its balance of payments balanced. More precisely, a fixed exchange rate obliges a country to keep fluctuations in its balance of payments within the limits set by its available international reserves, supplemented by its international borrowing power. 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 economic stabilization.* In addition, the need to command international confidence, imposed by the presence of a large volume of internationally mobile short-term capital, may restrict the freedom of the monetary authority to use all the elbow-room potentially available to it, since confidence is inspired and maintained by conformity to what is regarded as orthodox financial behavior by other central banks and the owners of internationally mobile capital. Finally, the adoption of a fixed exchange rate may aggravate the task of economic stabilization because it provides maximum scope for the transmission of expan-

* In principle, the effect of international capital movements on the country's international reserve position could be overcome by operations in the forward-exchange market aimed at eliminating the covered interest differential between domestic and foreign capital markets. This technique was recommended to the Radcliffe Committee but rejected for what seem to be largely institutional reasons. The workability of the technique has been the subject of a continuing controversy among the experts; the United States monetary authorities claim some success in using it in the past two years. Whether it could be an adequately effective insulator for Canadian monetary policy is a question beyond the scope of this paper; suffice it to remark that exploitation of the technique in support of a monetary policy aimed at short-run stabilization would involve a higher degree of sophistication in monetary policy than has been customary in the past, and possibly a greater chance of error.

sionary and contractionary developments in foreign economies to the domestic economy.

A fixed exchange rate, in short, introduces the likelihood that a country will have to endure internal instability, either as an automatic result of the link with conditions in the rest of the world forged by the fixing of the exchange rate or as a consequence of pursuing the monetary policy required to balance the balance of payments by inducing appropriate movements of international short-term capital. A floating exchange rate, by contrast, provides more scope for the pursuit of an independent monetary policy. It does not of course insulate the economy from the influence of favorable or unfavorable developments in foreign markets, or from the impact of short or long-term capital movements; but it does permit the economic authorities to attempt to prevent such developments from giving rise to fluctuations in the level of economic activity.*

The implications of the difference between the two exchange-rate systems for the choice between the three alternatives would seem to be as follows. First, since a fixed-rate system obliges monetary policy to be conducted primarily by reference to the state of the balance of payments, it necessarily lowers the standard of stabilization that can reasonably be expected either from monetary policy as practised in the past or from an improved system of monetary management, by comparison with a floating-exchange-rate system. Second, insofar as adherence to a fixed-rate system obliges a country to practice orthodox central banking, both in order to command foreign confidence and because the fixed-rate system as currently operated involves a considerable amount of cooperation among central bankers, such adherence tilts the balance in favor of accepting the limitations of economic stabilization by traditional methods of central banking, rather than attempting to improve the performance of monetary policy by radical reform of the constitution and operating methods of the central bank, whereas adherence to a floating-rate system would tend to tilt the balance in the opposite direction. In addition, as already mentioned, adherence to a fixed-rate system greatly complicates the question of how, in fact, a better performance with respect to stabilization could be secured in practice. Thirdly, adherence to a fixed-rate system reinforces the argument for relieving monetary policy of the responsibility for economic stabilization, since it automatically imposes on monetary policy the

* The extent to which a floating exchange rate provides this extra freedom of manoeuvre depends on the degree to which wages and prices in the economy are "sticky," so that relative domestic and foreign costs can be altered more easily by exchange-rate changes than by inflation or deflation of demand.

prior responsibility of controlling international capital movements. But this additional responsibility undermines the case for directing monetary policy toward the creation of a stable long-run monetary environment, since if monetary policy is not directed at the control of international capital movements some other means has to be found to control either capital movements or the balance of trade, and the most direct means of doing this—exchange controls and trade controls (which include such devices as temporary tariff surcharges)—may well be either impossible to operate efficiently enough to be worth the effort, or, if efficient, more disruptive than the use of monetary policy for the same purpose. Under a floating-exchange-rate system, on the other hand, the problem of balancing the balance of payments does not exist;* the choice between the three alternatives is more definitely arguable in terms of strictly economic considerations; and the balance is tilted somewhat in favor of the third alternative by the fact that to some extent movements of the exchange rate will serve as an automatic stabilizer insulating the economy from changes in world markets.

Alternative Guiding Principles for Future Policy

The preceding sections have outlined certain fundamental assumptions concerning the nature of central banking, the influence of monetary policy on the economy, and the philosophy of economic policy, and indicated the relevance of the choice between a fixed and a floating-exchange-rate system to the potentialities of monetary policy. The following sections discuss the three alternative approaches to the future conduct of monetary policy outlined in the introduction. In each case, the relevant section outlines the rationale of the approach under discussion, and describes briefly the kinds of recommendations for change in the conduct of monetary policy that adoption of the approach might suggest.

(a) Lowering the Expected Standard of Performance of Monetary Stabilization Policy

There are several grounds for arguing that the unsatisfactory record of monetary stabilization in Canada in recent years represents about as good a performance as can reasonably be expected, and that the inference to be drawn from this experience is that expectations of per-

* The balancing of the balance of payments may be secured by an inflow of foreign capital which is regarded as undesirable on some extraneous ground such as the dislike of American ownership of Canadian assets. The solution to this problem, if it is regarded as a problem, is clearly to increase Canadian savings and provide more incentive to Canadians to hold equities; both objectives would be served by a combination of surplus budgeting and easy money.

formance have been set impossibly high and should be revised downward.

In the first place, it can be argued that the openness of the Canadian economy to the world economy, and particularly the dependence of the Canadian economy on the American industrial complex for markets for Canadian resource products and on the American capital market for capital for Canadian economic development, makes the Canadian economy respond sensitively to fluctuations in the rest of the world, and particularly in the United States, and narrowly restricts the possibilities of economic stabilization by domestic economic policy. On this argument, the unsatisfactory record of stabilization in Canada in recent years predominantly reflects the effects on the Canadian economy of the slowing down of American economic growth, and the balance-of-payments difficulties under which the United States has labored in the same period; there is little that the Canadian policy-makers could do, or can be expected to be able to do in the future, to offset destabilizing influences emanating from the world economy. It can further be argued that over the long run Canadian prosperity and growth is best fostered by active participation in a liberal system of world trade and payments, and that the consequential exposure to economic fluctuations emanating from the world economy is a necessary price of long-run economic gains.

Secondly, it can be argued that the task of economic stabilization is inherently an extremely difficult one, and that there is no obvious way of effecting a significant improvement in its performance. The effects of monetary policy on the economy, in particular, are diffuse and far from predictable, and it is extremely doubtful how far monetary policy can successfully offset the effects of economic disturbances. Nor, it may be added, does the existing state of economic knowledge, whatever it may have to say about the theoretical possibility of efficient economic stabilization, hold out much prospect of significant improvement in the practical achievement of stabilization in the near future. At the present time, economic theory for the most part can contribute only a description of intricate economic relationships that must be better understood before stabilization policy can be made more efficient. That being so, the most that can be expected is a gradual improvement of performance as knowledge and experience accumulate.

Finally, it can be argued that the unsatisfactory performance of monetary policy in the past cannot be reasonably attributed to any easily remediable defects in the institutional arrangements for the conduct of monetary policy. A central bank, it can be argued, has been found by historical experience in the Western world to be the most

appropriate institution for the conduct of monetary policy. Its partial independence of the government is essential to the role it has to play in relation to the domestic financial community and the international financial world. As a responsible institution, it can be trusted to seek the knowledge it needs to operate effectively, to exercise the best judgment of which it is capable in formulating monetary policy, and to learn from experience. Like any institution or individual entrusted with the exercise of judgment, it may make mistakes, either because the situations in which it must act are complicated, or because it is influenced by a transient climate of public opinion, or because the exercise of its powers and responsibilities affect its judgment. But the probability of mistakes is inherent in the process of entrusting decisions to the judgment of responsible institutions or individuals, and the risk of mistakes is the price that must be paid by a nation for attempting to improve its economic management by centralizing the control of economic decisions in the hands of responsible public servants. If on the average the record of economic management is not very satisfactory, the correct inference is that the possibilities of achieving economic improvement by entrusting important decisions to the judgment of responsible institutions are more limited than had been thought.

If these arguments are accepted, and the position is taken that the unsatisfactory record of the past implies a need to write down expectations concerning the degree of economic stabilization attainable in the future, the main positive recommendation that emerges is that the public, the government, and the central bank should neither expect very much from monetary policy nor attach too much causal importance to it. This recommendation could be implemented in part by explicit incorporation in the Bank of Canada Act of the principle that the Minister of Finance, or the Government, is ultimately responsible for monetary policy, together with revisions of the wording of the Preamble to the Act designed to convey the sense that the objectives of policy listed are objectives of the Government's economic policy, and that the responsibility of the Bank is to conduct the day-to-day management of monetary policy so as to implement these objectives so far as is possible by monetary means. The purpose of both amendments would be to make the language of the Act reflect the view of the potentialities of monetary stabilization to which the arguments outlined above lead, while at the same time giving legal expression to the instrumental conception of the central bank on which the analysis of this paper is based.

The position that the degree of stabilization attainable by monetary policy is lower than has generally been regarded as satisfactory carries some other implications. If the standard of performance that can be

expected of monetary policy is revised downward, there is still a choice open between accepting a lower standard for stabilization policy, and attempting to achieve some of the ultimate objectives of stabilization policy by other means. Three alternative forms of action along the latter line are conceivable and could be recommended. The first is to develop instruments of stabilization alternative to monetary policy of the traditional kind; such instruments could be either fiscal devices, or selective instruments of credit control—the latter are discussed in a subsequent section. The second is to develop or improve the means of compensating or offsetting the social consequences of instability, particularly of unemployment on the one hand and inflation on the other, and to recognize that if a socially undesirable degree of instability is regarded as economically unavoidable its effects could be mitigated by greater generosity toward the victims. The third alternative is to attempt to improve the capacity of the economy to absorb and adjust to instability with less damage; this would require more determined efforts to make management and labor more flexible and mobile than they are now.

(b) Improving the Performance of Monetary Stabilization Policy

In order to argue that the performance of monetary stabilization policy could be substantially improved, it is not sufficient to point to the unsatisfactory record of the past and claim in the light of hindsight that the monetary authority should have been able to do better. Nor is it enough, to ensure improvement, to recommend that the Bank should become generally more alert, intelligent, and flexible. A serious argument must rest on a demonstration that monetary policy in the past has made errors that would, at least on a balance of probabilities, have been avoided had the system of monetary management been different, and different in certain definable ways.

Such a demonstration is extremely difficult; not only does it require a detailed examination of the past, and specifically of the state of opinion and the economic knowledge available at the time when various key decisions were taken, but it also requires a hazardous exercise in analysis of the might-have-been. What follows is not intended as an expression of the author's own views on these questions, but simply as an outline of a position to which an assessment of the evidence might lead and an exploration of its implications.

It can be argued that the performance of monetary stabilization in Canada in the recent past has fallen seriously short of an attainable standard for one or both of two major reasons, both of which reflect defects in the Canadian system of monetary control that could be

remedied by changing the present arrangements for monetary management.

The first argument is that, either because the democratic governmental process failed to reflect accurately the preferences of the public, or because the ambiguity of the Bank of Canada Act with respect to the ultimate responsibility for monetary policy allowed the Governor of the Bank to impose his own preferences, the priorities according to which monetary policy was conducted were at variance with the priorities that public opinion would have approved. Specifically, monetary policy attached unduly heavy weight to the objective of preventing or restraining inflation, and unduly little weight to the objective of maintaining high employment.* Accordingly, it can be argued, the performance of monetary policy would have been better had the objectives of policy conformed to the preferences of the public; and performance in future could be substantially improved by ensuring that the objectives of policy pursued by the Bank do conform to the preferences of the public.

The specific recommendations to which a position based on this argument would lead depend crucially on whether it is maintained that failure in the past was the result of the Bank taking a different view on objectives than the Government, or of the democratic system failing to generate an accurate indication of the public's preferences.

If it is maintained that the failures of the past were due to the excessive exercise of independence by the Bank, the logical recommendation would be for reforms of the Bank's constitution designed to give the Government control over its actions. A minimal step in this direction would be to revise the Bank Act to assert explicitly that the Government is ultimately responsible for monetary policy, and that the Bank functions as the Government's monetary agent. This step, however, might accomplish little by itself. It would oblige the Bank to exert itself to discover the Government's policy intentions and priorities, at least in general terms, and to ensure that the Government regarded the monetary policy being pursued as consistent with its general economic objectives; but it would not oblige the Government to assume an active responsibility for the conduct of monetary policy, in the sense of laying down the lines to be pursued by monetary policy.

* This argument is admittedly a difficult one to substantiate, since it depends on positing the existence of an ascertainable public opinion on the priorities of policy, and runs the danger of arguing from hindsight or of confusing personal preference with public opinion. Its plausibility must rest heavily on the facts that a large proportion of the country's academic economists disapproved of the Governor's monetary policy and expressed that disapproval publicly, and that the Government found it necessary eventually to remove the Governor of the Bank from his office.

To ensure that the Bank's conduct of monetary management did in practice conform to the Government's policies closely enough for the Government to be actively responsible for monetary policy, it would probably be necessary to oblige the Bank to look to the Government, not merely for general directions concerning the objectives to be pursued and the relative priorities attached to them, but for specific directions concerning the concrete monetary operations that the Government considered to be required by its general economic policy. A formal method of doing this would be to oblige the Government, acting through the Minister of Finance, regularly to communicate to the Governor of the Bank its views on what monetary policy should be. An alternative would be to strengthen the influence of the regular government departments primarily concerned with economic policy on the formulation of monetary policy, perhaps by setting up an interdepartmental committee to advise the Governor of the Bank.

If past policy failure is attributed to failure of the democratic governmental system to reflect public preferences with adequate accuracy, the problem of securing a substantially improved performance is much more difficult. There are two not necessarily mutually exclusive lines on which improvement could be sought. The first would aim at improving the expression of public opinion through Parliament. On this line of approach, the basic problem is the general one of securing effective democratic government by improving the quality of public understanding and discussion of issues so that public opinion is brought to bear on governmental decisions while they are being formulated, rather than left to be expressed in electoral approval or disapproval of the results of these decisions. This is a problem in public education—in the present context, of education of the public in the economics of policy choices—and it is doubtful how far such education can be promoted by changes in the institutional arrangements for the conduct of monetary policy. It is, however, arguable that the quality of public discussion and understanding of the issues involved in the use of monetary policy would be substantially improved if the Bank were obliged to publish regularly its own account of the actions it had taken, the purpose of these actions, and the results expected to follow from them, all in terms sufficiently concrete to permit informed discussion and appraisal.

The line of action just described assumes that Parliament is the proper body for the expression of public opinion and its translation into policy, and that it is the responsibility of the Bank to be guided by public opinion as represented by the Government in office. The alternative line of action rests on the different assumption—one that is more in keeping with the tradition of central banking—that elected govern-

ments are fallible and not entirely to be trusted, especially in matters of monetary management, and that it is the responsibility of central banks to formulate their own view of the public interest and pursue it, as the phrase goes, to the point of "nagging" the Government. On this assumption, the failure of the past is attributable to inadequate or biased representation of public opinion in the management of the Bank, and the indicated line of reform would be to strengthen the representation of public opinion on the Bank's Board of Directors. Specifically, it can be argued that by the very nature of central banking financial opinion is likely to have an excessive influence on the Bank's thinking, and that this influence should be counterbalanced by functional representation of other sectors of the economy on the Board. In addition, it could be argued that since monetary policy affects the whole economy in a variety of complex ways, special representation should be given to professional economists, whose business it is to understand and study how the economy works.

The foregoing discussion is concerned with the contention that the past failures of monetary policy are in large part attributable to a failure of monetary policy to reflect the public's preferences with respect to the priorities of economic policy, a failure that could be remedied by improving the arrangements for monetary management. The second argument attributes past failure, not to the pursuit of objectives different from those preferred by public opinion, but to failure of the Bank to understand the economic relationships on which monetary policy was seeking to operate, or to make use of the available economic knowledge concerning those relationships, let alone attempt to improve on that knowledge. This attribution is much easier to support than the other, inasmuch as the economic analysis and assumptions employed in formulating the Bank's policy are on public record in the Annual Reports of the Bank and the speeches delivered by the Governor, and can be shown—in fact, have frequently been shown—to be illogical, inconsistent, inadequate, or factually wrong in a variety of respects crucial to efficient policy formation.

Given that the Bank in the past has displayed an alarming ignorance of elementary economic principles, not to speak of the results of scientific economic research, it can be argued that the performance of the Bank would have been much better had it possessed and applied an up-to-date knowledge of economics, and that its future performance could be substantially improved if it were made to realize the importance of economic science and research to its work, and obliged to base its policy actions on a thorough economic analysis of policy alternatives

and consequences, and to improve its economic knowledge by a continuing large-scale research effort.

This prescription could be implemented by a variety of changes. The relevant recommendations could include the appointment of senior economists to the Board of Directors; a program of exchanges between the Bank's staff of economists and economists in the universities; regular informal conferences of Bank officials and academic economists to discuss technical problems of monetary management or the bearing of general economic problems on monetary policy; regular publication of the results of the Bank's own research in a journal open to contributions from outside economists.

Many of such changes could easily be effected by the Bank itself; that the Bank has not chosen to introduce them points to the main source of doubt concerning the probable effectiveness of this prescription, since it indicates that the Bank itself does not consider that more extensive and intensive use of economics and economists would help it to perform its duties. For the prescription to work, it would not necessarily suffice for the Bank to have to employ and argue with economists; the language of economics, like the language of the law, can be used to conceal the truth as well as to discover it, and the employment of an economist, like the employment of a lawyer, is not necessarily a guarantee of honest intentions. What the prescription aims at is to convert the Bank, as an institution, from the banker's habits of thought to those of the economist. Whether this could be done, and whether if it could be done the Bank could still function effectively in its relations with the financial system, are difficult questions whose answers depend on the institutional character of central banking. So far as the first question is concerned, it seems clear that the Bank's personnel would have to be persuaded of the value of the scientific approach to its problems. This would have to be achieved by experience; probably the most effective ways of making the bank undergo the experience would be to appoint senior professional economists to the Board of Directors, and to oblige the Bank to publish detailed economic analyses of its policy choices and their results, preferably with a commentary by independent economists. So far as the second question is concerned, avoidance of possibly serious disturbance of the traditional understanding between the Bank and the domestic and international financial communities might require an improvement in these groups' understanding of the economics of policy, highly desirable in itself but unattainable in practice. Nevertheless, the effort and risks involved in converting the Bank to a more economically oriented in-

stitution might well be considered worth undertaking, if the result promised to be a substantial improvement in the performance of monetary stabilization policy.

(c) Abandoning Short-Run Stabilization in Favor of a Stable Monetary Environment

The preceding two subsections have been concerned with the alternative positions that past experience indicates that a lower standard of achievement should be expected of monetary stabilization policy, and that an appreciably better performance could be ensured in future by revising present arrangements for monetary management either to make the central bank's actions conform more closely to public preferences, or to make its operations more scientific, or both. This subsection is concerned with the third alternative, that the attempt to achieve short-run economic stabilization by monetary policy should be abandoned, and that instead monetary policy should be directed to creating a stable monetary environment in the economy.

There are three main arguments for the abandonment of short-run stabilization as a primary objective of monetary policy. The first starts from the observation that while in principle it should be possible to operate monetary stabilization policy efficiently, because monetary action can be taken swiftly and can be finely adjusted, in practice the use of monetary policy for stabilization purposes has been laggard and clumsy in its recognition of and reaction to both short-run changes in the contemporary economic situation and long-run changes in the economic environment. More specifically, monetary-policy changes have consistently lagged significantly behind changes in phase of the business cycle. What is more important, changes in the priorities among objectives expressed in monetary policy have lagged long behind changes in the economic environment or conjuncture: monetary policy in the period from the end of the war to the early '50's—a period of economic euphoria—was preoccupied with the danger of a deep recession, with the result that it contributed to inflation; it then became preoccupied with the dangers of inflation, about the same time as the economic climate changed toward one of chronic depression, with the result that it contributed to unemployment and slow growth. Delay in the recognition of economic changes and adjustment to them, it can be argued, is inherent in the nature of policy-making institutions in a democratic society; but it is especially ingrained in the nature of the central bank, which lacks the mandate of an elected government to act speedily in emergencies. That being so, the central bank should not be entrusted with the responsibility for stabilization policy, since

effective performance of that responsibility would require it to act with a speed and foresight, and a willingness to court unpopularity, that is contrary to its institutional nature and the political framework within which it must operate.

The foregoing argument derives from consideration of the position of the central bank in the system of government. The second argument derives from consideration of the institutional nature of the central bank and its position in the economy. The central bank, it can be argued, is primarily a banking institution, and its main business is with commercial banks and other financial institutions. Its organization and traditions are adapted to that role; they are not designed specifically for the purpose of control of the economy by manipulation of the money supply, and the degree to which they can be adapted to that purpose is severely limited. On the one hand, the position of the central bank in relation to the economy is not such as to encourage or force it to think continually of the requirements of the economy as a whole, but rather such as to concentrate its thinking on the requirements and interests of the financial sector. On the other hand, pursuit of a vigorous monetary policy directed at economic stabilization necessarily brings it into conflict with the interests of the financial institutions with which it normally works, a conflict it will naturally wish to evade or avoid. In short, reliance on monetary policy for short-run stabilization involves entrusting the job to an institution that is neither well equipped for nor single-mindedly enthusiastic about the responsibility. It can be argued that the prospective degree of stabilization attainable is not worth the difficulty of attaining it, and that it would be better to try to achieve economic stabilization by some other means.

The third argument is concerned with the economic possibility of stabilization by monetary means. As has been mentioned in an earlier section, economists have had little difficulty in verifying that monetary policy can influence interest rates and credit conditions, and great difficulty in detecting the influence of the latter, or of the quantity of money itself, on economic activity. Nevertheless, very few economists would be prepared to assert, and certainly none has ever attempted to prove, that monetary policy has no influence whatever on the economy. The most plausible view, on the basis of research to date, is that monetary policy has an influence on the economy that varies in magnitude and in timing and is by no means easily predictable. This in itself would suggest that the use of monetary policy for short-run stabilization might do more harm than good, the disturbance resulting from unintended or unanticipated effects of monetary-policy actions outweighing the intended beneficial effects. Further, recent theorizing on these matters sug-

gests that one reason why the influence of monetary policy is difficult to detect is that enterprises and individuals make their plans on the basis of expectations about the normal state of the economy, including the normal state of credit conditions, and that these expectations adjust only slowly to changes in the way monetary policy is conducted. This line of thought readily leads to the conclusion that the vigorous pursuit of monetary stabilization policy may be not only not very effective in the short run but of decreasing effectiveness over time, since the economic decision-units at which monetary policy is directed will learn to manage their affairs so as to avoid being disturbed by changes in monetary policy; and to the further conclusion that vigorous use of monetary policy may impede the long-run growth of the economy, by adding to the uncertainties of economic decision-making and reinforcing speculative pressures that tend to keep long-term interest rates high.

All three of these arguments lead to the conclusion that the attempt to achieve economic stabilization by traditional monetary means should be abandoned, and that the objective of stabilization should be approached in some other way; none of them, however, excludes the possibility, explored in the next section, that a useful improvement in stabilization might be attainable by the use of selective credit controls. All three also imply, though with varying emphasis, that monetary policy ought to be directed toward the creation and maintenance of a stable long-run monetary environment for the economy. The first argument would suggest that since the monetary authority is likely to be a bad judge of what the current state of the economy requires in the way of monetary policy, it should be given the simpler task of concentrating on the long-run monetary requirements of a growing economy. The second argument would suggest that the central bank is especially equipped by tradition, experience, and institutional role to promote and police the development of the country's financial institutions and to maintain orderly conditions in its security markets—particularly to cushion the disturbing effects of governmental fiscal and debt operations. The third argument would suggest that the central bank can contribute most effectively to both short-run stabilization and long-run growth by following a definite, well-understood and publicized, consistent policy in its monetary operations, one to which it is committed sufficiently long ahead for borrowers and investors to be able to plan with confidence.

The difficulty with recommending that monetary policy be directed to creating and maintaining a stable long-run monetary environment is to give this recommendation a concrete content. Two concrete proposals have been advanced and canvassed in recent years. One is the

Radcliffe Committee's proposal that monetary policy should seek to stabilize long-term interest rates at a level appropriate to the long-run balancing of savings and investment at a high employment level. The other is the proposal advanced by various American economists, that the money supply should be expanded at a constant rate based on the long-run growth rate of demand for money. The difference between the two proposals reflects partly a difference between the British and American institutional systems of monetary control—the British system concentrating on changing interest rates and the American on changing bank reserves and the quantity of money—and partly a difference in basic monetary theory, which resolves essentially into a difference over empirical facts. The Radcliffe proposal assumes either that fluctuations in the economy originate predominantly in changes in the demand for money that could be counteracted by changes in the amount of it supplied, or that the demand for output is insensitive in the short run to changes in interest rates; the alternative proposal assumes that fluctuations in the economy originate predominantly in changes in the demand for output that do not alter the demand for money, and that interest rates have a negligible influence on the quantity of money demanded. Since fluctuations may originate in both monetary and real disturbances, and both the demand for output and the demand for money are likely to be responsive to changes in interest rates to some extent, adoption of either proposal would entail some possibility of destabilization by comparison with an ideal stabilization policy. In the case of real disturbances, the Radcliffe proposal would eliminate both the stabilizing effects on expenditure of automatic increases in interest rates in booms and decreases in interest rates in depressions and the further stabilization that could be effected by countercyclical monetary contraction and expansion. The alternative proposal would eliminate the possibility of counteracting monetary disturbances, and in the case of real disturbances would allow fluctuations in interest rates to induce increases in velocity in booms and decreases in velocity in depressions, these changes in velocity serving to accommodate a fixed stock of money to a varying level of output and activity. The destabilizing effects of either alternative, it can be argued, would be small by comparison with the destabilizing effects of active monetary stabilization policy as conducted in the past, and by comparison with the gains from a more stable monetary environment.*

The Radcliffe proposal was a recommendation to the central bank and the economic policy authorities; the American proposal is some-

* The last half of this paragraph has been revised as a result of discussion with Alvin Marty.

times intended to be translated into legislation binding the central bank to expand the money supply at a specified rate. Such a statutory restriction on the central bank's freedom of action is alien to the tradition of British central banking, and presumably could not be contemplated; nor is the state of knowledge concerning monetary behavior sufficiently advanced to permit the devising of a rule that would not run the risk of becoming inappropriate. The spirit of the two proposals could, however, be expressed in a recommendation to revise the Bank Act to make the Bank's primary responsibilities those of fostering the growth of the country's monetary and financial system, and maintaining a stable monetary environment in Canada, and to impose on the Bank the obligation not only to devise its policy with reference to those objectives, but to announce and explain publicly what its monetary policy is and will be for some reasonable time into the future. Whether the policy was to be expressed in terms of interest rates on certain government securities, or in terms of the rate of expansion of the money supply, could either be specified statutorily, or left to the Bank's discretion.*

New Controls Over Credit

The preceding section dealt with three alternative approaches to the future use of monetary policy—acceptance of a lower expected standard of performance with respect to economic stabilization, determination to improve that performance in the future by reform of the system of monetary management, and alteration of the objective from economic stabilization to the creation of a stable monetary environment. Each of these approaches is consistent with the recommendation that the traditional techniques of monetary management be reinforced by the introduction of various kinds of selective controls over the granting and use of credit. It can be argued that even though the degree of stability achievable by monetary policy is not high, it would be higher if the monetary authority had the power to strike more directly at sources of instability, or that a more determinedly scientific approach to stabilization should be empowered to use techniques that analysis of the sources of instability suggests might be more effective than orthodox techniques; or that the use of selective credit controls could contribute significantly to stabilization without disturbing expectations

* The recently revived technique of a fixed Bank rate is a device for committing the Bank to pursuing a stable policy in the very short run, and changing it only at intervals and by degrees to which the money market is accustomed. The position discussed in this subsection is essentially that a technique of this kind should be developed on a time-scale appropriate to the financial planning of the productive sector of the economy.

and increasing uncertainty as much as would the use of orthodox monetary policy.*

The purpose of this section is to explore the merits and drawbacks of various types of selective control over credit. Such selective controls can be divided for discussion into four types—"moral suasion," controls over bank behavior, controls over other credit institutions, and controls over particular types of borrower. Since the use of selective controls in any form raises some issues of a general nature, and since this paper cannot embrace a discussion of all the specific kinds of selective control that might possibly be considered, discussion of the four types of selective control just mentioned is preceded by a brief statement of some of the general issues.

(a) Some General Issues

Any attempt to use control of the money supply and credit conditions to stabilize the economy, whether the method employed is "general" or "selective," must necessarily operate indirectly. What matters for economic activity is the level of spending, not of borrowing in general or in certain specific forms, and monetary or credit control must operate through whatever influence the quantity of money, interest rates, or the availability of credit in general or in certain selected forms has on the level of spending. This means that selective credit control can only be effective to the extent that would-be spenders cannot resort to alternative financial institutions or alternative sources of finance than those over which control is exercised; and a primary question about any proposed device of selective credit control is the extent to which it can control actual spending, as distinct from merely altering the form in which spending is financed. The answer to this question obviously depends not only on the particular device under consideration, but also on the length of time over which the device is intended or required to be effective. Over the course of time, would-be borrowers deprived of access to their customary sources of finance will learn to resort to alternative sources, or to manage their affairs so as not to be dependent on their previous sources; similarly, competition among lenders will in the course of time develop substitutes for institutions and types of lending resort to which is restricted by selective control.** Thus

* The argument here would be that the use of selective methods explicitly recognizes that the circumstances are abnormal, and therefore minimizes the disturbance to long-run expectations. The validity of this argument clearly depends on selective controls being used infrequently and for short periods; if they became a permanent feature of the economic environment, their use for economic stabilization could raise the same problems as the use of monetary policy.

** For example, the pressure of rising interest rates against legal limits on the interest

heavy and sustained reliance on selective controls may be self-defeating, and may have the long-run consequence of reducing the efficiency of the financial system and the economy by fostering the substitution of inherently less efficient for inherently more efficient financial institutions and practices.

Because the efficiency of selective controls depends on their frustrating the plans of would-be spenders who are dependent for finance on the specific credit institutions or forms of credit subjected to control, selective controls are inherently discriminatory between spending units. Should this consideration be a matter for serious concern? It can be argued—the contention that "general" monetary control is non-discriminatory to the contrary—that "general" monetary policy is equally discriminatory, since it in fact operates in part through the rationing of credit among borrowers by banks and other lenders. It can also be argued that any policy of economic stabilization is inherently discriminatory in the sense that it will entail frustrating the plans of some economic units (consumers or firms), and that the distribution of frustration among the units will necessarily be to some extent fortuitous. The practical question therefore is whether the inequity involved in any particular device of selective control is tolerable, in conjunction with the contribution to stabilization it makes.

To put the argument of the two preceding paragraphs a rather different way, the important economic fact is not so much that selective controls discriminate against some types of economic units, as that they discriminate against established efficient methods of financing. And the important economic question is not so much whether they 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.*

The possible long-run distorting effects of the discrimination implied by selective controls are particularly important in the case of selective

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rates payable on deposits and chargeable on loans has led the chartered banks to develop new deposit instruments and loan forms that enable them in fact to exceed these limits. At the same time, these and other restrictions on the banks' freedom to compete in the deposit and loan market have fostered the growth of other deposit-taking and loan-making institutions, such as the trust companies and the finance companies.

* There is a close analogy between the use of selective controls on credit and the intermittent use of specific taxes such as capital levies or tariff surcharges. Both raise questions of equity, which have to be resolved by reference to established standards of equity, and both, if frequently resorted to or prolonged, may distort the economy into an inefficient structure.

methods of control applied to the operations of the chartered banks. In effect, the obligation imposed on chartered banks to maintain a minimum non-interest-yielding cash reserve in the form of Bank of Canada notes and deposits constitutes a tax on the chartered banks, levied in return for the privilege of conducting a banking business. Other restrictions on the chartered banks' freedom to determine the composition of their assets, such as the minimum liquidity ratio and other proposed devices to force chartered banks to hold government debt, constitute additional taxes—as do legal restrictions on the rates banks may charge. The use of such restrictions and variations in them to assist stabilization policy may in the long run retard the development of the banking system and foster the development of other less efficient institutional arrangements for conducting business the banks are best equipped to handle. In a concentrated banking system like the Canadian one, the use of selective controls directed at the banks may also encourage the banks to develop arrangements among themselves similar to those of cartels and combines, and oblige the central bank to accept such arrangements, as compensation for the loss of profit opportunities resulting from selective controls. Thus the distortions resulting from discriminatory treatment of banks may be aggravated by the distortions resulting from monopolistic practices.

One further comment is in order. Since discrimination is generally regarded as ethically undesirable, there is a natural tendency to condone or recommend it particularly in cases where the activities or economic units against which it is directed can also be considered as ethically or morally undesirable. Specifically, there is a strong tendency in discussions of selective credit controls to favor controls on the finance of speculation in stocks and real estate, on the grounds that speculation is a morally reprehensible activity, and on consumer finance, on the grounds that it is immoral for wage and salary earners to pledge their future earning power. Both types of financing can in fact be defended as rational activities which can contribute to the improvement of economic efficiency and welfare in the same way as any other kind of borrowing—speculation by leading to a more efficient allocation of assets among uses, instalment buying by leading to a more efficient allocation of consumption over time. If nevertheless it is considered that they should be restricted on moral grounds, the presumption should be that they are equally immoral whether the economy is booming or slumping, and should be dealt with by permanent measures.* The only

* One important reason for the condemnation of speculation, in addition to the usual sober citizen's dislike of seeing someone else get something apparently for nothing, may be the realization that present tax laws give the speculator an enormous

possible economic argument for countercyclical selective control of them is that they contribute extraordinarily to economic instability. This cannot be readily demonstrated for speculation in stocks and real estate, which involves trading in existing assets; though it can be argued in the case of consumer credit, which finances the purchase of goods.

(b) Moral Suasion

For the purposes of this paper moral suasion has been classified as a type of selective credit control. Actually it occupies an awkward middle ground between the unobjectionable straightforward provision of information by the central bank about its own analysis of the economic situation and the best interests of private enterprises, and the use of explicit selective controls on credit, since it attempts to persuade economic decision-takers by one means or another voluntarily to take actions that the central bank wants them to take but cannot force them to take. Since the actions involved generally amount to some form of rationing of credit, and since the persuasiveness of the central bank ultimately derives from its powers of control over the money supply, moral suasion can however be assimilated more closely to selective credit control than to the proffering of disinterested objective advice.

The use of moral suasion by the central bank inevitably involves some conflict with the immediate economic self-interest of the institutions at which it is directed, which institutions must be persuaded to comply either on the general ground of responsibility to the community at large or on the narrower ground of good relations with the central bank. The extent to which institutions can be persuaded to act against their immediate self interest on these grounds obviously depends on a variety of factors, including the extent to which they can afford the loss of profits or of goodwill (in the first case) and the extent to which the central bank has power to discipline them (in the second case). It follows that moral suasion is more likely to be effective when directed at the chartered banks and other heavily concentrated sectors of the financial system and the economy than when it is directed at sectors characterized by keen competition among a large number of small firms. The more monopolized a sector is, the more dependent it is on governmental goodwill, and the more its activities are prominent in or open to public discussion, the more amenable it will be to control by moral suasion.

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differential advantage over the citizen who earns his income by regular work. The appropriate remedy is not to try to hamper the speculator, but instead to remove the tax advantage by treating speculative capital gains as income.

These considerations suggest the first reservation about the use of moral suasion. Its effectiveness depends on the extent to which economic decisions are concentrated in the hands of a few units, which consequently can afford to allow what are essentially political considerations to override economic calculation. Correspondingly, reliance on it implies at least tacit approval of concentration of economic activity in a few decision-taking units, and assumption of some governmental responsibility for rewarding compliance with moral suasion by favors of some kind. The recognition of responsibility is usually a reciprocal relationship. It may be considered only realistic to recognize that economic control in Canada is concentrated; and it may even be argued that such concentration is desirable on various economic grounds. But it should be recognized that the use of moral suasion does raise the question of whether economic concentration is desirable, and that this question is a controversial one.

A second question relates to the objectives at which moral suasion is likely to be directed. Judging by past experience in Canada and elsewhere, moral suasion is likely to be directed at or canalized into restraining types of lending or spending that according to conventional financial thinking are unsound or morally somewhat shady, such as loans for speculative purposes or for consumer spending. Restraint of this kind may have little effect in controlling the true sources of instability, which often are simply excessive spending on thoroughly respectable projects. More generally, moral suasion raises the question of how far the monetary authority, in collaboration with responsible financial institutions and leading corporations, is competent to judge better than the competitive market process (or possibly an economic planning agency) what types of expenditures are in the national interest and what types are not.

A third question relates to the time lag inevitable in the use of moral suasion. For moral suasion to work, not only must the monetary authority and the government be persuaded that the economy is getting out of hand, but the financial and business community to which moral suasion appeals must also be persuaded. This presupposes that the need for action is apparent to all concerned; and this in turn ensures that action will only be taken with an appreciable lag.

On the other hand, there are two considerations favoring the use of moral suasion. One is based on the assumption that private enterprises, both financial and nonfinancial, are poor forecasters and poor interpreters of their own economic interests, and moreover react to economic changes with considerable inertia. Consequently, it can be argued, the adoption by the monetary authority of a definite simple line on the

nature of the contemporary economic situation and what action it calls for will be welcomed by the financial and business communities, and will speed up the change to policies that private-enterprise institutions would willingly follow if they were better informed and more flexible. This consideration amounts to accepting the proposition that in a complicated world, salesmanship has to substitute for perfect knowledge and wisdom, and assumes that imperfect guidance is better than none. The second consideration is based on the assumption that financial institutions are involved in intricate professional-client relationships with their customers, and that corporation management is built on a delicate balance of power among different departments, so that the application of the correct economic decisions is greatly facilitated if reference can be made to the overriding authority of the central bank's opinion. For example, it is frequently asserted that a directive or policy statement from the central bank makes it easier for commercial banks to refuse their customers loans while retaining their goodwill; and it is conceivable that the financial-planning departments of big corporations may be similarly strengthened in their resistance to overoptimistic expansion plans emanating from the production and sales departments. These considerations, of course, implicitly assume that the judgment of the monetary authority is both reasonably reliable, and expressed in terms that both are plausible and can readily be translated into action by the relevant private-enterprise institutions. Clearly, these assumptions limit the extent to which moral suasion can be relied on to improve the performance of economic-stabilization policy.

(c) Control Over Chartered Banks

One of the reasons why orthodox monetary policy operates slowly and imperfectly in restraining a boom is that at the start of the upswing the chartered banks are typically holding a relatively high proportion of government debt and a relatively low proportion of loans. As the upswing proceeds, and the demand for loans grows, the banks can satisfy this demand even though monetary policy is restraining the growth of their total assets, by running off their holdings of government debt in order to finance the expansion of loans. In effect, this process transforms idle bank deposits into active deposits, owners of idle balances being persuaded by a rise in interest rates to surrender these balances to the banks in exchange for government securities formerly held by the banks, and the banks relending the balances to borrowers who wish to spend them. In a different terminology, restriction of the money supply by monetary policy is partially offset by an induced increase in the velocity of circulation.

It can be argued that the effectiveness of monetary policy would be significantly increased if the central bank had the power to prevent the banks from running off their holdings of government securities, for example by being empowered to impose a variable minimum ratio of "more liquid assets" to deposits, or a variable maximum ratio of general loans to deposits. Since the use of such powers would involve obliging the banks to hold more government securities than they would otherwise choose to hold, it could be argued that the granting of them would have the additional advantage of helping to keep down the cost of the public debt by partially insulating the government-securities market from the effects of restrictive monetary policy.

The quantitative magnitude of the influence on both aggregate spending and interest rates achievable by use of such powers depends on the extent to which spenders who normally finance themselves by bank loans have access to other sources of finance, or possess assets that can be sold or pledged to finance spending. The restraining effect on expenditures (and interest rates) would be greatest if everyone refused a bank loan had no alternative but to cancel his spending plans; even in this case some of the effect would be offset by the influence of lower interest rates in inducing larger expenditures by spenders not dependent on bank loans. The restraint on expenditures (and interest rates) would be virtually zero if all potential borrowers from banks had the alternative of financing expenditures by selling off holdings of government bonds. In general, the restraint achievable depends on the deterrent effect on would-be borrowers from banks of the higher cost of alternative means of finance. It is generally agreed that some groups of would-be spenders—notably small businesses and consumers—are sufficiently dependent on bank finance for the denial of bank loans to force them to cancel or curtail their spending plans. Thus, providing the banks do not channel their loans to such groups at the expense of other groups having access to alternative sources of finance, the powers of control under discussion could increase the effectiveness of stabilization policy to some significant extent.

Assuming that this kind of selective control of chartered-bank lending could contribute to stabilization, whether it should be employed depends on three sets of considerations. First, its use is an alternative to more vigorous and alert use of monetary restraint; instead of preventing the banks from lending as large a proportion of their total assets as they wish, the monetary authority could achieve the same effect on loans by restricting total bank assets more severely. Preference for the selective over the general method of control of bank loans must therefore be derived from an empirical judgment that the central bank

cannot or will not apply general monetary restraint quickly and subtly enough—that is, it cannot anticipate the banks' switch from government securities to loans—or from the view that a more active monetary policy would have undesirable destabilizing effects on the economy, or from the judgment that the government-debt market should be protected so far as possible from the impact of monetary restraint. In the second place, the concentration of the restrictive effect on spenders who are dependent on bank finance may be regarded as both unfair and economically undesirable. In particular, it is frequently argued that restriction of bank loans bears unduly heavily on small businesses, with effects deleterious to economic growth and favorable to economic concentration and monopoly and the control of Canadian enterprise by American capital. These effects, so far as they can be demonstrated to exist and to be avoidable by other methods of stabilization, have to be weighed against the improvement in stabilization achieved by selective control of bank lending. Finally, forcing the banks to hold more government securities and less loans than they would like amounts to imposing a special kind of tax on bank earnings; whether this tax amounts to a net burden or not depends on whether it is assumed that total bank assets would be the same with or without the selective controls, or that in the absence of controls the central bank would restrict total bank assets more severely. In either case, some intricate questions about the effects on the banks' earnings and competitive position are involved.

Essentially similar considerations to those last mentioned are involved in proposals to supplement existing methods of control over bank deposits by giving the central bank power to alter the reserve ratio the chartered banks are obliged to maintain, either by direct variation of the required ratio or by requiring the banks occasionally to hold additional reserves in the form of "special deposits," on which interest may or may not be paid.

In a modern central-banking system, the required reserve ratio serves two functions. First, it fixes the "expansion multiplier"—the number of dollars by which the commercial-banking system can expand deposits on the basis of a dollar increment to reserves. Second, it imposes a tax on the commercial banks, equal to the loss of interest on the portion of reserves they would not hold if they were not obliged to. This tax, whose burden rises and falls with the general level of interest rates, can be regarded as the price the banks must pay to the central bank, and indirectly to the government, for the services of the central bank and the privilege of operating a banking business. Its level influences in the short run the division of bank earnings between the banks and the

government, and in the long run the allocation of resources to the provision of banking services.

The use of variable reserve ratios rather than open-market operations with a fixed ratio to control the volume of bank credit can accordingly be recommended on two grounds. The first is that the central bank's control over bank deposits is closer, the higher the reserve ratio; and that close control is more desirable, and the burden of a higher reserve ratio on the banks more bearable, in the boom than in the slump. This argument assumes, plausibly, that banks will work closer to the minimum reserve ratio the higher that ratio is. The second argument is that raising required reserves in a boom will tend to restrain the growth of bank loans and the rise of interest rates in the same way as would requiring the banks to hold government debt directly, since reserves are an indirect form of public-debt holding. The factual assumption here is questionable, since taxing the banks by forcing them to hold larger reserves may increase their desire to hold loans rather than securities. On either argument acceptance of the recommendation involves the same considerations as before, a balancing of likely effectiveness in stabilization against considerations of equity and economic efficiency.

There is, however, a special set of circumstances in which the power to vary reserve requirements or to require the banks to hold special deposits may have particular advantages. A country on a fixed exchange rate may easily experience a rapid inflow of short-term capital; if the monetary authority wishes to prevent such a capital inflow from generating a multiple expansion of the domestic money supply, it may have considerable difficulty in doing so by open-market sales of securities, since the sales required may be extremely large. The desired insulation of the domestic monetary system could be secured more readily by requiring the banks to hold additional deposits at the central bank as reserves against the increase in foreign-owned deposits—in effect, the multiple-expansionary effect of an acquisition of foreign assets by the central bank would be offset by an increase in reserve requirements.

(d) Control over Other Credit Institutions

In the past seven or eight years the argument has commonly been advanced that monetary control of the economy has been weakened by the development of financial intermediaries which offer the asset-owner assets which are close substitutes for bank deposits. The presence of these intermediaries, it is argued, means that an effort to tighten credit conditions simply leads asset owners to transfer their assets from the

form of bank deposits into the form of substitutes for bank deposits; since the liabilities of financial intermediaries are backed by a fractional reserve of bank deposits, the effect is an increase in the total of money and close money substitutes that can be provided on the basis of a given amount of chartered-bank reserves provided by the central bank, so that the intentions of monetary control are frustrated, whether monetary control is conceived of as working through the total amount of money or through the amount of credit extended by financial institutions. Consequently, it is argued, effective monetary control requires that these financial intermediaries should be subjected to the same kind of cash-reserve requirement as are the commercial banks.

The importance of this argument depends on how far in fact monetary restriction leads to a transfer from bank deposits to the liabilities of financial intermediaries rival to banks. The empirical evidence produced so far does not suggest that such shifts are an important cause of frustration of monetary policy, or that the presence of financial intermediaries is a source of instability. To this proposition there is one important exception: the finance companies. In boom times the demand for instalment credit is so great, and so insensitive to the cost of instalment credit, that finance companies can offer very high yields to attract funds from alternative forms of liquid investment; by so doing, they provide finance for consumer purchases that add to the pressure of demand on available productive resources and so contribute to economic instability. Finance companies, however, are not generally considered to be close rivals to commercial banks in the same sense as other savings and deposit-accepting institutions; and proposals for controlling their activities are usually directed at controlling the terms of instalment finance, rather than the lending capacity of the companies. For this reason, such proposals are dealt with in the following subsection, on control of specific types of borrowing.

So far as other financial intermediaries are concerned, there would seem to be no empirical case for empowering the central bank to exercise control over their activities similar to that exercised over the chartered banks. There may, however, be a case on grounds of equity or financial efficiency for subjecting near-bank institutions to reserve requirements similar to those now imposed on chartered banks. The purpose of such a change would not be to improve the central bank's power to pursue economic stabilization—as already mentioned, there is little reason for believing that the central bank's control is weakened by the presence of financial intermediaries, and indeed so long as the public does not switch easily from bank deposits into close substitutes the presence of intermediaries may on the contrary increase the leverage

of the central bank on economic activity.* On the contrary, the purpose would be to burden the intermediaries with the same taxation as the minimum cash-reserve requirement now places on the chartered banks. Whether this would constitute an improvement in equity and efficiency is a controversial question. As already mentioned, in return for this taxation the chartered banks receive certain services from the central bank, and enjoy the privilege of conducting a banking business. How far the services and the privilege are worth the tax paid for them is an extremely intricate question, as is the question of what equal conditions of competition between banks and near-banks would entail.

(e) Controls over Specific Types of Borrowing

The foregoing subsections have been concerned with controls over specific types of lending institutions. This subsection is concerned with the alternative type of selective credit control, which is directed at specific types of borrowing, rather than at lending by particular institutions. The argument for controls of this type is that certain kinds of borrowing finance types of expenditure that are of especial importance in the causation of economic instability; and the case for such controls must rest on demonstration that instability can be reduced—that is that instability of the relevant types of expenditure can be reduced—by controls on the financing of such expenditure. Given that certain types of expenditure can be identified as contributing to instability, the problem raised by such proposals is how far control of the finance of such expenditure can mitigate instability. This problem is a serious one, because on the one hand there is no sure way of identifying a dollar of borrowing with a dollar of expenditure, and on the other hand the same expenditure can be financed in a variety of ways, some of which may be difficult to control. Specifically, an individual or enterprise with a wide enough variety of assets or activities can always find a legitimate way of raising borrowed funds, regardless of the purpose for which the borrowing is intended; and similarly, if the demand for credit for some purpose is keen enough, the financial system can, given some time, always find a legitimate way of satisfying the demand.

* The presence of financial intermediaries supplying assets very similar to bank deposits and holding a fractional reserve in the form of bank deposits means that the economy's total stock of "liquidity" or "money services" rests on a smaller fractional base of central-bank liabilities than it would if these intermediaries were not present. Consequently, so long as the public's division of its monetary assets between the various alternative forms, and the cash ratios observed by banks and competitive financial intermediaries, are reasonably stable, a given change in the central bank's liabilities will produce a larger absolute change in the public's stock of monetary assets when financial intermediaries are present than when they are not.

Three main types of borrowing are commonly assigned a special role in the generation of economic instability: instalment borrowing, particularly consumer instalment finance; borrowing for new capital investment; and borrowing for stock-market and real-estate speculation. Accordingly, it may be argued that economic stabilization could be more efficiently secured by empowering the central bank, or some other governmental agency, to control the terms on which consumer instalment credit is available, to license borrowing for new capital investment, and (or) to prohibit borrowing for speculative purposes or to control the terms of such borrowing.

So far as consumer instalment credit is concerned, it can be argued on the basis of the evidence that consumer purchases financed by such credit have been a destabilizing factor in recent economic fluctuations. It can also be plausibly argued that consumer instalment buying is relatively insensitive to changes in the rate of interest incorporated in instalment-credit terms, but is sensitive to the down payment required and the period over which repayment is spread (as incorporated in the amounts of the instalment payments). Finally, it can be argued that the inequity and economic inefficiency involved in curtailing consumers' ability to pledge their future earning power are of a lesser order of importance than the inequity and inefficiency of similar restrictions applied to productive enterprises. Consequently, it can be argued, control of the down-payment and maturity terms of consumer instalment credit offers the prospect of a significant contribution to economic stabilization at a relatively small cost in terms of inequity and inefficiency.

On the opposite side, it can be argued that the use of controls over the terms of instalment finance places an inequitably heavy burden on the members of the community who are dependent on the earning power of their labor, as contrasted with those who possess property on which they can borrow, or whose prospective earning power is sufficiently high and certain to enable them to borrow on their personal credit from a bank. It can also be argued that any substantive use of such powers of control will foster evasion either directly or through the development of techniques for renting the services of consumer durables rather than selling the goods themselves on credit; this has in fact been the American and English experience with controls on instalment finance. Finally, there is the possibility that the control of purchases of consumer durables through control of the terms of instalment credit will set up replacement or "echo" cycles in the purchase of such goods, which will aggravate the problems of the authorities concerned with economic stabilization in future.

According to accepted economic theory, the main source of fluctuation in economic activity is fluctuations in the volume of business investment, and one promising way of promoting economic stabilization is to stabilize the level of business investment. A possible approach to stabilizing business investment is to try to stabilize the amount of new borrowing for the purpose of business investment, by controlling access to the new capital market by the licensing of new capital issues, as was done in the United Kingdom for a long period.

Capital-issues control as a means of controlling new investment is however severely limited, especially in a country like Canada where firms have ready access to foreign capital markets. From a broad economic point of view, of course, the effect of control over access to the domestic capital market in inducing would-be borrowers to borrow abroad is not in itself objectionable, since restraint on new domestic capital issues would usually be introduced when the supply of domestic savings fell short of the demand for them, and foreign borrowing would tap foreign supplies of savings; still, the need to resort to foreign borrowing might unduly favor foreign control of Canadian enterprises. If, on the contrary, capital-issues control comprised both domestic and foreign flotations, it would raise problems both of interference with the activities of subsidiaries of foreign companies and of handicapping Canadian enterprises competing with foreign enterprises in the domestic and world markets. The main problem with capital-issues control, however, is that control of new capital issues is a remote and doubtfully effective way of controlling investment expenditure: the modern corporation can both finance itself by appropriations of current earnings, and plan its external financing to maximize its freedom with respect to the timing of its investment expenditures. It is probably safe to say that capital-issues control in the United Kingdom had little substantive influence on investment once physical controls over materials were abandoned, and that in fact it was never a major influence on investment, but only a device for ensuring orderly queuing of new issues in the capital market. More generally, capital-issues control is not a very promising device for control of investment, though it can be a useful financial adjunct of investment planning enforced by other means.

The third type of control over specific types of borrowing commonly recommended is control over borrowing for speculative purposes, especially stock-market and real-estate speculation. As previously argued, it is extremely difficult to establish that such speculative borrowing contributes to economic instability, since it involves the purchase of existing assets and not of currently produced goods. The most that can be argued is that the expenditure of speculative profits by

speculators who sell out to more optimistic speculators contributes to aggregate demand, and that a bull market for equities may cheapen the cost of new capital to corporate enterprises and stimulate new investment. How far the excessive optimism of the boom is fostered by increases in stock and real-estate prices caused by purchases financed on credit is an unresolved question; so is the question of how far it is possible to restrain increases in aggregate demand by impeding speculation through restricting the availability of credit to finance it. Anyone with assets can speculate without the assistance of loans from a bank or a broker, and anyone with personal credit can obtain funds that can in fact be used for speculation. There is therefore considerable doubt whether control of loans for stock or real-estate speculation can either prevent speculation or, even if it can do so, contribute much to economic stabilization.

The case is different with speculation in stocks of physical goods, and a somewhat better case could be made out for selective control of loans to finance the accumulation of inventories. Unfortunately, speculative inventory accumulation is difficult to distinguish from the increases in inventories necessary to efficient production at a higher level; and in any case inventories can be financed by other means than borrowing.

Concluding Observations

This paper has had two major purposes: to survey the alternative positions that may be taken with respect to the future conduct of monetary policy and the types of recommendations to which they lead, and to examine the possibility of increasing the power of monetary stabilization policy by the adoption of various types of selective credit control. Three alternative positions on future monetary policy have been distinguished: acceptance of a lower standard of performance, recommendation of changes designed to make monetary stabilization policy more effective, and recommendation of abandonment of short-run monetary stabilization policy in favor of creation of a stable monetary environment. In the author's own judgment, the third alternative has the most to commend it; however, if Canada remains on a fixed exchange rate the limitations on the freedom of domestic monetary policy which that entails probably will necessitate the adoption of the first alternative, or at best a mixture of the first and second alternatives. A variety of selective credit controls has been examined. Given the concentration of control in the Canadian financial system and economy, more intensive use of moral suasion might help stabilization policy, and the granting of powers to the central bank to control the more

liquid assets or loans ratio of the chartered banks might also be useful and defensible. The author, however, has a prejudice against extension of the central bank's authority in these directions, on the grounds that it involves increased dependence on the central bank's judgment of complex economic problems, and tends to support economic concentration and monopolistic practices in the financial sector and in the economy generally. Turning to controls over specific types of borrowing, a reasonably good case can be made out for empowering the central bank to fix the down-payment and repayment terms of consumer instalment-credit contracts. While an even better case could be made out for regularizing the flow of private-investment expenditure, it is extremely doubtful that capital-issues control could be used effectively for this purpose. Finally, it is in the author's judgment highly questionable whether controls on borrowing for stock-market and real-estate speculation could contribute anything significant to economic stabilization.

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