SWEDISH MONETARY POLICY IN THE POSTWAR PERIOD, 1945-1961

DISSERTATION

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By

Reuben G. Miller, B. A., M. A.

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Approved by

Clifford L. James
Adviser
Department of Economics
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CHAPTER I

INTRODUCTION: THE NATURE AND SIGNIFICANCE
OF POSTWAR MONETARY POLICY IN SWEDEN

Widespread interest in Swedish monetary theory and policy is not a recent phenomenon. During the decade prior to the Second World War in particular the counter-cyclical use of monetary policy in Sweden received considerable attention from economists outside of Scandinavia. The Stockholm School of monetary theorists, like their predecessors Wicksell, Cassel, and Davidson, acquired an international reputation for the highly advanced character of their work. It was the Stockholm School economists who during the 1930’s pioneered the methodology and a number of the concepts which serve as the foundation for much of the contemporary theoretical reasoning about monetary problems both in Sweden and abroad.

World War II with its consequent upheaval of international and domestic economic trends and conditions produced a radical change in the nature of the problems confronting Swedish policy-making authorities. After 1945 problems of prosperity and inflation replaced those of depression and unemployment that had dominated the interwar period. The essentially monetary nature of postwar economic problems and the fact that they were so sharply distinguished from those of the prewar period presented anew the opportunity and necessity for theoretical monetary analysis and experimentation with various monetary means of attaining the goals of economic policy.

- 1 -
The previous performance of Swedish economists and policy makers in the monetary field would seem to justify an intensive study of their response and attempted solutions to the problem of inflation, the post-war period's most serious economic problem, internationally as well as in Sweden. The pursuit of such a study in the present work will serve to bring up to date the investigation of Swedish monetary affairs that was begun by earlier writers.

The principal earlier works in English devoted entirely or in the greater part to the subject of Swedish monetary theory and policy and the phases of the subject that they cover are as follows:

E. T. Kjellström, Managed Money: The Experience of Sweden (New York: The Macmillan Company, 1934). This work places heavy emphasis on the foreign exchange policy that was pursued after World War I, giving special attention to it and the domestic monetary policy of the period 1929-1933.

Brinley Thomas, Monetary Policy and Crises: A Study of Swedish Experiences (London: George Routledge and Sons, Ltd., 1936). Thomas traces the development of monetary problems and policy as well as monetary theory through the period 1914-1935 with special emphasis on the depression and recovery in Sweden during 1933-1935 and on the early development of the Stockholm School's monetary theory.

Richard A. Lester, Monetary Experiments: Early American and Recent Scandinavian (Princeton: Princeton University Press, 1939). In the section of this study entitled "Recent Scandinavian Experiments," which comprises approximately half of the entire work, Lester treats the subjects of the gold exclusion policy in Sweden, 1910-1919, and the Swedish experiment with managed money, 1931-1939. The emphasis in Lester's study, as contrasted with that of Thomas, is less on monetary theory and more on the practical empirical aspects of the Swedish policy. Lester's study concludes with an analysis of the conditions that prevailed just before the outbreak of World War II.

Erik Lundberg, Konjunkturer och ekonomisk politik: Utveckling och debatt i Sverige sedan första världskriget (Stockholm: Konjunkturinstitutet och Studieförbund för näringsliv och samhälle, 1953). The English translation of this work, Business Cycles and Economic Policy, trans. J. Potter (Cambridge, Mass.: Harvard University Press, 1957), is a slightly revised and edited version of the original. Lundberg's work encompasses the entire subject of Swedish economic policy in recent times but devotes special attention to monetary policy in Chaps. VI and VII (English edition) in which he treats the subject of the ends.
I. SUBJECT OF THE INVESTIGATION

The term monetary policy may be used in a number of different ways. It is necessary, therefore, to define clearly the concept that will be used in the present study. The definition is especially important because, in addition to preventing confusion, it delimits the scope of the investigation and the nature of the data to be used.

It is more consistent with current Swedish practice and the intentions of our study to view monetary policy as a specific category of policy means rather than as a particular policy goal. Thus, the term monetary policy will be defined as that aspect of the government's economic policy involving central bank actions taken with the intention of influencing the operation of the economy through the quantity, cost, or availability of money and credit. When defined in this way the ultimate goal of monetary policy may be economic, political, or social in character and may be specified in terms of factors such as the general level of prices, the volume of housing construction, or the distribution of income.

Wellesley College

and means of monetary policy since 1945 (pp. 124-54) and the old and new aspects of postwar monetary policy (pp. 155-65). Lundberg's analysis is primarily concerned with a critical evaluation of the Swedish use of discretionary fiscal policy and direct regulation in the postwar period.

As Åkerman has pointed out, there does not exist at present a comprehensive treatment of Swedish monetary policy in the postwar period. Johan Åkerman, "Fyra metodologiska moment," Ekonomisk Tidskrift, June, 1961, p. 105.

Welinder claims that the Swedish discussion of monetary policy has often been confused by unclear terminology. Carsten Welinder, "Kreditpolitik och penningvärde," Balans, 1954:5, p. 204.
The main emphasis in the present study will be placed on the experimental aspects of the monetary policy pursued in Sweden since the end of World War II. Using our definition of monetary policy, this means that attention will be directed to those aspects of the ends and means of the Riksbank's policy that were a departure from previous practice and/or were based on conceptions of economic causation of relatively recent origin which had not been previously applied under conditions of inflation. The economic, political, and institutional factors causing and conditioning the Riksbank's experiments will be studied and an attempt will be made to evaluate the results of experiments.

A brief review of the main features of postwar economic conditions and the development of monetary policy will be presented below. This review will then serve as the basis for the formulation of the conceptual framework and the specific questions in terms of which the investigation will be organized.

The Swedish Economy in the Postwar Period, 1945-1960

The postwar Swedish economy may be described as one in which cyclical disturbances occurred at the margin of full employment.3 In the fifteen-year period, 1945-1960, the Swedish economy, in sharp contrast with the interwar period 1919-1939, maintained a high stable level of employment and a rapid rate of economic expansion. There were three periods—1948-49, 1952-53, and 1958-59—of moderation and/or contraction

in business activity during the postwar years. The recessions were relatively mild and did not show any tendency to develop into a cumulative contractive process of the type that had been experienced in Sweden during earlier periods. Although the rate tended to vary considerably, real output increased throughout the postwar period. Thus, changes in the general level of prices, not the volume of employment, tended to be the primary manifestation of economic instability.

The outstanding characteristic of the postwar Swedish economy is its high propensity to inflation. The economy demonstrated a chronic tendency to generate autonomous increases in the level of incomes and excessive monetary demand in the commodity and factor markets. This was heavily reinforced by developments in the international economy and resulted in a steady progression of open and suppressed inflationary disturbances and balance of payments problems. Inflation was the principal economic problem in 1946-48, 1950-52, 1955-58, and 1960.

The consumers' price index rose by 72 percent in the postwar period.

The postwar behavior of the Swedish economy was, of course, heavily influenced by the government's economic policy. As a result of wartime experiences and the emergence of the Social Democrat Party as the dominant group in the postwar Riksdag, there was a reorientation of Swedish economic policy. Both new goals and new means were introduced in the policy of the immediate postwar years. Full employment became the principal goal and highly discretionary fiscal policy and direct controls the dominant means of economic policy. For the first time in Sweden social welfare goals and extensive social reforms were
considered an integral and important part of the government's economic program. Taken as a whole the Swedish government’s postwar economic program constitutes an attempt to introduce a greater degree of central economic planning than had ever been previously practiced in Sweden. It has been estimated that approximately one half of all economic activity in Sweden during the postwar period was directly or indirectly under the control of the central government. 4

Postwar Monetary Policy

The postwar development of Swedish monetary policy can for the purpose of our study be divided into three phases, as follows.

The first phase, 1945-1950. The immediate postwar phase is characterized by the stable low interest rate and passive credit policy pursued by the Riksbank from 1945 through 1950. This policy involved the maintenance of a low stable structure of long-term interest rates by means of the central bank’s open market operations in support of the price of long-term government bonds.

The outstanding characteristic of the policy of this period is its essentially long-term nature. As a result of the way in which it was incorporated into the social policy and general economic planning program that was developed in Sweden during the final years of World War II, monetary policy was only indirectly concerned with the immediate short-run problem of inflation. The only deviations from the

4Lundberg, op. cit., p. 433.
passive counter-cyclical and long-term nature of the monetary policy pursued from 1945 to 1950 were the reduction of the Riksbank's discount rate in 1945, the appreciation of the foreign exchange rate in 1946, and the subsequent depreciation of the exchange rate in 1949. All other monetary actions were directed toward the maintenance of a three-percent yield on long-term government bonds.

The unusually high liquidity of the banking and private sectors of the Swedish economy at the end of World War II presented a serious monetary problem which the central bank policy of the period was not designed to handle. The Swedish economy was subject to severe inflationary pressures of both internal and external origin during the period 1945-50. The domestic symptoms of these pressures were effectively suppressed, the consumer price index rose by only nine percent from 1945 to 1950, but the balance of payments crisis of 1947 and subsequent chronic shortage of foreign exchange reserves raised the question of the adequacy of the monetary policy that was pursued.

It was during the period 1945-50 that the conflict between the goals of economic and social policy became one of the most serious problems in the making of economic policy and the maintenance of economic equilibrium. This problem tended to persist in one form or another throughout the postwar period. The conflict of aims was in part the result of the tendency, which had been growing for some time in Sweden, for the means of counter-cyclical policy to become highly differentiated and specific while those of social policy became more general in scope. In the area of monetary policy this problem appeared
in terms of the significance that was attached to the influence of the interest rate on the standard of living through its effect on the volume of housing construction and the level of housing rentals, rather than on its influence on the level of prices through its effect on aggregate demand.

It became apparent during the war and immediate postwar period that the political importance of the government's housing program and its heavy financial requirements tended to dictate a low stable interest rate policy independent of general economic conditions and the arguments advanced by economists concerning the effects of interest rate policy.

The second phase, 1950-1955. This phase of postwar monetary policy, which may be termed the Korean War phase, is distinguished by the attempt of the Riksbank to develop techniques of monetary policy that would permit control over the volume and distribution of liquidity and credit independent of the interest rates. The policy of this period can best be described as one of centrally planned credit rationing.

The aim of Riksbank actions in the second phase became much more explicitly the elimination of inflationary disturbances and the maintenance of economic equilibrium than had been the case in the immediate postwar years. However, inflation during the period was open and severe. The consumers' price index rose by 34 percent from 1950 to 1955.

Both the techniques of monetary policy and the way in which they
were employed during the period 1950-55 were a significant departure from previous Swedish practice. The failure of the authorities to achieve a restrictive fiscal policy due to political problems associated with any attempt to raise taxes placed an additional burden on monetary policy. The monetary policy of the period involved the introduction of a number of new specific regulations and a new combination of existing general controls as a part of the attempt to find the means of eliminating disturbances to the planned level of economic equilibrium and the desired rate of growth through the control of domestic private investment.

The government's social policy and especially the requirements of the housing program continued to exert a strong influence on the formulation of monetary policy. In practice the Riksbank had the dual immediate objectives of restricting the supply of money and credit in the money and capital markets while at the same time guaranteeing a steady flow of credit to these markets at fixed low interest rates for housing and other purposes with a high social priority. The government's demand for credit required to finance its social program and investment activity seriously restricted attempts to pursue a tight money policy.

Considerable difficulty was encountered in the attempt to fulfill the dual objectives of monetary policy. The chronic problem of housing finance that appeared during the second phase of postwar monetary policy became the characteristic monetary problem of the period 1950-60. This problem can be taken as evidence of the continuation of
the conflict between the goals of social and economic policy. A shortage of savings tended to hamper any attempt to maintain low interest rates without a rapid monetary expansion.

The third phase, 1955-1960. The year 1955 marks the beginning of the third and current phase in postwar development of monetary policy in Sweden. However, the sharp increase of one percent in the level of interest rates brought about by Riksbank policy in 1955, although it marks the first time in the postwar period that interest rate policy was used as a principal means of anti-inflationary policy, does no more than indicate the beginning of a fundamental revision in the Swedish approach to the problems of monetary policy. It was not until 1957 that a consistent new line of policy appeared that could be clearly distinguished from that of the 1950-55 period.

The essential characteristics of the new line of policy that was developed after 1955 involving the active anti-inflationary interest rate and credit policy resemble those of the orthodox monetary policy of the 1920's and early 1930's in Sweden. However, the theoretical reasoning, especially that relating to the interest rate, and the political and economic conditions that account for the new policy, bear little relation to those of the prewar period.

The active use of restrictive interest rate and credit policy after 1957 is an expression of the modification in the goals of economic policy and the revival of more general means of counter-cyclical policy. The political and economic problems that were encountered in
detailed fiscal intervention and direct regulation of the economy were important factors contributing to the revival of general controls.

The economic difficulties associated with highly detailed intervention in the operation of an economy containing significant free market elements is typified in the monetary field by the problems encountered during the years 1955-57 when an attempt was made to exercise a direct control over the level of commercial bank advances. This policy was a response to the difficulties that had been experienced as early as 1952 in connection with the application of a rigorous control of the volume and distribution of credit independent of interest rates. The direct regulation of commercial bank credit applied in the years 1955-57 marks the high point in the Riksbank's attempt to exercise direct control over the Swedish banking system. The techniques of monetary control employed since 1957 have been mainly of the general type.

As a result of the shift during the period 1955-60 from a stable low interest rate policy to one of flexible interest rates the Riksbank's policy became in effect one of high interest rates and credit restraint. Reflecting various inflationary pressures, the consumers' price index rose by 28 percent from 1955 to 1960 and there appeared a tendency for Swedish interest rates to become as inflexible downward as they had formerly been in an upward direction.

Swedish monetary policy began a new phase in its development in 1960 as a result of the breaking of the political impasse on tax legislation that had hampered fiscal policy throughout the decade of the 1950's.
The Significance of Postwar Monetary Policy in Sweden

When considered in broad general terms the monetary policy reviewed above is not unique. The postwar evolution of Swedish policy conforms quite closely to the pattern of developments in Western European nations and the United States. The outstanding development in the field of monetary policy in recent times, which was shared by all these nations, was the revival of the active counter-cyclical use of monetary policy that began in 1950 following its almost complete abandonment as a means of economic stabilization during the war and immediate postwar period. The basic element in the international revival of monetary policy was a renewed emphasis on flexible interest rates and the discontinuation of the cheap money policies that characterized the immediate postwar years.

The policy of stable low interest rates was pursued longer and more vigorously in Sweden than in other countries. Consequently, the renewed emphasis on monetary policy as a means of economic stabilization in Sweden initially took the form of an extensive series of experiments with the various means of controlling the volume and availability of money and credit independent of the level of interest rates.

5Concerning the extent of the Swedish action along these lines, Jacobsson says that "a cheap money policy was uncompromisingly pursued in Sweden, being reinforced by active support of the bond market through central bank intervention on a scale almost unmatched in any other country." Per Jacobsson, Some Monetary Problems: International and National (London: Oxford University Press, 1959), p. 37.
Similar techniques have from time to time been used in other countries, but as Thunholm points out,

... while in line with developments elsewhere, the experiments with new instruments of credit control seem to have been particularly lively in Sweden and to have gone to extremes which most other countries have avoided.6

It was only after this period of experimentation that Sweden—one of the last nations to do so—adopted the type of flexible interest rate and credit policy that is typical of current international practice. Thus, the significance of postwar monetary policy in Sweden can be said to be founded on the fact that it is an extreme rather than a unique case.

From the point of view of the American economist the postwar Swedish experience in the field of monetary policy is significant because it offers an opportunity to study the formulation and application of monetary policy under the influence of a different theoretical tradition in a political and institutional environment that permitted a greater range and number of experiments with the means of policy, especially quantitative and qualitative credit controls, than have been possible in the United States. Although a study of the Swedish experience with monetary policy may not yield policy proposals that are directly applicable in the United States, it can supply general information which is relevant to the discussion of contemporary monetary

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6 Lars-Erik Thunholm, "Recent Trends in Credit Policy" (lecture in the London University Institute of Bankers' series on "Money and Banking Policy," London, 1954), p. 3. (Mimeographed.)
issues in the United States. Some of the issues on which the Swedish experience has the most direct bearing are: the role of monetary versus fiscal and other economic policies, the standard of monetary management, the relative merit of selective versus general monetary controls, and the limitations of monetary policy. The Swedish experience is especially significant in view of the growing criticism of flexible interest rate policy and demands for a more selective control of credit independent of interest rates that has been voiced in the United States in recent years.

II. ORGANIZATION OF THE INVESTIGATION

The primary aim of our study of postwar monetary policy in Sweden is a critical evaluation of the efficiency of the policy that was pursued and the validity of the various conceptions of economic causation on which policy actions were founded. The principal means to be employed in the pursuit of this aim is a detailed historical-descriptive case study of the formulation and operation of the Swedish central bank's control of the quantity, cost, and availability of money and credit during the period 1945-60. The questions to be answered by our case study are: What instruments and processes of monetary control


were employed and what explanations were offered for their use? How
was monetary policy fitted into general economic policy? What was the
contribution of monetary policy to the stabilization of the economy?

The monetary goals of the Swedish government's economic policy
were not used as the basis for the definition of monetary policy to be
employed in the present study. This does not mean, however, that these
goals are to be ignored. On the contrary, a major objective of our
case study of Swedish monetary policy is the analysis of the function
of purely monetary factors such as the rate of interest and the quan-
tity of money in causing and controlling economic disturbances of an
inflationary nature. In other words, the main concern of the present
investigation is the discovery of the extent to which central bank
operations helped or hindered the Swedish government in its attempt to
solve the postwar problem of inflation.

Our brief survey of Swedish policy indicates that, although
there were some modifications and shifts in emphasis, the principal
and for the most part dominant goal of Riksbank actions in the period
1945-57 was the maintenance of stable low interest rates in all or part
of the money and capital markets. Lundberg and Senneby confirm this
judgment and point out that

The reluctance to utilize the traditional methods of mon-
etary policy in their endeavor to obtain economic equilib-
rium has been one of the most characteristic traits of the
economic policy that was pursued during the greater part of
the postwar period. The authorities have, above all, hesitated in the use of the interest rate as a regulator of economic activity in industry and commerce.9

The stabilization of interest rates was, of course, the immediate not the ultimate goal of the Riksbank's policy. However, it was the relative constancy of this immediate goal despite the shifts that occurred in the priority attached to the ultimate goals of the government's economic policy that gave rise to the Riksbank's experiments with various new means of credit control.

The stable low interest rate policy in Sweden was based on and can be considered a test of several relatively new propositions of monetary theory. One proposition—that the quantity of money is essentially passive in the operation of the economy—which served as the foundation for wartime and immediate postwar monetary policy stems from the criticism of the quantity theory of money by the members of the Stockholm School during the 1930's. A second general proposition that received extensive testing in postwar Swedish monetary policy was that interest rates, provided they remained stable, have negligible short-run effects on the level of demand and prices. The Wicksellian concept of a unique equilibrium or natural rate of interest was rejected and skepticism was expressed concerning the effectiveness of the rate of interest as a means of controlling private investment. Thus, it was claimed that given the other means of economic policy at

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the disposal of the government, the interest rate could be set at any desired level and that level made an equilibrium level without great difficulty because of the relative ineffectiveness of the rate of interest and the quantity of money. This reasoning permitted the rate of interest to be set with regard to the desired rate of housing construction rather than aggregate demand in general.

A second major innovational aspect of Swedish policy directly associated with the stable low interest rate doctrine of the postwar period is the series of experiments that were made with credit ceilings, priority interest rates, and other means of direct control of credit. These experiments were part of

... an attempt to achieve a sufficient measure of credit rationing without movements of interest rates and without affecting the supply of funds for certain purposes of high social priority.10

In order to concentrate on a critical analysis of the origin and result of the Swedish view of interest rates as an inefficient and inappropriate means of attaining the society's goals with respect to the value of money, the policy pursued prior to 1958 will be viewed as essentially an attempt to maintain stable low interest rates without incurring undesirable side effects. The main question raised by this policy is whether an efficient anti-inflationary economic policy can be pursued without the aid of the level of interest rates or changes in the level of interest rates. In attempting to answer this

question our study will aim at the discovery of the extent to which the policy of stable low interest rates either directly—through its effect on the ultimate target variables of Swedish economic policy—or indirectly—through the technical restraint it placed on the manner in which the other means of monetary control could be used—was a major factor in the failure of Swedish authorities to prevent serious post-war inflation. Thus, the problem of postwar monetary policy will be reduced in the present study, as it was in fact in Sweden, to the question of the relative merits of flexible versus stable interest rates.

It is possible in principle to apply the question of flexible versus stable interest rates to the postwar period as a whole. This approach would require a comparison of the actual conditions in 1960 with what they would have been had monetary policy consistently followed a different course after 1945. However, in view of the significant short-term changes that occurred in the Swedish economy during these years, such an approach does not seem very realistic or useful.

A more promising approach is to divide the postwar period into subperiods with regard to variations in cyclical developments, differences in general economic policy, and institutional changes. Within each of these subperiods the question can be raised as to how the economy would have developed as the result of an alternative monetary policy.

The principal subperiods in the postwar development of the Swedish economy are as follows:

The first discernible period is from the end of the war in 1945
to mid-1947. This is the immediate postwar reconstruction period. The period is characterized by suppressed inflation. In spite of very rapid increases in domestic and foreign demand, prices remained relatively stable until mid-1947.

The second period is from mid-1947 to the autumn of 1950. This period constitutes the postwar period's first recognizable wave of cyclical expansion and contraction, although the process was still very much under the influence of wartime developments. There was a sharp revision in the government's economic policy in 1947-48 in response to the heavy inflationary pressure and balance-of-payments problem that reached serious proportions in 1947. Prices continued to rise until late in 1948 when the combined effect of a moderation in external pressures and restrictive domestic policy resulted in a stabilization of prices that lasted until the second quarter of 1950.

The third period from the autumn of 1950 to the end of 1953 is readily identified as the cyclical disturbance associated with the Korean War. The expansion phase of this cycle, which was marked by a very rapid increase in prices, was from the second quarter of 1950 to the first quarter of 1952. The contraction phase of the cycle lasted from the end of 1951 through the greater part of 1953.

The fourth period, from the beginning of 1954 through 1957, is what might be called the first normal cyclical development in the postwar period in the sense that it was not heavily influenced by wartime conditions. Price increases became pronounced in the second half of 1954 after a rapid recovery from the post-Korean slump and continued
to the end of 1957 whereupon the economy entered into a calmer period of development. It was in this period that the most decisive postwar changes occurred in Swedish monetary policy.

The fifth period in the development of the postwar development of the Swedish economy began in the second half of 1957. Consumer prices remained stable from the second half of 1957 to the second half of 1960. Wholesale prices fell somewhat during this period under the influence of declining import prices. From the first quarter of 1958 there was a stagnation of business activity which produced the largest volume of unemployment recorded in the postwar period. The recovery that began late in 1959 was very rapid and by mid-1960 employment had again attained its 1957 level. After the mild slump in 1958-59 the Swedish economy expanded rapidly, but price levels rose only moderately.

The main body of the present study will be devoted to the investigation of the formulation and application of monetary policy and the details of the economic developments in each of the subperiods we have distinguished.

III. SUMMARY

As a result of a combination of political factors and the economic reasoning employed by the monetary authorities a policy of stable low interest rates was pursued longer and more diligently in Sweden than in other nations following the end of World War II. The adherence to an inflexible interest rate policy despite serious inflationary
disturbances led to a number of innovations in central banking techniques that have not been widely used in other countries. The purpose of the present study is a critical evaluation, in terms of flexible versus inflexible interest rate policy, of the contribution that post-war monetary policy made to Swedish efforts to combat inflation.
CHAPTER II

SWEDISH VIEWS ON THE ENDS AND MEANS
OF ECONOMIC POLICY

One of the most extensive investigations of monetary policy in recent times found that

Monetary policy is necessarily moulded by the world in which it takes shape. The scope for its exercise is not invariable, and the aim which it is intended to serve, the resolution with which it is applied, and the techniques that give it effect are all conditioned by the facts of the economic situation and the ideas of the times.¹

It is the intention of this chapter to identify the "ideas of the times" that influenced the postwar development of monetary policy in Sweden. The study carried on has the twofold purpose of specifying the conceptual framework within which the Swedish monetary authorities made policy decisions during the first phase (1945-50) in the postwar development of monetary policy and at the same time to indicate the nature and origin of the basic concepts and attitudes that have exerted an influence on the formulation and application of monetary policy from the end of the war to the present time.

Special attention will be given to a detailed investigation of the economic, political, and institutional factors associated with the


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emergence of a low stable interest rate doctrine in Sweden at the end of World War II.

I. THE POSTWAR POLICY AND PLANNING PROGRAM

The Swedish government's views on the principles of macro-economic policy were embodied in the postwar policy and planning program that was promulgated at the end of World War II. Many of the specific provisions were never actually put into practice. However, the program does give a clear expression of the basic views on the ends and means of economic policy that conditioned the Swedish government's response to the problems that were encountered in the postwar years.

Basic Premises of the Postwar Policy Program

The basic premises on which the government's policy program for the immediate postwar years was founded were: (1) that unemployment and depression would be the principal economic problems; (2) that postwar disturbances in the level of Swedish economic activity would follow the typical prewar pattern, i.e., they would be primarily external in origin; and (3) that the removal of the wartime blockade and consequent increase of foreign trade would result in a substantial improvement in Swedish productivity and create an opportunity for an increase in the value of money. The policy-making authorities were particularly confident in their forecast of a major postwar depression and as Jacobsson has indicated, "from 1945 onwards official policy in Sweden has been based more obstinately than in other countries on the belief that there
would be a rather severe postwar depression."² The possibility of a
transitory disturbance as a stage in the development of the projected
postwar trend toward depression was, however, not completely excluded.³

There was a strong belief in government circles that any postwar
inflation, if such occurred, would follow the general pattern of
1919-21, i.e., a sharp upward flurry quickly terminating in crisis and
unemployment. It is, however, indicative of the expectations generally
held concerning the behavior of the domestic price level that the ques-
tion of how far the price level could and/or should be reduced was a
major topic of discussion in Sweden during the final years of the war.
As will be shown below, the formulation of a price policy based on the
expectation of a decrease in the general price level was an important
factor influencing the formulation of the immediate postwar monetary
policy.

Policy Goals

The program of economic policy was formulated in terms of the
maintenance of general economic equilibrium and had as its aim full
employment of labor and productive resources, an increased standard of

²Per Jacobsson, "The Trend of Credit Policy," Skandinaviska
Banken, Quarterly Review, April, 1951, p. 30.

³The Commission for Postwar Economic Planning was explicit in
its mention of the possibility of inflationary problems during the
reconstruction phase of the postwar period. Utredningar och utlästan-
den från kommissionen för efterkrigspanering, Del VII, SOU 1944:57,
p. 103.
living through a rapid and stable rate of economic growth and expansion of the welfare services of the state, a stable value of money, and a stable equilibrium in the balance of payments.

The Swedish economy at the end of World War II remained vitally dependent on foreign trade which at the time was completely disorganized and the economy of a number of important customers shattered. In this situation, and fearful of the social and political upheaval which any return to prewar depressed conditions would entail, the government committed itself to the objective of a high stable level of employment and income. The superior position given to the goal of full employment was an innovation in Swedish policy making and it clearly distinguishes the postwar policy from that pursued during the interwar years.

The shift in the priority assigned to the various goals of economic policy was accompanied by a fundamental change in the government's conception of the task of its policy. During the interwar years the business cycle had been accepted as an inherent characteristic of the operation of the Swedish economy. Consequently, the government's policy was restricted to an attempt to dampen the amplitude of cyclical fluctuations. The full employment goal of the postwar program, on the other hand, was not assigned to any specific phase of the business cycle but rather it was part of a policy whose long-run goal was the complete elimination of cyclical disturbances. Karin Kock in her review of the attitudes and assumptions underlying the postwar policy and planning program says,
The problem of maintaining full employment is no longer viewed as simply a question of preventing a cyclical rise in unemployment. The government has adopted a more ambitious goal and committed itself to a long-term program designed to assure continuous full employment with a rising standard of living.4

It is characteristic of the approach taken at the end of World War II that in the "Financial Plan" submitted to the Riksdag in 1946 by the Commission for Postwar Economic Planning the government's income and revenue were calculated and planned over a relatively long period, i.e., five years, with respect to the length of the typical business cycle in Sweden.5 This was the first of four long-term plans—five-year plans—formulated in Sweden during the postwar period.6 In this long-term planning the private sector of the economy was considered residual in relation to the state whose plans were to be realized through the use of economic controls. Thus, an essential part of postwar policy was an attempt to plan directly and for a long period ahead, both the level of utilization and the allocation of the society's productive resources. During the postwar years there was a steady increase in the importance attached to plans for optimal utilization. This


5Proposition, 1946:222.

tended to make policy far more ambitious than earlier Swedish programs in terms of government intervention.

**Housing Policy**

The social policy, welfare goals, and projected economic reforms, particularly the income redistribution policy, advocated by the Social Democrat government, had an important influence on the way in which full employment and economic stabilization policy of the immediate post-war years was formulated. The Commission for Postwar Economic Planning, for example, says concerning its work,

> The recommendations the Commission has presented have in the first place meant a coordination of business cycle and employment policy intervention, on the one hand, and social and population policy measures, on the other.7

Increased national old age pensions, compulsory sickness insurance, compulsory unemployment insurance, financial support for large families, and an extended general housing program were the five main pillars of the new social security program. The postwar housing program, which decisively influenced the formulation of monetary policy, is an important example of the way in which Swedish policy makers integrated social and economic policy.

The postwar housing program called for the stabilization of housing construction at a relatively high level independent of cyclical fluctuations in the economy. The program was drawn up with the dual

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7 *Utredningar angående ekonomisk efterkrigsplanering*, Del VIII, Framställningar och utlåtanden från kommissionen för ekonomisk efterkrigsplanering, SOU 1945:11, p. 23.
objective of improving the housing standards and preventing a production crisis in the construction industry which would have serious consequences for employment. The housing program also took into account the aims of population policy, i.e., one of the aims of the housing policy was to promote better conditions for the creation and enlargement of families as a means of solving the Swedish demographic problem of a low net reproduction rate.

The postwar extension of the wartime rent control authority and the continued stabilization of rents at or near their 1939 level was aimed at keeping rental charges a constant or falling percentage of the average industrial wage. The success of the rent control policy was considered fundamental to the government's aim of redistributing real income. Strict adherence to the rent control program was a factor which seriously restricted the use of interest rates as a means of anti-inflationary policy. In later phases of postwar developments the maintenance of artificially low rental rates was a major factor in maintaining a high level of demand and thereby prolonging the severe shortage of housing that had existed at the end of the war.

The basic premise of the government's postwar housing policy of loans, interest rate guaranties, subsidies, rent control, and building permits was that, despite the serious shortage in the short run resulting from retarded construction during the war and an upsurge in the rate of urban migration, housing construction in the long run would be

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8 *Bostadssociala utredningens slutbetänkande*, SOU 1945:63.
faced with a falling demand. An overexpansion of the industry was considered a serious potential problem. Thus, although housing construction is of particular importance in determining the level of aggregate investment, it was not proposed that the volume of housing construction be used to offset cyclical fluctuations in the level of economic activity. Rather it was thought that the stabilization of this area of economic activity would be a significant contribution to the stabilization of the entire economy and the goals of social policy which were of great political significance. Housing construction, although not controlled through the government budget, came to be considered a part of the investment activity of the public sector of the economy.

Rural housing, which was assigned a lower social priority, was exempted from the construction stabilization policy. The level of rural and industrial construction was to be varied in a countercyclical manner. The success of the government's housing policy, especially during an inflation, was thus made in part dependent upon the authorities' ability to control rural housing and industrial construction without disturbing urban housing construction. The traditional general means of monetary policy such as the central bank's discount rate, although somewhat selective in effect, are not well suited to this particular type of selective control of investment.

**Price Policy**

While the goal of full employment was dominant, the Swedish government's aim with respect to the value of money retained an important place in the formulation of the postwar policy and planning
program. The price policy of the immediate postwar period was, however, significantly different from that previously pursued in Sweden during peace time. The price policy and the theoretical reasoning on which it was based bear a particularly heavy share of the responsibility for the postwar break in the traditional relation between central bank policy—especially interest rate policy—and the government's goal with respect to the value of money. Even though the goal of price policy that was adopted in 1944 was officially abandoned in 1947, the theoretical conceptions on which it was founded continued to exert an important influence.

During the years 1940-45 it was thought that, if economic stability was to be attained and distributive justice maintained under wartime scarcity conditions, price level variations inversely proportional to changes in productivity and the supply of goods rather than a stable price level should be the aim of price policy. Prices were permitted to rise sufficiently to compensate for the decreased real supply caused by the drastic reduction in foreign trade that resulted from the naval blockade of the North Sea by the belligerent powers. The level of money incomes were to remain unchanged and a build up of surplus purchasing power in the private sectors of the economy prevented. Thus the price level itself became a means rather than an end of the policy of economic stabilization during the war years.

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9 For a discussion of the theory underlying the price policy of the period, see Dag Hammarskjöld, "Den svenska diskussionen om penningpolitikens mål," Studier i ekonomi och historia tillägnade Eli F. Heckscher (Uppsala, 1944), p. 48.
One of the principal problems encountered in the pursuit of wartime price policy was that of developing the means by which the volume of purchasing power and income could be held constant. It was this same type of problem that confronted Swedish policy makers again in the immediate postwar period and the wartime experience had an important influence on the decisions that were made in the later period. During the war years foreign exchange controls and other regulatory measures such as the rationing of consumers goods, allocation of industrial raw materials, new and increased taxation, including a special defense tax on business and a general sales tax, price controls, and a general wage freeze were the principal means used in the pursuit of the goals of wartime price and income policies.

A logical extension of the norm of price policy applied during the war years would imply that the aim of postwar price policy should be a return to the prewar price level. Although the exact extent was a matter of controversy, it was generally thought that wartime policy actions had not been entirely successful in limiting price increases to just those justified on the basis of decreases in productivity and the supply of goods. A fifty percent increase in wholesale and consumers' prices (1939-42), although brought under control after 1942 until the end of the war, was exceptionally severe considering Sweden had not been actively engaged in the war. The wartime increase in

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10 Lindahl estimates that approximately one half of the increase of consumers goods prices during the war was due to the increased scarcity of goods, the rest resulted from increased incomes and
Swedish prices was sharper than in Germany and the United States and about the same as in Great Britain. It was feared that any attempt to eliminate price increases generated by wartime increases in the level of incomes would lead to serious unemployment. Therefore, although it was generally agreed that the expected increase of productivity and the supply of goods should result, at least in the short run, in falling prices rather than rising nominal incomes, Swedish economists and policy makers were very cautious in their formulation of the policy to be pursued.

The official postwar price and monetary policy was announced by the Finance Minister in 1944. The five-point program can be summarized as follows:

1. Stabilization of the value of money within the limits created by fluctuations in the supply of goods. The improvements in the supply of goods in the postwar period should give a corresponding improvement in the value of money.

2. Nominal incomes should be held constant.

3. Price decreases which threaten to lead to unemployment should be avoided, but at the same time it should be borne in mind that as full as possible a return to the prewar price level is desired.

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4. Stabilization of the foreign exchange rate even if the internal goals of monetary policy must thereby be neglected.

5. A continuation of the present stabilization of the level of interest rates.\textsuperscript{11}

The main assumptions on which this policy was founded were:

(1) the belief that the krona had a very strong position internationally;

(2) that industry's plans to rationalize and expand would raise productivity and production rapidly; and (3) the belief that a more or less permanent surplus of liquidity would give the financial resources necessary to realize long-term goals with respect to international lending and domestic social policy.

As is apparent from the official statement, postwar price policy in Sweden was very complex. The concept of a stable value of money was modified in such a way that there was no longer a fixed price level objective that could serve as the guide for the central bank's management of the volume of money and credit. Because of the dominant position given to the goal of full employment, the objective of price policy became a price level development that would be consistent with the maintenance of a constant level of nominal income and full employment.

With respect to the means of postwar price policy, the main question raised was that of how the required stabilization of the level of money wages and profits would be accomplished. It is

\textsuperscript{11}Proposition, 1944:252, p. 19.
noteworthy in the light of later developments that due to the widely accepted forecast of a serious postwar depression, greater attention was given to the means of preventing a decline in the level of money incomes than to preventing an increase. In general, central bank operations were not thought capable of making any direct contribution to postwar price policy.

Means of Economic Policy

Evidence of a fundamental shift in Swedish thinking about economic policy after World War II can be found in the selection of means to be used in postwar policy. Gårdlund claims that:

An outstanding characteristic of Swedish economic policy in the postwar period is that the methods for a state managed economy that were first formulated in the 1930's in the course of a lively theoretical debate and in the face of a strong political opposition have come to be considered insufficient and unusable in the 1940's.\(^{12}\)

The provision of the means of carrying out its highly ambitious policy within the framework of a democratic society with strong liberal traditions and institutions was one of the most difficult politico-economic problems confronting the Swedish government in the postwar period.

The principal manifestation of the change in Swedish thinking about the means of economic policy was in the postwar tendency for the means of counter-cyclical policy to become highly differentiated and

\(^{12}\) Torsten Gårdlund, Problem under överkonjunktur (Stockholm: Svenska Ekonomföreningen, 1948), pp. 34-35.
specific while at the same time the economic means associated with the government's social policy became more general in scope and incidence. Thus, in the immediate postwar period Swedish policy makers tended to treat the broad general means of monetary policy and quantitative fiscal policy primarily as means of securing long-term social goals and economic growth. In the case of the central bank's interest rate policy, for example, greater significance was attached to its influence on population problems and the level of living through its effect on rents and housing construction than on its effect on aggregate demand and prices.

The need for highly flexible and specific means of economic control was enhanced by the nature of the full employment policy to be pursued in the postwar period. A continuous effort to maintain full employment even in periods of good business conditions was an important part of the "positive business cycle policy" that was proposed by Swedish planners. It was realized that an active expansionist policy would involve a serious potential threat to the stability of the value of money and equilibrium in the balance of payments if it were based solely on the type of general measures of monetary and fiscal policy that had been employed in the 1930's. The Commission for

13 For an excellent statement of the Swedish thinking concerning the relation between social and economic policy, see Carsten Welinder, Socialpolitikens ekonomiska verkningar, SOU 1945:14.

14 Utredningar angående ekonomisk efterkrigsplanering, Del VII, SOU 1944:57, p. 83.
Postwar Economic Planning suggested, however, that by employing such means as a national advisory council on investment, special export industry inventory production plans, public control of construction activity, and subsidization of certain consumers goods, action could be taken against cyclical unemployment as well as the structural unemployment, which had been an important problem during the interwar period, without the risk of stimulating inflation.

The Swedish position with respect to a planned economy is rather ambiguous. The success of the wartime control system in maintaining full employment throughout the serious economic disturbances of the period was impressive. There was general agreement in Sweden, however, that the direct government administration of the economy as practiced during the war years was justifiable only under extreme emergency conditions. Thus, the greater part of the wartime control system was only to be retained during the transition to more normal peacetime conditions. But as the party in power pointed out, this was not to mean a return to prewar conditions.15 In calling for a greater degree of economic planning, the policy makers apparently had in mind an acceptable peacetime equivalent to the wartime control system. Landgren claims,

It would be inaccurate to characterize this program as "socialistic" or savoring of the "planned economy." The neutral term interventionist is probably better suited to indicate its general approach.\(^{16}\)

The concept of economic planning employed by the postwar Social Democrat Government in Sweden is closely related to that employed by the British Labour Party, who had a similar nondoctrinaire socialist outlook. Swedish policy makers did not use the Soviet Union as a model for their idea of a planned economy, but they failed to blueprint their intentions clearly.\(^{17}\)

II. THE EMERGENCE OF A STABLE LOW INTEREST RATE DOCTRINE IN SWEDEN, 1945

The specification of politically acceptable and theoretically consistent aims and means of monetary policy within the context of the Swedish government's projected postwar policy and planning program was a formidable task. The principles and practices employed by the Riksbank during the interwar years were clearly no longer applicable. The significant changes that occurred during the war years in Swedish thinking about economic policy, the shift in the nature and priority


of the various goals of policy, and the generally more ambitious conception of economic and social policy that was to be pursued in the postwar period implied that a major revision of Riksbank policy was necessary.

Major Factors Influencing the Formulation of Postwar Monetary Policy

Before considering the policy recommendations put forward by the various policy-making authorities and the way that they were combined in the official statement of the basic principles of postwar monetary policy, the major political and economic factors influencing the policy making process will be reviewed. Special attention will be given to Swedish monetary theory.

Political and ideological factors. The practical questions of the nature of central bank policy unlike the rather vaguely formulated general goals of economic policy gave an opportunity for a clear expression of differing views concerning the course to be followed by the Swedish government's economic policy in the postwar period. Swedish socialism is of a moderate variety and both the Liberals and the Conservatives are in general agreement with the Socialists on the question of major social and economic reforms. Thus in the planning of postwar policy and in the course of the postwar political debates the broad issues of social welfare policy were not hotly contested and instead the detailed questions of the means of policy, especially those of monetary policy, became the focal point for political and
ideological differences. The Riksbank's interest rate policy became a key issue in this controversy.

There was a tendency in Sweden at the end of World War II to identify an active central bank interest rate policy with the use of unemployment as a means of controlling the economy. The independence of the central bank, which was a traditional prerequisite for an active monetary policy directed toward the stabilization of the value of money, was considered inconsistent with the steps to be taken in the postwar period to establish the degree of central economic planning necessary for the pursuit of a more ambitious economic policy. These points of view were combined in the demand for the maintenance of a stable low interest rate.

On the other hand, an independent Riksbank with full freedom to pursue the goal of a stable price level, chiefly by means of interest rate policy, was considered by some groups to be the only approach consistent with the preservation of a liberal free enterprise economy.

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18. A number of Swedish writers have pointed out the sharp political and ideological differences that underlie the harmony and willingness to cooperate that is the chief characteristic of Swedish political life that is readily apparent to foreign observers. See, for example, N. Andren, "Parliament and Parliamentary Government in Sweden" (Stockholm: University of Stockholm, 1955), pp. 30-32. (Mimeographed.)


20. Welinder points out that "... interest rate policy appeared as the nearest to hand alternative to the government's policy. Through setting it as the alternative to regulation it became the symbol for a
The position taken was that the goals of economic policy should be formulated with regard to the general working means of policy. Thus a stable low interest rate policy became identified with a socialist planned economy and flexible interest rates with a liberal economic position.

These basic ideological positions were reflected in the special postwar policy statements of the major political parties. In the statement of the Social Democrat Party, the party in power, full employment was considered the supreme goal of postwar economic policy and heavy emphasis was placed on the establishment of a planned economy as the best means of attaining this goal. Concerning the place of monetary policy in this program it was stated that "... in order to stimulate business activity the interest rate should be held as low as possible."21 In their explanation of this position the authors of this program, who included Gunnar Myrdal among others, said,

... low interest rates are considered favorable to full employment and even in the case of a tendency toward scarcity in the capital market a general increase of interest rates is not justified because of its altogether too gross and undifferentiated effect on business activity. One should seek to control investment in other ways.22

To facilitate the desired control of investment the Social Democrat
program called for the socialization of all insurance activity and the development of extensive commercial banking activity by the state.

The monetary policy and the housing program of the Social Democrats went hand in hand; as long as the government aimed at a large housing program, it felt committed to a low interest rate policy.

In order to restrict the cost of subsidies and encourage a further rise in living standards, building and estate administration costs must be reduced. This means, inter alia, a low bank rate within the framework of the present policy, and the coordination and unification of present forms of state building loans and subsidies.23

The fact that the party in power identified a stable low interest rate with its ideological predilection for a planned economy and considered it a necessary condition for the attainment of its supreme goal of full employment tended to make it dogmatic on this issue. The opposition, especially in the early postwar years, was not very strong. Wigforss claims that even as late as 1947 Ohlin was still opposed to any increase of interest rates as a means of combating inflation. As the leader of the Liberal Party Ohlin was the leading figure in the opposition, and the Conservative Party, in order to maintain unity in the opposition, could not make a strong issue out of the interest rate policy until after their increase of strength in the election of 1948.24 However, it was not until after the major

23 Ibid., p. 87.
political realignment in the Riksdag during the period 1950-52 that political opposition to stable low interest rates became really powerful.

Economic factors. The theoretical issues involved in the controversy over the principles to be applied in postwar monetary policy were very complex since they involved basic questions of macroeconomics. The question of stable versus flexible interest rates is essentially that of the role of money in causing and controlling economic disturbances. Additional complications arose from the fact that the discussion of these theoretical issues was not separated from questions and problems of practical policy. Consequently, strong ideological bias can often be found in the selection made by different Swedish economists of the politico-institutional framework within which they formulated their theory of the function of money in the economy.

Lundberg has pointed out that there was a very close agreement among Swedish economists during the 1930's, but that,

The new economic problems of the postwar period in fact gave rise to much greater divergence of opinion among economists . . . This was, of course, in part due to the fact that after the war economists came to be more deeply involved in politics.25

Two major lines of thought developed in the course of the Swedish discussions of the role and effectiveness of monetary policy as a

means of economic stabilization.\textsuperscript{26} The conflict between these schools of thought was an abiding feature throughout the postwar period of the discussion by Swedish economists and policy makers of the problems of economic policy and stabilization under conditions of inflation.

The first line of argument, the one that dominated in the immediate postwar period, was based on the contention that fiscal policy, supported if necessary by direct controls, could and should be used as the principal means of attaining economic stability.\textsuperscript{27} It was this school of thought that, with the support of the monetary theory developed by the Stockholm School in the 1930's and the experience of the wartime period, produced the positive arguments against the active use of the central bank's credit and interest rate policy as a means of short-term economic stabilization.\textsuperscript{28} The emphasis in these arguments was generally placed on both the general ineffectiveness of the interest rate as a means of controlling the price level and the undesirable

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\textsuperscript{26}Landgren, \textit{op. cit.}, pp. 88-89.
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side effects of interest rate changes on factors other than the value of money.

The main argument of the second school of thought, which did not have much influence on policy formulation until the second and third phases in the postwar development of Swedish monetary policy, was that an active central bank policy is a necessary and important part of the government's stabilization policy if insoluble practical problems and serious distortions of the economic system are to be avoided. This second line of thought had two important subdivisions.

The division in the second school of thought developed after 1947 in the course of the discussion of the problems created by the policy of stable low interest rates being pursued by the Riksbank. One group of economists recommended an essentially traditional restrictive policy involving general quantitative controls and flexible interest rates as the principal means of combating inflation. It was this group that was responsible for the development in Sweden of a...


30 Lindahl, Dahmén, and Thunholm are the important members of this group. Erik Lindahl, Spelet om penningvärdet (Stockholm: Kooperativa Förbundets Förlag, 1957); Erik Dahmén, "Banklikviditet och kreditmarknad," Ekonomisk Tidsskrift, September, 1952, pp. 129-46; and Lars-Erik Thunholm, "Penningpolitiken som investeringsregulator," Betänkande angående generella metoder och fysiska kontroller inom investeringspolitiken, SOU 1953:6, Bilaga B.
theory of monetary policy similar to the so-called "availability doctrine" that appeared in the United States in the early 1950's.

The other subgroup of the school of thought that advocated an active central bank policy as a means of controlling inflation stressed the importance of credit rationing. Given sufficient new controls of the money and capital markets, it was argued, credit rationing by the monetary authorities could occur independent of the level of interest rates. It was an early version of this type of reasoning that underlay the voluntary agreement on credit restraint that was concluded between the Riksbank and the commercial banks in 1947. The theory was more extensively tested by the policy of credit restraint without general movements of the interest rate that was pursued between 1950 and 1957.

In the present chapter we will primarily be concerned with the position of the first school of thought as expressed in the works of Ohlin and Myrdal and the influence their views had on the formulation of the central bank policy to be pursued in the postwar period.

31This line of reasoning was developed and defended by Hall and Westerlind. David Hall, "Riksbankens roll i den svenska penningpolitiken," Vårt ekonomiska läge. 1948 (Stockholm: Sparfrämjandets Förlag, 1948), pp. 104-14; Erik Westerlind, "Femårsplanens perspektiv, problematiken kring det nya långtidsprogrammets rekommendationen beträffande investeringar," Balans. 1951:4, pp. 168-78.

32For an excellent detailed study of the part played by the Stockholm School economists in the formulation and application of wartime economic policy in Sweden, see Gunnar Arnell, "Stockholmskolans lågräntedoktrin och statsmakterna 1941-45," (Ms 27.11.1957, National-ekonomiska institutionen vid Uppsala Universitet, UNI, 15/57). (Mimeographed.)
Bertil Ohlin is perhaps more than any other single writer responsible for the theoretical reasoning underlying the monetary policy of the immediate postwar period. Ohlin's construction of the theory of interest rate determination and conception of the appropriate postwar interest rate tend to make the equilibrium interest rate a dependent and controllable factor. The central bank through its credit policy can, in Ohlin's view, set the interest rate anywhere within wide limits. The appropriate interest rate depends upon general economic conditions, particularly the expectations governing the willingness to invest and propensity to save, and the general economic policy that is being pursued. Since the general economic policy can modify economic conditions independent of monetary policy, the appropriate interest rate, according to Ohlin, ultimately depends on the policy-making authorities and their decisions concerning the aims of economic policy and the means to be employed in attaining them. Thus, the equilibrium interest rate, as Ohlin conceived it, is basically a political price and not a market price.33

Inflation in Ohlin's view is not essentially monetary in origin. He considers the public's holdings of the means of payment as essentially passive with respect to decisions to spend and denies any direct causal relation between the quantity of money and the price level.34

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33Bertil Ohlin, Kapitalmarknad och räntepolitik (Stockholm: Kooperativa Förbundets Bokförlag, 1941), pp. 89-91.

34Ibid., p. 163; see also pp. 75-76 and 163-66.
Ohlin finds the principal causes of a general price rise to lie in the fields of income determination, the propensity to save, and the determination of profits, so that consequently,

In the struggle against inflation it is obviously important (a) to control income formation, (b) to maintain the desire to save, and (c) to limit investment intentions or investment opportunities and thus investment, including government expenditures. Older monetary theory, because of its one-sided concentration on the capital market, came to overlook controls over income formation. This is probably the main reason why the older economists belittle the importance of price controls, despite their obvious consequences for income formation and "purchasing power".\(^{35}\)

In abandoning the Wicksellian concept of a "normal" interest rate Ohlin shifted the analysis of monetary equilibrium from the capital market to the economic system as a whole. His position was that Swedish economists in their discussion of inflation had concentrated too heavily on the capital market and

... have striven to see a reflection of changes in aggregate categories in the capital market and like Wicksell put the relation between savings and investment in a key position.\(^{36}\)

According to Ohlin it would be better to formulate the analysis in terms of aggregate supply and demand so that income and profit expectations and the spending they generate could be directly investigated.

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\(^{36}\)Bertil Ohlin, Methodfrågor inom dynamiska teorien," *Ekonomisk Tidskrift*, December, 1941, p. 335.
This approach, he claims, would avoid

... the mistake made in recent decades of assigning to
the height of the interest rate a decisive importance for
the control of general variations of prices and production.37

Ohlin developed the practical implications of his theoretical
reasoning in the course of his study of expected postwar economic prob-
lems.38 Ohlin advocated a continuation of the wartime policy of stabil-
izing the interest rate at its 1941 level, i.e., 3.5 percent, and
attacked the proposition that an expected postwar shortage of capital
would "naturally" cause higher interest rates. This could, he argued,
be easily prevented. Ohlin did not find any inflationary threat associ-
ated with the continued maintenance of the low interest rates and
the high level of liquidity built up during the war years. His reason-
ing here seems to have been heavily influenced by the Swedish experience
with monetary policy during the 1930's and the implicit assumption that
the wartime system of controls would remain intact or be reactivated in
the event of an inflation. Even if an inflation were to develop, Ohlin
claimed, "... it is not certain that high interest rates constitute
a rational means of combating this problem,"39 since their main effect
would only be to "... reduce housing construction to a fraction of
the amount made possible by the supply of labor and raw materials."40

37 Ibid., p. 336.
38 Bertil Ohlin, "Ekonomiska efterkrigsproblem," Studier i
svenskt näringsliv, Tillägnade Jacob Wallenberg (Stockholm: 1942).
39 Ibid., p. 283.
40 Ibid.
Thus Ohlin confidently concludes that in the postwar period "... interest rate policy will play a less central role in stabilization policy than it had formerly in theory and to a certain degree in practice."^41

Myrdal's work on the question of postwar economic policy complemented that of Ohlin. Myrdal attempted to show how and why fiscal policy and direct controls could and should be used as the principal means of a postwar economy in which the proper monetary policy would be one of low stable interest rates. The central theme of Myrdal's paper, *High Taxes and Low Interest Rates,* was that

... taxation, if it is purposely formulated, offers the possibility of a much smoother and discriminatory control of investment that ever could be attained by means of the interest rate. Thus control through taxation could be built up in such a way that it functions as a very effective means of business cycle policy while at the same time it gives under all circumstances the possibility of giving investment the direction locally, nationally, and socially which appears to be politically desirable.^42

It is hardly surprising to find a close relation between Myrdal's work and the view adopted by the government when one considers the fact that he was a member of the Riksdag and its Banking Committee, Chairman of the Royal Commission on Postwar Economic Planning, and a principal adviser in the writing of the Social Democrat Party's economic program.

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Myrdal explicitly favored a stable low interest rate and claimed that during the postwar period the rate should "... lie on a level corresponding to an effective yield on Government bonds of somewhat under rather than over three percent."\(^3\) Myrdal found no theoretical reason why the rate could not be reduced to two or even one percent if the tax means of control were properly developed. High taxes on corporate businesses would tend to limit their investment activity, while investment in housing, agriculture, and the government's business activity would be favored by the low interest rate. The interest rate, thus, would become a means of influencing the allocation of investment rather than its volume. Since the areas favored by low interest rates are those of high social priority, the goal of monetary policy can be thought of as essentially that of social policy.

Myrdal's view of interest rate policy is, as Suviranta indicates, a theory of monetary policy in a centrally managed economy and the expected effects of the policy rest on extremely hypothetical assumptions concerning the operation of the other means of policy.\(^4\) Myrdal, like Ohlin, assumed that the intensive control of production, consumption, and prices, built up during the war years, even if somewhat modified, be carried over into the postwar era. Akerman, who did not share Myrdal's optimism as to the usefulness of taxes as a means of

\(^3\)Ibid., p. 168.

business cycle policy, claimed that given the use of interest rate policy advocated by Myrdal, there were left only two strategic factors by which cyclical fluctuations could be controlled: centrally regulated wages and investment.45 Neither Ohlin nor Myrdal gave any detailed statement of how these forms of regulation would operate and were apparently unaware of the severe political problems that their attempted use would entail.

The Formulation of Postwar Monetary Policy

The question of postwar price and central bank policy dominated the attention of the Swedish monetary authorities during the last years of the war. The fact that the discussion of postwar policy began as early as 1943 indicates that the wartime experience with stable low interest rates and the theoretical propositions on which it was based had an opportunity to exert a strong influence on postwar plans.

During the war years the Swedish conception of the level of interest rates was transformed from that of an essentially automatic general working means of economic policy directed toward the maintenance of a stable value of money into that of a discretionary highly selective instrument of policy whose principal task was to maintain full employment in certain sectors of the economy and assist in the attainment of certain welfare goals.

The Swedish authorities rejected the essentially passive orthodox interest rate policy pursued by the Riksbank in 1939-40 when the interest rate was permitted to rise sharply in response to the liquidity crisis that accompanied the outbreak of the war. Criticism of the policy of this period was based on the contention that the interest rate is properly the result of the policy actions of the Riksbank and the National Debt Office and not the interaction of the supply and demand for loanable funds, i.e., that the interest rate is a fully controllable parameter of government policy. For a discussion of financial developments in Sweden during the war years, see Karin Kock, Kreditmarknad och räntepolitik, 1924-1958 (Stockholm: Almqvist & Wicksell, 1962), Chaps. XI-XIV, Part II.

It was the volume of employment and the level of housing construction rather than the development of aggregate supply and demand and the price level that determined the monetary authorities' conception of what was an appropriate rate of interest during the war years. The quantity of money was not attributed any real causal significance and monetary policy was not assigned any important role in wartime anti-inflationary policy. Due to the context of controls in which it operated and the absence of external disturbances, wartime monetary policy was successful. Although the public's money supply increased very rapidly and interest rates remained at a low stable level, prices were stable from 1942 to 1945.
The Swedish monetary authorities. Before examining the various proposals and recommendations that were involved in formulating the principles of postwar monetary policy, it is necessary to briefly review the structure of the policy-making authority in Sweden. This structure has itself exerted a certain influence on the nature of the policy that was pursued in the postwar period.\(^4\)

In a formal legal sense monetary policy is the responsibility of the Riksbank which is an agency of the legislative branch of the Swedish government, i.e., the Riksdag, and only accountable to that body as a whole. In practice, however, the executive branch of the government can, if it is based on a majority in the Riksdag, exert a strong influence on the policy of the Riksbank. During the postwar period the political situation, the policy concepts, and the working arrangements were such that the Riksbank's traditional freedom of action in selecting the immediate monetary ends and means to be used in the attainment of the broad goals of economic policy laid down by the Riksdag was greatly restricted and even the detailed day-to-day operations of the bank were subject to considerable political control.\(^5\)


\(^{48}\) Thunholm contends that there has been a long-term trend in Sweden "... for the real influence on the policy of the Riksbank to be placed to an increasing degree in the hands of the government as Riksbank policy has become more firmly integrated into general economic policy." Lars-Erik Thunholm, Svenskt kreditväsen (Stockholm:
Under these circumstances the statements of the Finance Minister, who
is the cabinet's spokesman in questions of economic policy, are an
important expression of the official view of the ends and means of mon-
etary policy.

The Banking Committee (Bankoutskottet), which is a standing
committee of the Riksdag, is also an important agency in the formulat-
ion of Swedish monetary policy. The Committee is charged with the
task of reviewing the operation of the Riksbank and originating legis-
lation in the monetary field. It submits periodic communications on
monetary developments and an annual report on questions of monetary
policy to the Riksdag. Generally, it is in the debate and vote on the
Banking Committee reports that the Riksdag registers its opinions con-
cerning the past and future pursuit of monetary policy.

The day-to-day administration of the Riksbank and the practical
application of monetary policy is the responsibility of the executives
and directors of the Riksbank who together make up the Board of the
Riksbank (bankofullmäktige). The Chairman of the Board, who is the
only member appointed by the cabinet, all others being appointed by
the Riksdag, and the President of the bank are the leading figures in
the Board's decisions concerning central bank actions. In addition to

Kooperative Förbundets Förlag, 1952), p. 20. The position of the
Riksbank vis-à-vis the government received considerable attention
during the postwar period. See, for example, "Riksbanks ställning
och uppgifter, Diskussionen vid 1957 års bankmöte med inledningsan-
förande av Prof. Erik Lindahl," Svenska Bankföreningens skrift, No.
87, 1957.
the practical questions of the application of monetary policy the Board of the Riksbank may exert a strong influence on general principles of the government's economic policy. In several of the postwar years the Board was a leading source of suggestions and recommendations for government policy action.

It is the practice in Sweden for the Riksdag from time to time to appoint Royal Investigating Commissions to study certain policy issues and suggest legislation concerning important economic problems. The reports of the Royal Investigating Commissions (Statens offentliga utredningar--SOU) are a major source of information concerning the reasoning underlying Swedish monetary policy. The Riksbank also from time to time appoints Committees of Experts to study and suggest solutions to monetary problems. Swedish economists, as a general rule, make up a substantial proportion of the members of both the Royal Commissions and the Riksbank's Committees.

Policy recommendations. During the last quarter of 1943 and the first quarter of 1944 the various agencies concerned with monetary affairs submitted reports and proposals to the government concerning the guidelines for postwar price and monetary policy. The official postwar program that was announced by the Finance Minister in April, 1944, was based on the views expressed by the various policy-making agencies.

The report of the Committee of Experts appointed by the Riksbank to study the question of postwar monetary policy had considerable
influence on the final form the policy took. The Committee strongly recommended that changes in the foreign exchange rate be used to protect the domestic economy from foreign price changes. The Committee, however, was primarily concerned with the domestic problem posed by the large wartime accumulation of liquid assets. The development of excess demand based on the activation of this purchasing power would, the Committee claimed, create a "dilemma" for monetary policy. It would mean that an "undesirable tightening of the credit market" would occur and at the same time it would indicate the need for a restrictive policy to prevent price increases. The Experts found that a "differentiation" of monetary policy would provide an appropriate solution to such a dilemma. The differentiation the Committee suggested would in very general terms mean that

... on the one hand, the money market's credit needs would be satisfied through support measures on the part of the Riksbank. The retention of a relatively stable situation in the long-term capital market should be attempted, but this does not exclude a certain increase of the discount rate and other short-term rates which could be justifiable. At the same time monetary policy should, on the other hand, with the support of fiscal policy be directed toward preventing the existing active purchasing power from leading to increased aggregate demand that would push up prices.

It became apparent in the discussion and comment on the report of the Riksbank's Committee of Experts that the policy-making

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49 "Utgångspunkter för penningpolitiken efter kriget," Utredning av sakkunniga inom Sveriges Riksbank, Proposition, 1944:1, Bilaga 1, pp. 1-36. Lindahl, Montgomery, Rooth, and Leanne were the members of the Committee, Hammarskjöld was the Chairman.

authorities were in agreement that changes in the long-term interest rate were only to be used as a means of stimulating employment and recovery in the event of a depression. In fact, aside from the Committee of Experts, the policy-making authorities did not seriously consider the question of postwar inflation in their discussion of monetary policy. The official program that was announced in 1944 implied that direct controls and fiscal policy would be the principal means employed to control the price level in the event of inflation. This implication was later confirmed by the Finance Minister, who said concerning the failure of the postwar policy planners to explicitly prepare for an inflationary development,

It is correct that the problem of falling prices and crisis stood in the foreground. But we did not underestimate the danger of inflation, nor were we uncertain as to what we would do in such a case. Such a position would have been impossible after four years of war and constant discussions of the measures against inflation. If the policy of inflation was not taken up in the postwar program, it was because a continued inflation would have meant a continuation of the war and crisis economy in which we were living at the time.51

The Commission for Postwar Economic Planning in its report on postwar price and monetary policy expressed a preference for direct controls. The Commission took a very pessimistic view of the effectiveness of monetary policy. The general conclusion was that the Riksbank had only a limited function to perform, since the Commission claimed that, "... the means of monetary policy do not at present

51Wigforss, op. cit., p. 256.
possess a high degree of efficiency for carrying out short-term economic policy and especially for the determination of price developments."

The principal short-term task the Commission would have assigned to the Riksbank was the stabilization of the level of interest rates. In stating its position the Commission said that,

... if any tendency toward a tightening of the money market should arise immediately after the war as a result, for example, of an increased demand on the part of the public for foreign exchange, this tendency should be counteracted by Riksbank intervention in such a way that an increase of the long-term interest rate is avoided.

The Commission favored the use of price controls to bring about and regulate the extent of the moderate price decreases that it recommended for the immediate postwar period. It was feared that any attempt to use monetary policy for this purpose would only result in unemployment.

With respect to a more long-term monetary policy the Commission placed the principal emphasis on the effect of interest rates on costs. A reduction of interest rates was recommended in the case of increased unemployment and it was pointed out that

In spite of the fact that the immediate effects of a decrease of interest rates are not significant for price developments, its effects on production and profitability could be considerable in certain types of economic activity.

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53Ibid., p. 15.

54Ibid., p. 18.
These effects, although highly selective, were thought to be sufficiently strong that an increase of interest rates even in the case of inflation was to be avoided. The Commission recommended the use of direct credit controls as a means of combating inflation, but it did not discuss the nature of these measures.

The monetary policy of 1944. With regard to the central bank's interest rate policy it was stated in the official five-point postwar price and monetary policy that

The current stabilization of interest rates should be continued. In a situation of depression a reconsideration of interest rate policy would be necessary. At such a time the question of an appropriate interest rate should be judged from the point of view of employment. In the event of an inflationary development an increased control of the money market should be sought through appropriate monetary measures. However, an increase of the long-term interest rate should not occur.55

Aside from this rather terse statement, the official announcement of postwar policy did not attempt to elaborate or rationalize the function to be performed by central bank policy after the war. It is perfectly clear, however, that monetary policy, in so far as it is concerned with the central bank's control of the level of interest rates, was to be directed toward the achievement of the postwar goal of full employment and not the attainment of the government's goal with respect to the value of money. The various policy-making authorities' reports that preceded, and the Riksdag debate that followed, the announcement of the government's program also made it clear that

even in the event of a depression greater significance was to be attached to fiscal policy and the detailed industry by industry type of employment policy recommended by the Commission for Postwar Economic Planning than to any reduction of the level of interest rates.

The postwar interest rate stabilization policy outlined by the government is passive in the sense that it precludes the use of the means of monetary policy to influence short-term economic developments, if the means involved would have any effect on the level of interest rates. As long as the money market was not subject to the direct controls that were advocated but not specified in the official statement of policy, the stabilization of the long-term interest rate in the context of the institutional structure of the Swedish financial system would mean that the supply of money and credit would within wide limits be perfectly elastic with respect to the demands of the economy. Thus, the official program implies that the supply of money is only of minor importance in maintaining economic stability and the abundant liquidity of the immediate postwar period did not pose a serious problem.

The postwar interest stabilization policy was more in the nature of a negative than a positive policy. Its principal task was to prevent disturbance to the general level of prices due to changes in cost factors influenced by the interest rate and to prevent changes in the level of prices, production, and employment in the housing industry due to changes in the cost or availability of credit. The monetary authorities in general tended to view the interest rate stabilization
policy as a prerequisite for the government's economic policy but not as a major contributing factor, i.e., as a necessary but not sufficient condition.

One question left unsettled by the monetary policy that was announced in 1944 was that of the proper level of interest rates. Although the various monetary authorities shared the opinion that post-war monetary policy should be directed toward a stabilization of the level of interest rates with an eventual reduction in the event of a depression, there was little discussion of the rate at which this stabilization should occur. The policy of stable interest rates and that of low interest rates are to a certain extent separate developments, although they were based on a common theoretical foundation.

In the monetary policy of 1944 and the discussion that preceded it attention was centered on the effect of interest rate changes rather than the effect of the interest rate independent of change. It was clearly stated in the governing party's political program, however, that the interest rate was to be stabilized at a low level. The Board of the Riksbank held the position that any reduction in the level of interest rates should be postponed until a depression actually developed. This argument was based on the contention that there was a limit to which interest rates could be reduced safely and that an earlier reduction would deprive the monetary authorities of a means of combating depression when the need arose. It was not, on the other hand, claimed that a reduction of interest rates would have an undesirable short-run effect on the price level. The issue of the level at
which postwar interest rates were to be stabilized was brought into sharp focus by the interest rate reduction of 1945. This development will be studied in the following chapter.

III. SUMMARY

Full employment was given the highest priority in the very ambitious economic policy that was formulated in Sweden at the end of World War II. There was a general conviction among Swedish policy makers that a serious depression would be the principal postwar economic problem. Fiscal policy, in addition to being the main means by which the government's intended postwar economic and social reforms were to be carried out, was counted on to carry most of the burden of maintaining demand, if a depression developed, and was also given a primary role as a means of restrictive policy. The effectiveness of monetary policy as a means of economic stabilization was discounted both in the case of depression and inflation. According to the most widely accepted economic reasoning on the subject, the quantity of money was not considered a significant causal factor in the operation of the economy. The effect of central bank operations on the supply of credit was generally ignored in Swedish discussions of monetary policy and attention was centered on the effects produced by changes in the level of interest rates. It was thought that only through very large and potentially dangerous changes in interest rates the level of expenditures could be influenced in a significant manner. Small changes in interest rates were thought to have their main effect on costs and thence on prices.
The principal task assigned to the Riksbank was that of maintaining stable low interest rates as a means of attaining certain social goals and preventing monetary factors from disturbing the balance of the economy. The use of changes in the foreign exchange rate as a means of protecting Sweden from foreign disturbances was an important part of the postwar policy that was proposed by the monetary authorities. Despite the emphasis placed on a planned economy and the very ambitious nature of the policy goals that were adopted, direct controls were regarded as emergency measures and were only to be retained or re­ imposed in the event of very great inflationary pressures. It was hoped that the control system built up during the war years could be rapidly dismantled in the postwar period.
CHAPTER III

MONETARY POLICY AND THE REPRESSED INFLATION

OF THE IMMEDIATE POSTWAR YEARS, 1945-1947

I. INTRODUCTION AND PLAN OF THE CHAPTER

The aim of this and the following chapter is to study the nature and evaluate the efficiency of the measures taken by the Riksbank during the first phase of the postwar development of Swedish monetary policy. The principal feature of the policy that was pursued from the end of the war in 1945 to mid-1950 was the Riksbank's attempt to maintain a stable three-percent yield on long-term government bonds traded in the open market. As a result of the Riksbank's interest rate objective and the monetary theory on which it was based, credit policy was essentially passive; the initiative for credit expansion and contraction was exercised by the private sector of the economy without interference from the central bank. The basic question raised by the Swedish experiment with monetary policy during the period under review is the adequacy and appropriateness of a policy which forgoes positive control of the supply of money during a period of strong inflationary pressure and rapid change in economic conditions.

The monetary policy that was pursued and the cyclical behavior of the Swedish economy during the period 1945-50 will be discussed in terms of the development and subsequent moderation of a condition of
repinned inflation. This conception of inflation refers to a situation in which direct controls, especially price controls, are employed to prevent excess demand from directly influencing the price level.¹ The analysis of the effects of monetary policy under these conditions is complicated by the fact that an *ex ante* disequilibrium of aggregate supply and demand at the existing price level and money supply has a different and more complex result than would otherwise have been the case. In the presence of a system of direct controls general price increases can only be considered a symptom rather than a measure of inflation. Thus the judgment of the efficiency of the monetary policy that was pursued during the first five years after the war when the Swedish government vigorously employed price controls must be based on a broad analysis of economic developments rather than just the behavior of the price level.

Our study of economic developments and the policy pursued by the Riksbank during the first five years after the war will be divided into two subperiods. The first subperiod, from the end of the war in 1945 through 1947, is characterized by the growth of a repressed

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¹One writer has defined repressed inflation as "... a type of inflation in which there has been an increase in the money supply, but where controls have been able to keep the percentage price rises considerably below those of the money supply." Stephen F. Sherwin, *Monetary Policy in Continental Western Europe, 1944-1952*, Wisconsin Commerce Studies, Vol. II (Madison: University of Wisconsin, 1956), p. 5.

inflation which culminated in a foreign exchange crisis in 1947. This period is analyzed in the following sections. The second subperiod, from the end of 1947 through the first half 1950, constitutes the first postwar stabilization period in Sweden. During this period exogenous factors and the government's economic policy resulted in a reduction of excess demand and a substantial moderation of the symptoms of repressed inflation. The analysis of this period is presented in Chapter IV.

II. THE POSTWAR RECONVERSION PERIOD AND REPRESSED INFLATION, 1945-1947

Economic Developments and Government Policy

The situation in the Swedish economy at the end of World War II has been described as being one in which "the general scarcity, excess demand, and currently inelastic supply are giving rise to a latent inflationary pressure which can only be held in check by price controls." Economic developments during the years 1945-47 tended to intensify this situation and caused the transition to peacetime conditions to be more rapid and involve a different type of economic problem than had been expected by Swedish policy makers at the end of the war.

Foreign trade, which normally accounts for 15-20 percent of the Swedish gross national product, was a major source of difficulty. The

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government failed to achieve its goal of maintaining a stable equilibrium in the balance of payments and as a result of the deficits that were incurred the large foreign exchange reserves, built up during the war years, were virtually exhausted by the end of 1947. The balance-of-payments problem was the immediate cause of the revision of Swedish economic policy in 1948.

The major factor influencing the development of Swedish foreign trade during the immediate postwar years was the extremely high level of domestic and foreign demand. However, the government's policy also played an important role. A rapid expansion of imports was made possible by the fact that the government began removing quantitative import controls immediately after the end of the war so that by mid-1946 imports were almost entirely free of restrictions. With regard to exports the government in 1946 and 1947 employed a system of export licenses and export price controls designed to reserve a certain portion of the output of export products for the home market and prevent excess profits in the major export industries. The aim of the government's export policy was to prevent the existing discrepancy between the international and domestic prices of Swedish exports from causing an upward movement of the domestic price level.

A substantial portion of the change that occurred in the value of foreign trade and the inflationary pressures to which the Swedish economy was subject was the result of an increase in the level of world market prices. The Swedish terms of trade improved by 20 percent from 1945 to 1948 due to the rise of export prices. In July of
1946 the krona was appreciated by 17 percent with respect to the dollar in an attempt to prevent the spread of rising international prices to the domestic economy. As a result of the revaluation of the krona and export price controls, the level of Swedish export and import prices, expressed in kronor, remained relatively stable in 1946. However, in March of 1947 a greatly increased need for foreign exchange and a sellers strike in the forest industry which threatened seriously to restrict exports, forced the government to abandon export price controls, and the level of the export-price index rose by more than 50 points in 1947.

The rapid expansion of imports and lagging development of exports in 1946 resulted in a deficit of 851 million kronor in the balance of trade and the balance of payments on current account showed a deficit of 104 million kronor. The imbalance on trade account worsened in 1947 and the deficit rose to a record 1,985 million kronor. The deficit on the current balance of payments was 1,449 million kronor in 1947. Figure 1 illustrates the effect of postwar foreign trade activity on the gold and net foreign exchange holdings of the Riksbank. The pattern of Swedish trade caused the reduction of reserves to be especially great with regard to gold and dollars.

There was no immediate reaction on the part of the Swedish authorities to the unfavorable development of the balance of trade in 1946. There was a tendency to consider a high level of imports as anti-inflationary. The general opinion in the autumn of 1946 appears to have been that the condition of scarcity then existing in the
NET FOREIGN EXCHANGE AND GOLD

FIGURE 1
THE RIKSBANK'S FOREIGN EXCHANGE RESERVES, 1944-1950
MILLIONS OF KRONOR

domestic economy would not last for more than a few months or a year at the maximum. It was not until March 15, 1947 that the government, with a view to the extremely high level of imports and precipitous decline of foreign exchange reserves, felt compelled to introduce restrictive import controls. As a result of the slow operation of the controls that were applied, the continued high level of domestic demand, and a further increase in the level of import prices, the value of imports remained at a high level throughout 1947 and did not show any significant decline until mid-1948.

The development of foreign trade and the resulting balance-of-payments problem is indicative of a lack of ex ante equilibrium of domestic aggregate supply and demand at the existing level of prices and employment. The principal source of the immediate postwar disturbance to the equilibrium of the domestic economy was an extremely rapid increase in both the investment and consumption components of aggregate demand.

If the deficit on the current balance of payments is considered as dissavings, it is apparent from Table I that the proportion of gross national product saved in 1947 was quite low in comparison with 1946 and the prewar years 1938/39. There is additional evidence to support the inference that there was a sharp decline in the propensity to save from 1945 to 1947. Table II, which is based on Lindberger's revision of the Konjunkturinstitutet's social accounting data, indicates that

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TABLE I
GROSS INVESTMENT AND GROSS SAVINGS AS A
PERCENTAGE OF GROSS NATIONAL INCOME
1938/39 AND 1946-1950

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<tbody>
<tr>
<td>Gross private domestic investment</td>
<td>17.5</td>
<td>17.8</td>
<td>19.9</td>
<td>17.1</td>
<td>16.2</td>
<td>17.5</td>
</tr>
<tr>
<td>Gross public domestic investment</td>
<td>6.8</td>
<td>7.7</td>
<td>8.4</td>
<td>9.1</td>
<td>9.5</td>
<td>9.8</td>
</tr>
<tr>
<td>Changes in inventories</td>
<td>2.0</td>
<td>0.4</td>
<td>1.7</td>
<td>1.2</td>
<td>0.4</td>
<td>-0.5</td>
</tr>
<tr>
<td>Total gross investment</td>
<td>26.3</td>
<td>25.9</td>
<td>30.0</td>
<td>27.4</td>
<td>26.1</td>
<td>26.8</td>
</tr>
<tr>
<td>Net surplus on current balance of payments</td>
<td>-0.3</td>
<td>-0.4</td>
<td>-5.8</td>
<td>-1.5</td>
<td>+1.7</td>
<td>+0.5</td>
</tr>
<tr>
<td>Total gross savings</td>
<td>26.0</td>
<td>25.4</td>
<td>24.2</td>
<td>25.9</td>
<td>27.8</td>
<td>27.3</td>
</tr>
</tbody>
</table>

Composed of:

- Gross savings by central government | 2.2     | 5.3  | 7.6  | 3.6  | 3.1  | 2.0  |
- Gross savings by local government  | 2.7     | 1.9  | 1.7  | 2.1  | 3.6  | 2.8  |
- Gross private savings             | 21.1    | 18.3 | 14.9 | 20.2 | 21.1 | 22.5 |

<table>
<thead>
<tr>
<th></th>
<th>1945</th>
<th>1946</th>
<th>1947</th>
<th>1948</th>
<th>1949</th>
<th>1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable personal income</td>
<td>11,490</td>
<td>13,372</td>
<td>14,246</td>
<td>16,686</td>
<td>17,352</td>
<td>18,643</td>
</tr>
<tr>
<td>Estimated disposable</td>
<td>14,312</td>
<td>16,102</td>
<td>18,883</td>
<td>19,231</td>
<td>19,805</td>
<td>21,003</td>
</tr>
<tr>
<td>household income</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Less consumption</td>
<td>-12,830</td>
<td>-14,996</td>
<td>-16,239</td>
<td>-17,694</td>
<td>-17,944</td>
<td>-19,434</td>
</tr>
<tr>
<td>expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household savings</td>
<td>1,482</td>
<td>1,106</td>
<td>644</td>
<td>1,537</td>
<td>1,861</td>
<td>1,569</td>
</tr>
<tr>
<td>(net)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household savings as</td>
<td>10.4</td>
<td>6.9</td>
<td>3.8</td>
<td>8.0</td>
<td>9.4</td>
<td>7.5</td>
</tr>
<tr>
<td>a percentage of household</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disposable income</td>
<td></td>
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</tbody>
</table>

although household disposable income increased very rapidly after the war, household consumption expenditures rose so rapidly relative to income that the percentage of income saved (net) decreased from 10.4 percent in 1945 to 3.8 percent in 1947.4

The low point reached by the propensity to save in 1947 corresponds with the high point reached by the propensity to invest during the first five years after the war. Gross domestic investment increased rapidly after the end of the war and, as Table I shows, it accounted for a significantly increased proportion of gross national product in 1947. Gross private domestic investment, which increased by 50 percent in 1945–47 as compared to 27 percent in public investment, was the major factor accounting for this development. Within the private sector industrial investment showed the greatest rate of increase during the first two years after the war. The high rate of industrial investment is attributable to the accumulated investment needs that resulted from wartime capital consumption, the high level of domestic and foreign demand, a favorable development of profits, high liquidity, and an easy credit market.

A substantial portion of the increase in industrial and other private investment in the period 1945–47 was due to increased construction activity. The expansion of construction after the end of


World War II was facilitated by the liberal policy pursued by the authorities in the granting of building permits. The total value of the permits granted during the first twelve months after the end of the war was 30 percent greater than in the previous twelve-month period and the value of permits granted for industrial purposes increased by 60 percent. There was a tendency both in 1945 and 1946 for the number of permits granted to greatly exceed the number utilized.

Early in 1947 the government announced its intention of reducing the level of investment activity by restricting the total value of industrial building permits issued by 10 percent as compared to 1946. In June of 1947 the planned reduction was increased to 30 percent and broadened to include both housing and industrial construction. The government's action did not, however, have any immediate effect on the level of construction activity which increased by 11 percent in 1947. The failure of the government's policy may be attributed to the existence of a substantial backlog of unused permits and the fact that only about 60 percent of all construction activity was subject to control by permit granting in 1947. It was not until the backlog of permits was absorbed and the scope of the control system expanded in 1948 that building permits became an effective means of influencing the level of investment.

The high level of demand in the immediate postwar years placed a serious strain on the economy's productive resources. The scarcity conditions that existed in the years 1945-47 were in part relative to the enlarged money supply and the unfulfilled needs and desires that
resulted from wartime restrictions, but the scarcity was also absolute in the sense that many items were in short supply. The supplies of fuel, in particular, as well as many agricultural products were absolutely small. Furthermore, the unbalanced state of the economy and the rigidities caused by the government's system of physical controls resulted in production bottlenecks that were especially severe in the industries producing raw materials. After having declined by 2 percent from 1944 to 1945 the volume of industrial output increased by 22 percent in 1946. However, the increase of industrial output slowed to 4 percent in 1947 and the increase in productivity per man hour was only 3.9 percent as compared to 5.8 percent in 1946.

Unemployment reached the very low figure of 2.1 percent in 1946. Ambitious production plans based on the high level of consumers' demand and favorable profit prospects in 1946 and 1947 resulted in an excess demand for labor or a "factor gap" in the sense that the number of employment vacancies exceeded the existing volume of unemployment. The severe shortage of labor in 1947 was accompanied by a high rate of labor turnover and absenteeism which disorganized the operation of the labor market and inhibited the development of productivity.

5Concerning the empirical measurement and theoretical significance of the factor gap, see Rudolf Meidner, Svensk arbetsmarknad vid full sysselsättning (Stockholm: Konjunkturinstitutet, 1954); and Bent Hansen, A Study in the Theory of Inflation (London: George Allen and Unwin, 1951).
The voluntary wartime wage freeze broke down at the same time that serious expectations of postwar price decreases were abandoned. As indicated in Figure 2, the hourly wage rates of Swedish industrial workers rose by 8 percent in 1946 and by 14 percent in 1947. The increase in wages in 1946 and 1947 was greater than the increase of productivity or of prices (see Appendix, Table XVIII). The realized changes in wage rates are the sum of contractual increases and a substantial "wage drift," i.e., an increase of earnings not accounted for by wage increases negotiated in collective bargaining. In 1947 the wage drift amounted to 4 percent of the wage level established by contractual increases. Rehn and Hansen have established the fact that a wage drift in the context of the highly organized Swedish labor market is directly associated with an excess demand for labor. The large increase in wages, especially in 1947, was an important cost element contributing to inflationary pressures. It was not until 1948 that the government took active steps to limit wage increases.

As Figure 3 indicates, the expectations of postwar decreases in the level of Swedish domestic prices were only fulfilled to a limited extent. Although there was a sharp decline in import prices just after the end of the war, the index of wholesale prices fell, if agricultural prices are excluded, by only 7 percent from June, 1945 to April, 1946. During the same period the index of consumers prices,

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FIGURE 2

ANNUAL PERCENTAGE CHANGE IN INDUSTRIAL WAGE RATES, 1946-1959

Source: Svenska Handelsbanken, Index, 1959:10, p. 4.
FIGURE 3

SWEDISH PRICE INDEXES, 1939-1948
JUNE, 1939=100

Wholesale prices
Export prices
Import prices
Consumers prices (August, 1939=100)

exclusive of foods from Swedish production, housing, spirits, and tobacco whose prices are not determined by the market, declined by 3 percent. The total consumers' price index did not decline by more than 1 percent during this period.

The trend of price developments reversed sharply in 1946 and the consumers' price index rose by approximately 8 percent during the years 1946-47 if one takes into account the removal of the wartime general sales tax from the beginning of 1947 which would have permitted a decrease of 3 percent. The fact that the increase in the level of consumers' prices was only relatively moderate despite the rapid rise in international price levels and the substantial excess demand in the domestic market may be attributed to the price controls which were rigorously applied during this period. However, in addition to the open price increases that occurred there were also, as the Konjunkturinstitutet pointed out, substantial hidden price increases. Unfortunately, there is no way of accurately estimating the change in quality and the shift to a more expensive assortment of goods that occurred.

According to the plans that were drawn up at the end of the war fiscal policy and direct controls were to be the principal means employed in the government's postwar economic stabilization program

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7For a discussion of the principles and operations of the Swedish price control authority during the immediate postwar period, see Harry Ålmeby, "Priskontroll," Vårt ekonomiska läge, 1948 (Stockholm: Sparfrämjandets Förlag, 1948), pp. 54-66.

in the event of an inflationary disturbance. However, from the end of the war in 1945 the government began immediately to relax the key regulations on imports and investment, allocation of scarce materials, and rationing of consumers' goods so that with the exception of price controls, direct controls were not extensively employed in a restrictive manner during the greater part of the period. Consequently, fiscal policy remained as the major politically acceptable means available for the pursuit of anti-inflationary policy.

The budgetary system employed in Sweden greatly complicates the analysis of the effect of the government's fiscal policy on the operation of the economy. In the calculation of the budget's effect on the income of the private sector of the economy, which is presented in Table III, all revenues on the current budget, with the exception of receipts from inheritance and gift taxes which involve wealth transfers, are treated as reducing private income. On the other hand, all expenditures, exclusive of depreciation charges, on the current budget

9As a result of reforms introduced in 1937 and 1944 Sweden now employs a divided budget. Current operating expenditures are included in what is termed an operating budget which is financed in principal by taxes and other ordinary government revenues. The government's investment activity is accounted for in a capital budget. Nonproductive capital investments are written off immediately by means of a depreciation charge on the current budget so that productive investment may be financed by borrowing without impairing the government's net capital position.

For a more detailed discussion of the Swedish budgetary system, see Budgetary Structure and Classification of Government Accounts (New York: United Nations Department of Economic Affairs, 1951); and Bestämmeiser och praxis rörande statens budget, SOU 1952:45.
### TABLE III

THE EFFECT OF THE CENTRAL AND LOCAL GOVERNMENT FINANCE ON PRIVATE INCOMES, 1945-1950
MILLIONS OF KRONOR

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<tbody>
<tr>
<td><strong>Income:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income on the current budget, ex. of wealth transfers through inheritance, gift, and estate taxes</td>
<td>3,483</td>
<td>3,547</td>
<td>4,368</td>
<td>4,900</td>
<td>5,004</td>
</tr>
<tr>
<td>Depreciation charges by govt. authorities and state enterprises</td>
<td>144</td>
<td>135</td>
<td>152</td>
<td>168</td>
<td>167</td>
</tr>
<tr>
<td>Reduction in private income due to govt. revenues</td>
<td>-3,627</td>
<td>-3,682</td>
<td>-4,520</td>
<td>-5,068</td>
<td>-5,171</td>
</tr>
<tr>
<td><strong>Expenditures:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditures on the current budget, ex. of write-offs</td>
<td>3,039</td>
<td>3,084</td>
<td>3,848</td>
<td>4,518</td>
<td>4,570</td>
</tr>
<tr>
<td>Real investment on the capital budget</td>
<td>357</td>
<td>406</td>
<td>465</td>
<td>546</td>
<td>416</td>
</tr>
<tr>
<td>Increase in private income due to govt. expenditures</td>
<td>+3,396</td>
<td>+3,490</td>
<td>+4,313</td>
<td>+5,064</td>
<td>+4,986</td>
</tr>
<tr>
<td>Net effect of central govt. finances on private income</td>
<td>-231</td>
<td>-192</td>
<td>-207</td>
<td>-4</td>
<td>-185</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimates on a Calendar Year Basis</th>
<th>1946</th>
<th>1947</th>
<th>1948</th>
<th>1949</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net effect of central govt. finance</strong></td>
<td>-440</td>
<td>-1,000</td>
<td>-40</td>
<td>-210</td>
</tr>
<tr>
<td><strong>Net effect of local govt. finance</strong></td>
<td>+70</td>
<td>+60</td>
<td>-180</td>
<td>-120</td>
</tr>
<tr>
<td><strong>Total effect of govt. sector</strong></td>
<td>-370</td>
<td>-960</td>
<td>-140</td>
<td>-330</td>
</tr>
</tbody>
</table>

and "real" investment on the capital budget are treated as increasing private income.\textsuperscript{10}

When converted from a fiscal to a calendar year basis the data in Table III indicate that the government's budget had its maximum restrictive effect on private income in 1947.\textsuperscript{11} In attempting to judge the significance of the budget's contractive effect it should be noted that the \textit{change} in the budget's contractive effect on private income of 560 million kronor from 1946 to 1947 is quite small relative to the Konjunkturinstitutet's estimate of an increase of 1.8 billion kronor in the size of the inflationary gap in 1947.\textsuperscript{12}

The contractive income effect of the government's budget in 1946 and 1947 was for the most part the automatic result of the rapid increase in national income rather than the result of a restrictive fiscal policy. With the exception of a sharp cut in defense spending immediately after the end of the war, no effort was made to cut government expenditures. In 1946 and early 1947 the Riksdag adopted a

\begin{itemize}
  \item \textsuperscript{10}The restriction to real investment excludes the government's foreign and domestic lending activity and the purchase of assets which are not the result of current production.
  \item \textsuperscript{11}The conversion of Swedish budget data to a calendar year basis, especially for the early postwar years, is difficult and subject to a wide margin of error. The discrepancy between the fiscal and calendar year calculations is due to the fact that the monthly data used in making the calendar year calculations cause a significant shift in the timing of government receipts.
  \item \textsuperscript{12}"Konjunkturläget hösten 1946," \textit{Meddelanden från Konjunkturinstitutet}, Series A:14, 1947, p. 27.
\end{itemize}
welfare program involving new and greatly increased old-age pensions, housing subsidies, and family allowances which were to have a substantial expansive effect on expenditures when they became fully operational from the beginning of 1948.

With regard to government revenue the major actions taken in the immediate postwar period were the removal of the wartime general 3-percent sales tax from the beginning of 1947 and the introduction of a PAYE system of income tax collection. The removal of the sales tax was essentially political in motivation, but in the economic rationalization that was offered for the action it was argued that the cut in taxes would offset inflationary pressures tending to push up the cost of living and thereby prevent wage increases and a further increase of nominal incomes. The removal of the sales tax was also the occasion for an extensive tax reform in line with the government's goals with respect to the redistribution of income. As a result of the tax reform personal income taxes were made more highly progressive, gift and inheritance taxes were greatly increased, and the corporate income tax was raised from 32 to 40 percent. The tax reform produced revenue that in part offset losses due to the removal of the sales tax, but it also tended to discourage savings and stimulate investment.13

The principal reason for the exceptionally large tax receipts and contractive effect of the government's budget on private incomes

in 1947 seems to have been the inflationary rise in the level of national income and the new system of tax collection which had the effect of eliminating a one year lag in the payment of income taxes.\textsuperscript{14}

In summarizing the economic developments during the period from the end of the war in 1945 through 1947 it can be said that the Swedish economy underwent an approximation of the Wicksellian type of cumulative inflationary process. The upward pressure on prices during the period was the result of an interaction of an excessive level of aggregate monetary demand relative to available aggregate domestic supply, and cost increases due to excessive wage increases relative to changes in productivity. The upward pressure on Swedish domestic price levels was further intensified by the level and changes of prices in the international market. Price controls and foreign exchange rate policy prevented these disturbances from having their full expression in domestic price increases. However, during the greater part of the immediate postwar period the government's economic policy, which failed to achieve its goals with respect to a substantial improvement in the value of money and a stable equilibrium in the balance of payments, was essentially passive or ineffective with respect to the excess aggregate demand, especially investment demand, which was a principal cause of the inflationary pressures. Thus, the policy pursued repressed the inflation, but did not remove its cause. The primary

manifestations of the lack of balance in the Swedish economy during the immediate postwar period were a seriously unfavorable balance of trade, disorganization of the labor market, a reduced rate of growth of output and productivity, and a distortion of economic relations due to rigidities in the economy's adjustment mechanism.

III. MONETARY POLICY AND CONDITIONS IN THE MONEY AND CAPITAL MARKETS

Initial Conditions

The high level of liquidity built up during the war years was the principal problem confronting Swedish monetary authorities at the end of World War II. The abundant liquidity of the economic system in 1945 was in part due to the increase in the Riksbank's holdings of gold and foreign exchange reserves by approximately 529 million kronor as a result of wartime surpluses in the balance of payments. The net result of all Riksbank transactions from mid-1939 to mid-1945 was an increase of 1,160 million kronor in the economy's supply of cash assets, i.e., currency in circulation and deposits at the Riksbank.

The large deficits on the government's total budget, especially during the fiscal years 1942/43 and 1943/44, were also a major factor in the wartime growth of liquid assets. As Figure 4 indicates, government borrowing during the war years added over 7 billion kronor to the outstanding sum of bonds and Treasury Bills. In round numbers, the Swedish national debt as a percentage of the gross national product amounted to 25 percent in mid-1939 and 60 percent in mid-1945. In the
FIGURE 4
Funded and Floating National Debt Outstanding at the End of the Fiscal Year, 1939-1960
Millions of Kronor

Source: Riksgäldskontorets årsbok, 1960, p. 56.
United States the figures at the respective dates were 60 and 150 percent.

As a result of the increase in their holdings of public debt from 220 million kronor in mid-1939 to 2,100 million kronor in mid-1945 the commercial banks at the outset of the postwar period possessed the means of financing a substantial increase in the supply of credit to the private sector of the economy. Although cash reserves declined during 1945 and were only 5 percent of total deposits at the end of the year as compared with a prewar normal ratio of from 10 to 15 percent, the total reserves of cash and highly liquid assets made up 36.5 percent of total deposits as compared with 20 percent in the years immediately preceding the war (see Figure 5). The liquidity of the commercial banks' holdings of government securities was further enhanced by the fact that approximately 55 percent of the portfolio consisted of short-term (i.e., six months or less) Treasury Bills.

Although its exact extent cannot be accurately measured, there is evidence to indicate that a condition of excess liquidity existed in the private non-banking sector of the Swedish economy at the end of the war. The public's money supply in its broadest sense, i.e., currency in circulation outside banks, demand and time deposits, increased by 83 percent during the war years while at the same time the level of consumers' prices rose by 48 percent and the level of real output remained relatively stable. The fact that the circuit velocity of the means of payment, i.e., the ratio of demand deposits and currency in circulation to the gross national product, fell from 5.8
Liquid funds (cash, Treasury Bills, and bonds) in percent of deposits
Rediscounted domestic bills in percent of deposits

Source: Svenska Handelsbanken, Index, 1955:1, p. 4.

FIGURE 5

COMMERCIAL BANKS' LIQUID ASSETS AND REDISCOUNTED BILLS
IN PERCENT OF DEPOSITS, 1922-1954
in 1938 to 4.8 in 1945 indicates that there was a substantial increase in idle balance during the war years.\textsuperscript{15}

The basic premise of the government's postwar economic policy was that means other than those at the disposal of the central bank could be used to prevent the excess liquidity of the private sector of the economy from being employed in an inflationary increase of aggregate demand.

The Reduction of Interest Rates in 1945

It was in the context of the monetary conditions cited above that the first step was taken in the introduction of the Riksbank's postwar policy. On February 9, 1945 the Riksbank reduced its discount rate from 3 to 2\frac{1}{2} percent. The commercial and savings banks immediately adjusted their lending and deposit rates downward by an equal amount. The yield on long-term government securities fell by one-fourth percent to 3 percent, and the entire structure of interest rates was, as Figure 6 shows, adjusted downward. Thus, as a result of the Riksbank's action, the long-term interest rate was returned to its prewar level and the last trace of the war-induced increase to 4.5 percent was removed.

\textsuperscript{15}The implications of the highly liquid condition of the private sector of the economy for the maintenance of postwar monetary stability were studied by Josephy and Dickson who concluded that fiscal policy would be the most important means of preventing surplus liquidity from serving as the basis for excess demand. See, Berthold Josephy, "Krigstidssparande och fredsekonomin:s monetära jäm-vikt," Ekonomisk Tidskrift, March, 1944, pp. 1-20; and Harald Dickson, "Krigstidssparandet, inflationsfaran och statsskulden," Ekonomisk Tidskrift, June, 1944, pp. 193-206.
Riksbank's discount rate
Effective yield on government bonds with 6 years to maturity
Effective yield on long-term government bonds
Mortgage Bank loan rate
City Mortgage Fund loan rate


FIGURE 6

SWEDISH INTEREST RATES, 1940-1949
The only official explanation ever offered for the Riksbank's reduction of the discount rate was given by the Banking Committee:

In the middle of January, 1945 there appeared a powerful demand in the capital market directed primarily toward the 3.5 percent government bonds influenced by expectations of a fall in the interest rates. After extensive bond sales with a view to limiting the price increase, the Riksbank decided on February 8, 1945 to reduce the discount rate from 3 to 2.5 percent and its other rates by a similar one-half percent.16

The Committee stressed the importance of the greatly increased volume of government debt in determining conditions in the capital market. The imminence of postwar conversion of wartime bond issues and the increased burden of the service charges on the public debt were the principal factors cited to explain the market's expectations of higher bond prices. The forecast of a serious postwar depression was also thought to have strengthened the general expectation of lower interest rates and thereby added to the upward speculative pressure on bond prices which was the immediate cause of the interest rate reduction. The Banking Committee did not state why it thought it would be impractical or impossible for the Riksbank to correct the market situation without a change in the level of interest rates.17

16 Bankoutskottets utlåtande, No. 51, 1945, p. 2.

17 The Banking Committee's inference that the central bank could be forced during a period of rapid expansion of the public debt to permit a decrease in the level of interest rates was raised to the level of a theoretical debate by Hammarskjöld and Hansen. See, Dag Hammarskjöld, "Reflexioner kring ett ränteproblem," Ekonomisk Tidskrift, December, 1946, pp. 241-53; and Bent Hansen, "Hammarskjölds ränteproblem," Ekonomisk Tidskrift, March, 1947, pp. 38-59.
The motives for the reduction of interest rates in 1945 were perhaps most clearly revealed in the Riksdag's debate of the Riksbank's policy.\textsuperscript{18} It was stated in the course of the debate that housing policy, fear of postwar depression, and the policy program of the Social Democrat Party were to be considered the main reasons for the action taken by the Riksbank. A representative of the Banking Committee answered the attack of a Conservative Party member with the contention that the main effect of the Riksbank's interest rate policy would be to reduce the difference between the rental rates fixed in 1942 and those in newly constructed houses, thereby permitting a return to a normal relation.\textsuperscript{19} The majority of the Riksdag appear to have accepted the idea, first propagated by Ohlin during the war, that the appropriateness of the interest rate should be judged with regard to rental rates and conditions in the construction industry rather than aggregate demand.

The Board of the Riksbank insisted that its action in reducing interest rates should not be considered inflationary but rather a rational part of the government's effort to maintain economic stability. The basis for the Board's contention was that

\begin{quote}
\ldots price controls and other regulations have brought it about that the interest rate does not have the significance in determining business conditions and price developments that it has under more normal conditions.\textsuperscript{20}
\end{quote}

\begin{footnotes}
\textsuperscript{18}Riksdags protokoll, 1945, FK 11, pp. 21-27 and 1945, FK 30, pp. 93-150.
\textsuperscript{19}Ibid., FK 11, p. 22.
\textsuperscript{20}Bankoutskottets utlåtande, No. 51, 1945, p. 2.
\end{footnotes}
This statement indicates that the central bank authorities based their action on the type of theoretical analysis of monetary policy suggested by Ohlin and Myrdal.

As demonstrated in Chapter II, the view prevalent among the leading Stockholm School economists at the end of World War II was that in a highly regulated economy with efficient price controls the effect of a relatively small change in the level of interest rates would be secondary and nominal with respect to aggregate demand. Since it was thought that under conditions of regulation costs would be the principal factor determining prices, it was claimed that even a small change in the level of interest rates could through its effect on costs, especially in the housing industry, heavily influence wage and price developments. Thus a reduction of interest rates would either cut costs or prevent their rise and thereby help to stabilize prices. This view of causal relations seems to supply the best rationalization of the decision to reduce interest rates in a period when the monetary authorities were admittedly aware and concerned about a threatened inflationary development.


\[\text{In its report dealing with the reduction of the discount rate the Banking Committee pointed out that the continued scarcity of goods and the export surplus expected in the immediate postwar period}\]

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\[\text{Calculations made at the time of the reduction of interest rates in 1945 were supposed to have indicated that a one percent change in the general level of interest rates would cause the rental rates in newly constructed houses to change by 12-14 percent in the same direction.}\]
The immediate effects of the reduction of interest rates in 1945 appear to conform quite well to those which were to be expected using the Stockholm School's theory of monetary policy. The downward pressure on interest rates ceased and open market operations were not required to support the level of long-term interest rates in 1945. Housing construction, despite a substantial increase in construction costs, was maintained at a high stable level without the use of government subsidies. Although the fall in import prices in the second half of the year was also an important contributing factor, the level of consumers prices remained stable in 1945 despite a substantial increase in wage rates.

The Riksbank's Position in Subsequent Policy Actions

The monetary policy pursued subsequent to the interest rate reduction of 1945 continued to be based on the Swedish conception of the role of the interest rate in determining prices by way of its influence on costs. The official directive to the Riksbank stated that the goal of monetary policy was the maintenance of a stable value of money, but that actions taken to attain this goal were not to conflict with a stabilization of the long-term rate of interest or a

constituted a serious problem for price policy since "... the increased tension between purchasing power and the supply of goods which can thus be expected and which can be even more pronounced to the extent that the money claims accumulated during the war are used to satisfy the hunger for goods, implies serious risks for price increases."

Bankoutskottets utlåtande, No. 51, 1945, p. 3.
reduction in the level of prices made possible by lower import prices and increased productivity.

Although subordinate in both theory and practice and more limited in scope than in any previous period of Swedish economic history, the central bank authorities took an active part in the government's discussion of economic policy. The analysis of economic developments and policy recommendations put forward by the Board of the Riksbank in its communications to the government during the years 1945-49 constitutes the most consistent Swedish application of the general approach to economic policy that was formulated at the end of World War II. The Board warned against permitting wage increases and made timely recommendations for increased severity of price controls, elimination of surplus purchasing power, more restrictive fiscal policy, and tighter regulation of construction activity. However, underlying the Riksbank's policy recommendations was the assumption that it was neither the central bank's task nor within its power to assist directly in the attainment of the goals toward which its recommendations were directed.

The Banking Committee claimed throughout the period 1945-47 that the Riksbank's policy of maintaining a stable low long-term interest rate was an adequate and appropriate policy for the central bank. However, in its review of the policy pursued by the Riksbank
in 1947 the Committee stressed the essentially subsidiary nature of the policy when it said that

... the experience of the postwar years indicates that the Riksbank has in the main been able to accomplish the stabilization of long-term interest rates and has thereby preserved an important prerequisite for the government's general economic policy.23

The Revaluation of the Krona in 1946

Foreign exchange rate policy was the one notable exception to the monetary authorities' generally negative attitude toward the active use of the means of monetary policy to achieve the goals of the government's economic stabilization program. One of the Riksbank's major policy actions during the immediate postwar years occurred on July 16, 1946, when the Swedish krona was appreciated by 17 percent with respect to the US dollar.

The decision to revalue the krona was not a surprise action. The krona was generally considered to be undervalued and an adjustment of the rate was expected. However, it had generally been expected that an appreciation of approximately 10 percent would be required to establish an equilibrium exchange rate. The difference between the change that was expected and the 17 percent change that was actually made can be explained on essentially the same grounds as the interest rate reduction in 1945. The situation in mid-1946 was such that not only had no significant postwar reduction of Swedish

23Bankoutskottets utlåtande, No. 6, 1948, p. 7. ( Italics not in the original.)
prices occurred, but in addition inflationary pressures of domestic origin were beginning to appear. The threat of a more rapid rate of increase in world market prices due to the removal of price controls in the United States further complicated the situation. The appreciation of the krona offered an opportunity to take an action against both the external and internal inflationary threats simultaneously.

Within the framework of the monetary theory accepted by the Swedish monetary authorities in the immediate postwar years a substantial appreciation of the external value of the currency would give both a margin of error in the estimation of inflationary pressures of external origin and tend to offset the wage and other cost increases that were threatening the stability of domestic prices. The fact that there had been a substantial surplus on the current account in the Swedish balance of payments during 1945 and the first half of 1946 further contributed to the decision to appreciate the krona to such an extent that it could have important results for domestic price developments.

One of the principal assumptions underlying the foreign exchange policy of 1946 was that the high level of international demand for Swedish export products and the substantial foreign credits granted by Sweden at the end of the war would make a continuation of the favorable balance on current account probable and would greatly increase the risk of a serious boom in exports. Thus, in addition to the desirable restrictive effects that currency appreciation would have on exports, it was expected that the appreciation would also
offset the lagging tendency in imports—the volume of imports during the first half of 1946 averaged 80 percent of the prewar level—which the monetary authorities considered an important supply factor contributing to the growth of domestic inflationary pressures. It was further assumed that the record high level of gold and foreign exchange reserves that had been built up during the war would prevent the appearance of an international liquidity problem as a result of the appreciation effect on imports. Thus it would appear that in July, 1946 the monetary authorities still considered the level of costs and supply to be the principal determinant of prices and the main source of difficulty in achieving the aims of postwar price policy.

The monetary authorities stressed the need for a generally restrictive economic policy to assure the success of the appreciation measure. Gunnar Myrdal, the Minister of Trade, said,

> What we hope is that the changed exchange rate will give us an increased scope for the counter-inflationary policy within the country. On the other hand, a change in the exchange rate means a greater need for the economic policy in general to be carried out with greater vigor because the worst thing that could happen would be if we after some months would find that we ourselves had not controlled the inflationary factors in our country.²⁴

The development which Myrdal feared was the one that actually occurred. On the assumption that it would take place in a highly regulated economy the appreciation of the krona, like the reduction of the interest rates in 1945, was considered well motivated with respect

²⁴ News item in the Dagens Nyheter, July 14, 1946.
to its immediate effect on cost and supply. The effects of the measure on aggregate demand and financial conditions were considered as secondary. The error of the assumption on which the foreign exchange policy was founded and the failure to recognize the extent of the disequilibrium existing in the domestic economy were important factors contributing to the difficulties experienced in the pursuit of monetary policy in late 1946 and 1947.

Credit Policy

From the point of view of Wicksell's monetary theory the volume of bank credit constitutes one of the principal monetary expressions of an inflationary disturbance to economic equilibrium. The fact that commercial bank loans and discounts increased from 5,843 million kronor at the end of 1945 to 8,021 million kronor at the end of 1947, i.e., by 35 percent in two years, can from the Wicksellian point of view be considered closely related to the tendency for planned investment to exceed voluntary savings and the resulting inflationary pressure on prices. The question of the causal significance of the expansion of bank credit and the role of the Riksbank in this process, especially in the period from mid-1946 to mid-1947, was one of the most controversial raised concerning the monetary policy that was pursued during the immediate postwar years.

The data presented in Figures 7 and 8 illustrate the changes that occurred in the activity of the Riksbank and the commercial banks during the years 1945-47. More detailed statistical data concerning
A = Total holdings of gold, foreign currencies, bonds, and Treasury Bills
B = Holdings of gold and foreign exchange
C = Note circulation outside the commercial banks
D = Holdings of bonds and Treasury Bills


FIGURE 7

THE RIKS BANK'S NOTE CIRCULATION AND HOLDINGS OF GOLD, FOREIGN EXCHANGE, BONDS, AND TREASURY BILLS, 1944-1949
MILLIONS OF KRONOR
FIGURE 8

DEPOSITS AND LIQUID ASSETS OF THE COMMERCIAL BANKS, 1945-1950
BILLIONS OF KRONOR

A = Deposits
B = Advances
C = Liquid assets

Source: Riksbanks årsbok, 1951, pp. 36-37.
Swedish financial developments for the entire period 1945-60 are presented in the Appendix. The aim of the following discussion is to clarify the relation between the Riksbank's operations and the changes that occurred in the money and capital markets during the period under review. Special attention will be given to the factors influencing the volume of commercial bank credits.25

The inclusion of an analysis of the direct effect of the government's budget on the financial system during the immediate postwar years is handicapped by a lack of detailed statistical data.26 An estimate of the effect of fiscal policy on the liquidity of the private sector of the economy may be based on the information presented in the Appendix, Table XXVI concerning the cash outcome of the government's total budget. However, the data in Table XXVI do not take into account the operation of the National Debt Office nor do they show the manner in which the gross expenditures on the capital budget were

25 Swedish financial statistics, especially during the immediate postwar years, are inadequate in a number of important respects. The lack of data, which is especially great with respect to the government's financial operations, prevents a detailed statistical analysis of the sources and uses of bank reserves before 1950. Substantial improvements were made in Swedish financial data after 1950, but a number of inadequacies still exist. For a detailed criticism of the Swedish financial statistics, see Bengt Senneby, "Kan inte statistiken över penningmarknaden förbättras?" Ekonomisk Revy, November, 1955, pp. 558-61, and Sune Tidefelt, "Förbättring av penningmarknadsstatistiken," Ekonomisk Revy, January, 1956, pp. 31-35.

financed. This latter shortcoming is especially important during the immediate postwar years when the government employed substantial amounts of funds derived from the liquidation of certain wartime agencies to finance new investment projects. In order to discover the full financial effect of government operations during this period estimates have been made of the cash proceeds of government borrowing and changes in the government's total holdings of cash assets. These calculations, which are presented in Table IV, indicate that government operations in each of the first three fiscal years after the end of the war had an expansive effect on the liquidity of the private sector of the economy.

Credit conditions remained relatively easy despite the high level of demand and the rapid expansion of credit that occurred during the first twelve months after the end of the war. The ease of market conditions is indicated by the fact that the National Debt Office early in 1946 was able to carry out refunding operations which increased the proportion of funded debt in the outstanding national debt from 73 to 85 percent. The net cash holdings of the commercial banks, i.e., vault cash and deposits at the Riksbank, decreased by 32 percent during the first twelve months after the war, but due to

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27 The National Debt Office, which is separate from the Treasury, is responsible for all government debt transactions and in addition carries on a certain amount of activity which is not accounted for in the government's budget. One of the more important of these non-budgeted activities is the raising of funds necessary for making working capital advances to various government enterprises.
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<tr>
<td>Treasury repayment of National Debt Office cash advances</td>
<td>250</td>
<td>550</td>
<td>390</td>
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<tr>
<td>Changes in Treasury’s bank balances</td>
<td>+ 126</td>
<td>- 89</td>
<td>- 14</td>
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<tr>
<td>Write-off for capital losses on current budget</td>
<td>203</td>
<td>22</td>
<td>50</td>
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<tr>
<td>Net of diverse income and expenditure accounts on the National Debt Office balance</td>
<td>- 32</td>
<td>- 23</td>
<td>- 10</td>
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<tr>
<td>Sum of income for financing capital budget</td>
<td>547</td>
<td>460</td>
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<tr>
<td>Capital budget: investment authorizations and others</td>
<td>978</td>
<td>749</td>
<td>645</td>
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<tr>
<td>National Debt Office advances of working capital to public authorities</td>
<td>16</td>
<td>40</td>
<td>11</td>
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<tr>
<td>Total expenditures</td>
<td>994</td>
<td>789</td>
<td>656</td>
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<tr>
<td>Cash deficit resulting from Treasury and National Debt Office operations</td>
<td>447</td>
<td>329</td>
<td>240</td>
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<tr>
<td>Increase of government debt</td>
<td>243</td>
<td>43</td>
<td>67</td>
</tr>
<tr>
<td>less: National Debt Office acquisition of private bonds</td>
<td></td>
<td></td>
<td>- 53</td>
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<tr>
<td>plus: cancellations against National Debt Office holdings of govt. debt</td>
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### TABLE IV (continued)

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<tr>
<td>plus: cancellation of Riksbank profits against National Debt Office obligation to Riksbank</td>
<td>. . . + 62 + 120</td>
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<td>Net increase from debt operations</td>
<td>211 25 12 530 332</td>
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<td>Repayed capital assets</td>
<td>451 134 220 234 296</td>
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<tr>
<td>Increase (-) or decrease (+) in Treasury and National Debt Office cash balances</td>
<td>-215 +170 +8 -176 +49</td>
<td></td>
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<tr>
<td>Total financing of cash deficit</td>
<td>447 329 240 588 677</td>
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</table>

the very large secondary reserves and the absence of an effective legal
reserve requirement or a strong traditional norm for the banks' cash
ratio, the reduction of cash holdings did not restrict credit expan-
sion. The commercial banks were able, with the assistance of the
National Debt Office, to replenish their cash holdings at will and
maintain them at the desired level through a reduction of their hold-
ings of government securities.

The Riksbank's purchase of the inflow of gold and foreign
exchange that resulted from the favorable balance of payments during
the first twelve months after the war added substantially to the
liquidity of the economy. These foreign exchange operations tended
to offset the sharp increase in the government's deposits at the Riks-
bank that resulted from the reduction in defense spending. The expan-
sive effect of foreign exchange purchases and the fact that the com-
mercial banks were maintaining their cash position by allowing their
holdings of short-term Treasury Bills to run off made extensive open
market operations by the Riksbank to support the level of long-term
interest rates unnecessary in 1945 and the greater part of 1946.

A condition of scarcity began to develop in the money and cap-
it al markets after June, 1946, but did not become serious until in
late 1947. The main factor responsible for the change in credit con-
ditions after mid-1946 was, in addition to the continued high level
of demand for credit by the private sector of the economy, the deficit
that appeared on the current account in the balance of payments. The
drastic change in Swedish foreign trade after the appreciation of the
krona in July, 1946 caused the Riksbank's net holdings of foreign exchange, exclusive of the loss incurred due to the change in the value of gold, to decrease by 760 million kronor during the second half of 1946.

The cash drain associated with the outflow of foreign exchange and the increase in the cash holdings of the private sector placed a heavy strain on the liquidity of the commercial banks. The reduction of the commercial banks' holdings of Swedish bonds and Treasury Bills was accelerated and amounted to 945 million kronor in the second half of 1946 as compared to 392 million kronor during the first half of the year. During the second half of 1946 the banks' sales of securities were for the most part bonds rather than Treasury Bills as had been the case in the earlier part of the year. The commercial banks' holdings of Swedish bonds and Treasury Bills amounted to 10.3 percent of total assets at the end of 1946 as compared with 23.8 percent at the beginning of the year.28

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28Only the Treasury Bills' component of the commercial banks' holdings of securities is reported separately. The greater part of the banks' portfolio of Swedish bonds is made up of government bonds while the remainder is composed of the bonds of various quasi-public mortgage institutions, i.e., the General Mortgage Bank, the City Mortgage Bank, and the Housing Credit Bank. The bonds of the central mortgage institutions are used to raise funds for the first mortgage loans of the various local and regional mortgage credit associations which are a basic element in the Swedish real estate financing system. The mortgage institutions' bonds, the yield on which determines the basic mortgage rates, are considered gilts-edged and are quoted practically at par with government bonds. The mortgage institutions' bonds are also subject to open market operations by the central bank.
The pressure placed on bond prices by the rapid reduction of the commercial banks' holdings was further augmented, especially during the last quarter of 1946, by sales from the savings banks and insurance companies as well as by new issues from mortgage institutions. A significant portion of the bond sales during the second half of 1946 was associated with the shifting of short-term commercial bank construction credits to long-term financing with the savings banks, insurance companies, and mortgage institutions. However, a substantial part of the bond sales was also made in anticipation of falling bond prices. The market's expectation of rising interest rates was apparently based on the assumption that the Riksbank would, as it always had in the past, permit its foreign exchange operations to influence market conditions.

In the second half of 1946 the Riksbank made large purchases of government bonds in the open market and in addition purchased directly large amounts of the new issues of the mortgage institutions. As a result of these various purchases the Riksbank's net holdings of Swedish bonds and Treasury Bills increased by 759 million kronor. These purchases offset the effect of the sales of foreign exchange and the tightening tendency in the capital market thereby preventing any noteworthy increase in the level of long-term interest rates in 1946.

The passive credit policy that was adopted by the Riksbank in 1946 was ultimately dependent upon the goal of maintaining the long-term interest rate at the three-percent level. As early as 1944 the authorities responsible for postwar economic planning had insisted that the Riksbank should in the future use all the means at its
disposal to prevent any disturbance to the level of the interest rate due to changes in foreign trade activity.

Within the context of the existing financial institutions and practices the goal of maintaining a stable three-percent yield on long-term government bonds seriously limited the ability of the Riksbank to pursue a restrictive credit policy. Even the possibility of pursuing a differentiated interest rate policy was limited by institutional conditions. The Swedish financial system, which is relatively small, does not have the detailed organization and highly specialized institutions of the British or American systems. There is, for example, no clearly discernible short-term open money market in Sweden. The temporarily idle funds of businesses and other organizations are deposited on the longer term time deposits of the commercial banks rather than placed in a bill market.29 This situation makes it extremely difficult for the central bank to bring about an increase of short-term rates without creating serious problems for its policy with respect to the long-term interest rate.

The one technical factor tending to restrict the expansion of credit by commercial banks in 1946 was unintentional and was removed before the end of the year. The limitation in question was due to the

legal provision concerning the right of the banks to receive deposits.  

The Bank Law of 1911, which is the basis for all modern Swedish banking regulation, called for a minimum ratio of 20 percent between the banks' own funds and total deposits. This regulation was revised during the interwar period to permit the deduction of the banks' holdings of cash and government securities from the sum of deposits requiring capital cover. The law was further amended in 1943 to permit an adjusted sum of deposits equal to eight times the banks' own funds. The restrictive effect of this regulation on commercial bank credit reached significant proportions in the second half of 1946 due to the absolute decline of the banks' primary and secondary reserves. The condition was eased somewhat by a rapid increase of capital, but for a number of individual banks the situation became critical. Although the President of the Riksbank favored the retention of the regulation because of its credit limiting effect, legislative action was taken in December, 1946 to ease the restriction by permitting an adjusted sum of deposits equal to ten times bank capital.

The existing regulations concerning commercial bank reserves, although not well suited to postwar financial conditions, did afford the monetary authorities some possibility of directly influencing commercial bank liquidity and the rate of credit expansion. The basic Swedish regulation concerning commercial bank reserves, the provisions

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of the Banking Law of 1911, requires the commercial banks to maintain a minimum reserve of cash and highly liquid assets equal to 25 percent of demand deposits. Since demand deposits are a relatively small portion of the total deposits of Swedish commercial banks, i.e., 45 percent in 1945, reserves required under the Bank Law of 1911 are less than the prudent reserves the banks normally hold. An attempt was made in 1937 to expand the law on reserve requirements in such a way that it could be used as a means of overcoming the handicap that excess bank liquidity placed on the pursuit of a restrictive monetary policy. A special enabling act gave the government the power in the case of necessity and at the request of the Board of the Riksbank to suspend the provision of the Banking Law of 1911 that permitted the commercial banks to include assets other than cash and Riksbank deposits in its required reserve. The Act further provided that the government could specify the minimum amount of the required reserve that the banks were to hold in the form of Riksbank deposits. The government was also empowered to extend the reserve requirement to all time deposits—exclusive of savings deposits—with a notice period up to one month.

The intention of the cash reserve requirement law of 1937, which, although never used, was still on the books in 1946-47, was clearly to make the central bank's discount rate and open market operations efficient means of controlling the volume of commercial bank credit. The identification of required cash reserves with the flexible interest rate policy of the interwar period seems to have been
the main reason why the 1937 Law was not actively employed in the immediate postwar period. It was not until 1949 after a substantial shift in the Swedish attitude toward monetary policy that the law on commercial bank reserves was completely revised and the monetary authorities acquired a suitable means other than open market operations of affecting bank liquidity.

It is apparent from the above discussion of the means at the disposal of the Riksbank that the monetary authorities were placed in a difficult position by the developments in the money and capital markets in late 1946. Unless new means were employed the Riksbank could not restrict credit without changing its interest rate policy. The situation became even more difficult when conditions on the balance of trade continued to deteriorate during the first half of 1947 and by mid-1947 foreign exchange reserves were reduced to only 25 percent of the level before the appreciation of the krona. The Riksbank's net foreign exchange transactions during the twelve-month period following the appreciation resulted in a decrease in the economy's supply of cash assets by 1,778 million kronor. However, during the same period the net result of the Riksbank's purchase and sale of securities was an increase of 1,372 million kronor in the bank's holdings of Swedish bonds and Treasury Bills. When all Riksbank transactions are taken into account the total supply of cash assets was decreased by 251 million kronor from mid-1946 to mid-1947. However, the contractive effect of Riksbank's operations was not sufficient to offset the increase in the supply of cash assets by 329 million kronor that resulted from the government's cash deficit in the fiscal year 1946/47.
Although the Riksbank's policy was not contractive, there was a precipitous decline in the ratio of the commercial banks' liquid assets to deposits during the two-year period from June, 1945 to June, 1947. The fall of the liquidity ratio from 37 to 12 percent was the result of a rapid absolute decrease in the banks' primary and secondary reserves rather than a sharp increase in the volume of deposits. Holdings of Swedish bonds and Treasury Bills decreased by approximately one billion kronor from mid-1946 to mid-1947. The decrease in the banks' liquid assets was counterbalanced by an increase of 1,169 million kronor in loans and discounts outstanding. The cash drain that resulted from the fact that commercial bank deposits only increased by 312 million kronor during this period may be attributed to a rapid increase in the public holding of cash and the outflow of foreign exchange.

The net result of the rapid expansion of commercial bank credit to the private sector of the economy and the cash drain experienced during the twelve months after the appreciation of the krona was a reduction of the cash ratio to a figure substantially below the prewar normal, and a reduction of the percentage of total assets held in the form of Swedish bonds and Treasury Bills to 7 percent as compared with 5 percent during the prewar period. Thus, by mid-1947 the commercial banks had liquidated their security holdings and fully realized the credit potential that they had possessed at the end of the war. At this point, however, further expansion of credit to the private sector of the economy became dependent upon an increase in the banks' supply of liquid assets.
The rapid expansion of commercial bank credit and the volume of Riksbank security purchases that were required to maintain stable interest rates raised the question of an increase in the level of interest rates as a means of slowing the rate of monetary expansion and combating inflation. The Banking Committee's position on this question was that:

... an increase of the interest rates would counteract the stabilization efforts through an increase of the pressure on costs. The effects of the policy followed with regard to the supply of the means of payment and credit giving seems, however, to give reason to emphasize in this connection the importance of the fact that other measures be taken for the limitation of the credit volume.  

Although clearly alarmed about the rate of credit expansion and increased symptoms of suppressed inflation, the monetary authorities denied being responsible for the situation. The Riksbank's position was that within the limitations imposed by the scope of its authority and the means at its disposal the policy pursued had the maximum restrictive effect on the financial system. The fact that the total assets of the Riksbank did not show any substantial increase in spite of an increase of currency in circulation and that the open market purchases of government securities did not equal the sales of gold and

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31 By other means the Banking Committee was referring to the government's general economic policy and not actions by the Riksbank. See, Bankoutskottets utlåtande, No. 6, 1948, p. 12.

foreign exchange were cited by the monetary authorities as evidence of the Riksbank's contribution to monetary restraint.

In answer to the charge that its open market operations had increased liquidity and that this had been a decisive cause of the expansion of imports and resulting balance-of-payments disequilibrium the Riksbank denied that its policy contributed in any way to the exchange crisis of 1947. The Board of the Riksbank claimed that "the purchase of Treasury Bills and bonds has been the result not a cause for the heavy volume of imports and the rapid decline in foreign exchange reserves." The Riksbank's position was that due to the change in the composition of commercial banks' assets that resulted from wartime fiscal policy, postwar open market operations should be viewed as the equivalent of prewar rediscounting transactions. The Riksbank claimed that

... purchases have been made because of a decline in the liquidity of the banking system, which in turn is a direct result of the payment for the increased volume of imports. Thus they represent both directly and indirectly the manner in which the sale of foreign exchange was financed.

The Board, however, tended to contradict itself when it also said that,

After the war possibilities for normal investments reappeared and consequently the credit institutions sold a large portion of their holdings of Treasury Bills and bonds.

\[^33\text{Ibid.}, p. 8.\]  \[^34\text{Ibid.}, p. 7.\]  \[^35\text{Ibid.}, p. 8.\]
IV. SUMMARY AND CONCLUSIONS

The monetary policy pursued in Sweden during the immediate post-war period 1945-47 is symptomatic of the basic inconsistency that characterized Swedish economic policy during these years. The development of the economy during this period indicated strong inflationary pressures in almost all sectors. The imbalance of the domestic economy was further aggravated by rising international prices. However, continued belief in the imminence of a major postwar depression and strict adherence, for political reasons, to the guidelines for economic policy that had been laid down at the end of the war prevented Swedish policy makers from recognizing the seriousness of inflationary disturbances and promptly formulating a thorough and consistent anti-inflationary policy. The general means of monetary and fiscal policy continued to be used in an expansive manner at the same time that efforts were being made to alleviate inflationary pressures.

The anti-inflationary measures undertaken during this period were generally palliative controls put on to check inflationary price increases rather than eliminate the source of imbalance. The imposition of strong direct controls over prices, imports, and investment was, however, delayed until a threatened foreign exchange crisis made action unavoidable. The nature of the controls employed was such that they were able to repress inflation and prevent any large overt price increases, but they did not prevent the continued growth of excess demand, purchasing power, and liquidity.
The pressure on anti-inflationary controls and the economic distortions associated with their use was intensified by the use of the other means of economic policy. The principal measures of monetary and fiscal policy undertaken during this period were directed toward the goals of full employment, rapid growth of real income, and the redistribution of income rather than the maintenance of a stable value of money. The dangers to the economy instead of being on the cost side, as had been anticipated, were on the demand side with an enormous import surplus and a rapid increase in private investment activity. Over-expansion of demand stimulated by the removal of the wartime sales tax, the appreciation of the krona, the lowering of the interest rate, and the maintenance of excessively easy credit conditions were the principal factors impeding the achievement of both internal and external equilibrium.

Monetary policy throughout the immediate postwar period was designed primarily as a support for the government's housing program and income redistribution plans and secondarily to assure that monetary factors would in no way interfere with the maintenance of full employment. The uncompromising stable low interest rate policy required by these goals acted as a stimulant to all types of investment when in fact a curtailment was necessary.

The appreciation of the krona in 1946, the major exception to the passive counter-cyclical nature of monetary policy during this period, was directed toward the insulation of the domestic economy from external price increases. However, as a result of its not being
supported by a restrictive domestic monetary policy, the appreciation served to speed up the exodus of foreign exchange and thereby directly contributed to the record large balance-of-payments deficit that developed in 1947.

Given the means of control at its command and the structure of the Swedish financial system, the Riksbank was forced to engage in excessively large open market operations in order to compensate for the loss of foreign exchange reserves and maintain stable low interest rates. The Riksbank's policy thereby served to maintain liquidity in the capital and credit markets and prevent any financial restrictions being placed on the rate of growth of investment. The fundamental inconsistency of the monetary policy pursued during the immediate post-war period and the source of its inefficiency stem from the fact that the policy of low stable interest rates directed toward housing policy and rapid economic growth had undesirable side effects via the quantity of money which through its contribution to inflationary pressures tended to slow the rate of growth and ultimately forced the government to curtail housing construction as one of the means of controlling inflation.

The Board of the Riksbank defended its policy on the grounds that there was no noteworthy increase in the assets of the central bank and that the open market purchase of securities less than completely offset the sale of gold and foreign exchange. This, of course, means that the Riksbank did not itself create a net increase in the public's supply of the means of payment. The Riksbank's policy may,
however, still be considered expansive in the sense that it offset a contractive tendency. That is to say, if the Riksbank through its open market operations had not made possible the liquidation of the commercial banks' securities and the expansion of credit that was associated with it, the outflow of foreign exchange would have caused a corresponding net decrease in the supply of money. In monetizing the commercial bank holdings of securities the Riksbank indirectly provided the means of financing a substantial portion of the investment activity that was a critical factor in the inflationary pressures of the immediate postwar period.

The fact that the monetary authorities permitted the outflow of foreign exchange to serve as one of the principal means by which liquidity in the credit market was reduced to a normal level rather than adopting some alternative means of securing this end presented a serious handicap to the government's stabilization policy. A logical extension of the foreign exchange policy that was adopted in 1946 would have required an additional appreciation of the krona in 1947 to offset the continued increase in the international price level. The low level of foreign exchange reserves was one of the major factors preventing the pursuit of such a foreign exchange policy in 1947 and thereby exposed the domestic economy to additional inflationary pressures of external origin.

The Stockholm School's monetary theory, as expressed in the works of Ohlin and Myrdal, was not an adequate basis for monetary policy under the conditions that existed during the immediate postwar
years. The principal disadvantage of the policy of low stable interest rates and the source of its inefficiency was the limitation which it placed on the Riksbank's credit policy by causing open market operations to be directed solely toward the maintenance of an unchanged level of interest rates. The control of commercial bank liquidity and of the rate of credit expansion was thus lost. This limitation and its undesirable consequences are not, as later developments in Sweden clearly indicate, a necessary and inescapable result of the policy of maintaining low interest rates. For example, an attempt could have been made to limit the effect of open market operations on bank credit through the introduction of legal reserve requirements designed to sterilize some portion of the commercial banks' excess liquidity. The failure to develop the means of monetary policy in such a way that a restrictive credit policy could have been pursued independent of the Riksbank's goal with respect to the level of interest rates was the result of the monetary authorities' acceptance of the Stockholm School's doctrine of the passive nature of the quantity of money in the operation of the economy.

As a result of their concentration on the effect of the interest rate on the demand for credit and lack of attention to its effect on supply, the Stockholm School economists and the monetary authorities seriously underestimated the size of the change in the level of interest rates that would be required to have a significant restrictive effect on the operation of the economy. A relatively small increase in the level of interest rates, i.e., from one-fourth to
one-half percent, may have been sufficient, if supported by the introduction of either cash or secondary reserve requirements, to have a significant restrictive effect on commercial bank credit through the capital loss it would impose on those banks attempting to liquidate secondary reserves.

One of the most vigorous proponents of this view was Per Jacobsson who claimed that,

As regards Sweden, which suffered no war damage, there can be little doubt that, had the country's monetary policy been better managed than was actually the case, an interest rate level of about 3.5 percent . . . would have been quite high enough to ensure adequate balance between savings and investment.36

There is, however, little reason to believe that monetary policy alone would have been sufficient to establish equilibrium and to attain the multiple goals of the government's policy under the seriously disturbed conditions of the immediate postwar years. Too great an emphasis on monetary policy could have resulted in a sacrifice of the high level of investment activity that was required to catch up the lags of the war years and thereby assure the future rate of economic growth and the nation's position in international trade. However, a policy of moderate flexibility of the level of interest rates and/or the introduction of direct controls of commercial bank credit would have permitted a more rapid adjustment of economic policy to the problems of the immediate postwar years. The unwillingness to employ

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36Per Jacobsson, "Return to an Active Credit Policy," Skandinaviska Banken, Quarterly Review, October, 1951, p. 87.
general means of monetary and fiscal policy forced the government to reintroduce the wartime system of direct controls which developments in subsequent periods showed to be inefficient and undesirable under peacetime conditions.

In summary, our findings tend to confirm the judgment of the ECA's study of developments in Sweden, which concluded that,

In general, an increase in the money supply and low rates of interest artificially maintained by the Riksbank's open-market operations, have contributed to the inflationary pressure in Sweden and, to some extent, to the expansion of consumption and investment.37

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CHAPTER IV

THE DILEMMA OF MONETARY POLICY IN THE
STABILIZATION PERIOD, 1947-1950

I. INTRODUCTION

The monetary policy pursued from the end of 1947 to the outbreak of the Korean War in mid-1950 was essentially the same as the policy of the immediate postwar period in so far as the maintenance of stable low interest rates continued to be the dominant aim of the Riksbank operations. The period, however, was one of transition in the monetary authorities' attitude toward the active use of monetary controls to combat inflation. The failure of the government to supply the correct framework of direct controls and fiscal policy, the imminent foreign exchange crisis, and the rapid expansion of commercial bank credit caused the adequacy of the passive credit policy of the immediate postwar period to be seriously questioned. Credit restraint was formally made a goal of monetary policy and late in 1947 an attempt was made to limit the supply of credit to the private sector of the economy by means of a program of voluntary credit restraint on the part of the commercial banks and certain other financial institutions.

The desire to restrict the supply of credit while at the same time maintaining stable interest rates created a dilemma for the Riksbank. For a certain time in 1947-48 the monetary authorities were
forced to compromise both objectives. It was during this period that monetary policy, for the first time in the postwar period, became the subject of intensive political controversy and public debate. The principal question raised was whether the Riksbank's efforts to restrict credit were technically efficient and adequate to make any significant contribution to the stabilization of prices.

The moderation of inflationary pressures beginning in mid-1948 as a result of external developments and the restrictive policy adopted by the government permitted a temporary resolution of the monetary authorities' dilemma. Late in 1948 it became apparent that although credit restraint was being formally retained as an objective of monetary policy, the Riksbank's operations were being directed exclusively toward the stabilization of interest rates; moral suasion and the non-monetary means of policy employed by the government were relied upon to prevent an excessive expansion of credit. Thus, the monetary restraint employed in 1949 referred only to the indirect control of the demand for credit and the Riksbank's operations were actually permitted to be expansive with respect to the supply of money. The krona was devalued in September, 1949 and a new wave of commercial bank credit expansion began in the last quarter of the year and persisted through 1950 and 1951. Wage-price stability ended abruptly in 1951 when Sweden experienced her most rapid rate of inflation in the post-war period. The question may be raised as to whether the abandonment of the stable low interest rate policy and the pursuit of a more active
credit policy could have contributed to the maintenance of the relatively stable economic conditions that were attained in 1948-49.

II. ECONOMIC DEVELOPMENTS AND GOVERNMENT POLICY, 1947-1950

The period under review is marked by a reduction in the extent of excess demand and a consequent moderation in the symptoms of repressed inflation. The two main factors influencing economic developments during the period were changes that occurred in the international economy and the revision of the government's economic policy that resulted in the introduction of a number of highly restrictive direct controls, which, after a period required to perfect their administration and make them effective, served as the basis for a wage-price freeze.

Beginning with the new import restrictions in March, 1947 the government's economic policy was made progressively more restrictive. However, the restrictive measures undertaken in 1947 were introduced in a piecemeal fashion and were essentially hastily improvised emergency measures directed toward the prevention of a foreign exchange crisis. Twice during 1947 the government called conferences of political leaders and private interest groups to discuss the measures that should be taken to combat inflation, but no agreement could be reached.¹

It was not until early in 1948 that a consistent new line of policy was formulated. The goals of the new policy were summarized under the following eight points:

1. A balance between exports and imports should be achieved by increasing the proportion of Swedish output that is exported.

2. Priority will be given to export industries in the granting of industrial and residential building permits, the allocation of import licenses, the distribution of controlled commodities, and the extension of credit.

3. Production must be increased and proper scope given to investment showing the highest productivity.

4. There must be close cooperation and a concerted effort by the government authorities and all groups in the society, including industry and labor, to bring about the necessary increase in production and exports.

5. While the above policies may lead to an increase in the standard of living in the long run, the immediate situation necessitates a reduction of consumption.

6. The volume of investment must be kept within the amount of savings, and less necessary investment curtailed by a selective restriction of credits brought about through a close cooperation between the Riksbank and the various credit institutions, but without raising interest rates.

7. Great restraint is required in public investment which has the effect of further increasing the standard of living, and great
economy must be observed in all public expenditures. The overbalancing of the government's budget (i.e., the current working budget) must be maintained at least at the present level.

8. The program requires a stabilization of prices and money income. The sacrifices entailed in such stabilization will be the common contribution to the strenuous efforts that must be made to lay a foundation for continued economic progress.2

The policy adopted in 1948 represents a number of significant changes in the Swedish government's view of postwar economic problems. First, the new policy goals indicate that the forecast of a serious postwar depression was, at least temporarily, abandoned and the problem of excess demand and inflation recognized as the principal immediate threats to the stability of the economy. Second, the disequilibrium in the balance of payments, which in 1946-47 had been treated as an essentially short-term disturbance, came in 1948 to be viewed as a more fundamental long-term problem. The expansion and diversification of the export industry was the principal objective of the new five-year plan that was drawn up in connection with the 1948 policy program.3 The elimination of inflation was considered a prerequisite for the success of the long-term program.

Foreign economic developments exerted a major influence on the Swedish economy during the period under review. The recession in the

United States and its dampening effect on the level of world trade in 1948 and 1949 tended to support the restrictive policy that was adopted in Sweden, but at the same time it aggravated the Swedish balance-of-payments problem. A reduction in the Swedish terms of trade placed an added burden on import controls. Sweden's participation in the widespread devaluation of European currencies in 1949 heavily influenced domestic economic conditions prior to the outbreak of the Korean War and had important consequences for the development of prices in subsequent periods. The relatively stable economic conditions that were attained in 1948-49 were brought to an end by the boom in world trade that accompanied the recovery of United States' economy late in 1949 and the outbreak of the Korean War in mid-1950.

The change in the character of economic conditions in Sweden did not become apparent until the second half of 1948. The consumers' price level rose by 4 percent during the first half of the year and the GNP deflator increased by 6 percent for the year as a whole, but by the last quarter of 1948 it was quite clear that, although no decline had occurred, the peak of the initial postwar boom had been passed.4 From mid-1948 to mid-1950 the cost of living rose by only 2 percent. The improvement in the balance between aggregate supply and demand that occurred from 1947 to 1949 was the result of both a reduction in the rate of increase of demand, especially consumers' demand, and an increase in the rate of growth of supply (see Appendix, Table XX).

The gross domestic product of Sweden increased by 17 percent in real terms during the years 1948-50. The rate of growth in these years was exceptionally high relative to both the prewar period and subsequent postwar years. Full employment having been attained at the end of the war, the increased production was mainly the result of productivity increases caused by the high rate of investment during the immediate postwar years. The increases in domestic production were sufficiently large to offset the reduction in the volume of imports brought about by the government's efforts to cope with the disequilibrium in the balance of payments and thereby prevented the efforts of the authorities to achieve external equilibrium from further disturbing the balance of the domestic economy.

On the demand side of the economy there was a substantial retardation in the rate of growth of private investment and consumption expenditures. A reduction in gross private investment by 6.8 percent in 1948 and by 4.4 percent in 1949 was responsible for slowing the rate of growth of gross investment in these years. The reduction in gross private investment from 1947 to 1949 may be attributed to a dampening of the propensity to invest due to the cyclical decline in business activity internationally and the strict limitations imposed by the government on the issuance of construction permits. According to the Konjunkturinstitutet the decline in Swedish export prices in 1948 was a major factor explaining the fact that industry only planned on
increasing its investment by 9 percent in 1949 as compared with the 19 percent increase that had been planned for 1948.\(^5\)

The Swedish construction control system and the manner in which it was applied during the years 1947-50 was such that it was mainly the construction of private housing rather than industrial construction that was influenced by the issuance of building permits.\(^6\) The Konjunkturinstitutet's index of the volume of housing construction, based on 1946, fell from 101 in 1947 to 72 in 1949 and stood at 78 in 1950 indicating that a reduction in housing construction was the main factor in the moderation in the rate of gross private domestic investment in 1948 and 1949. The acceleration of the rate of private investment in 1950 was the result of a sharp increase in investment in machinery and equipment, which although somewhat retarded in 1949, increased rapidly throughout the period 1948-50 (see Appendix, Table XXIV).

Another factor tending to reduce the rate of expansion of aggregate demand after 1947 was a substantial retardation in the rate of increase in disposable household income. The increase in disposable income in 1949 was only 3 percent as compared with 17 percent in 1947. The moderation in the rate of increase of consumption expenditures was, however, even greater, i.e., from 8 percent in 1947 to 1 percent in

\(^5\)Ibid., pp. 17-18.

\(^6\)For a detailed discussion of the nature and operation of the system of construction controls, see "P.M. angående byggnadsreglerings verkningssätt," Betänkande angående generella metoder och fysiska kontroller inom investeringspolitiken, SOU 1953:6, pp. 115-59.
1949. Thus there was a sharp increase in household savings from 3.8 percent of income in 1947 to 9.4 percent of income in 1949. Household savings again declined in 1950 as consumption expenditures rose rapidly relative to income in anticipation of price increases that were generally expected at the end of the year.

In addition to a reduction of imports by means of restrictive licensing arrangements and the curtailment of investment activity through the controls placed on construction activity, a number of other restrictive measures were employed by the Swedish government in 1948 and 1949. Among the more important of these other measures were a sharp increase in indirect taxes, a directive to the price control authorities instructing them that price increases were only to be permitted in exceptional cases where cost increases resulted in losses or an unreasonably low yield, rationing of certain consumers' goods, limitations on the size of dividends paid out, sterilization on blocked account at the Riksbank of a portion of retained corporate earnings, and a general wage freeze.

The Swedish authorities continued to place the main emphasis on the role of costs in causing inflation and the stabilization of the level of money wages was thought to be the key element in anti-inflationary policy. The central labor organizations at the request of the government urged their affiliated unions to use great restraint in their wage demands for 1948. However, the contracts signed at the beginning of the year resulted in an increase of 4.5 percent in the level of industrial wages. It was partly as a result of these wage increases
that the government decided to raise the level of indirect taxes. The tax induced increase in the level of consumers’ prices during the first half of 1948 along with the higher food prices that resulted from the poor harvest in 1947 offset the increase in money wages and prevented any significant increase in real wages. The government's tax policy was a major factor in the labor organizations' decision in the autumn of 1948 to agree to a wage freeze in which all 1948 collective agreements would be extended unchanged in 1949. In return for the wage freeze the government committed itself to maintaining stable consumer prices so as to prevent any reduction in real wages. This commitment was of the utmost importance in the formulation of central bank policy from the last quarter of 1948 through the first half of 1950.

Although there was a closer approximation of equilibrium at stable prices and full employment in 1949 than in 1947, there still existed strong latent inflationary pressures whose suppression required the continued use of powerful restrictive measures. Evidence of this situation was given when the government announced in 1949 that a continuation of the wage freeze in 1950 was essential to assure the continued stabilization of the economy. The unions agreed with considerable reluctance to the continuation of the wage freeze and notified the government early in 1950 that they would not consider any further prolongation of the agreement.

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The wage freeze prevented the level of contractual wages from increasing in 1949 and 1950, but it did not stop the wage drift. (See Figure 2, page 77.) Despite the government's restrictive policy and the moderation of the investment boom induced by foreign developments, the demand for labor remained very strong. The improvement in the balance between the supply and demand for labor that occurred after 1947 was not evenly distributed throughout the economy and in a number of sectors, such as the metals and construction industries, substantial shortage of labor persisted. Due to the nature of the labor market situation the increases that resulted from the wage drift were very unevenly distributed between different occupations. The Swedish labor movement's "solidarity principle," which calls for the elimination of inequities and a general leveling of the structure of wages, makes wage demands especially sensitive to changes in the structure of wages. 8

Thus the uneven rate of wage drift in 1948 and 1949 built up tensions which heavily influenced wage developments in 1951 when free collective bargaining was resumed and the wage level rose by more than in any other single year in the postwar period. 9

It was mainly by means of direct controls rather than fiscal policy that the government made its contribution to the stabilization


9Rehn considers the uneven rate of wage drift and the resulting distortion of the structure of wages the cause of the so-called wage explosion that occurred in 1951. See, Rehn, op. cit., p. 103.
of the economy in 1948 and 1949. During part of the period fiscal policy actually worked counter to the goals of the anti-inflationary policy. As Table III, page 81, indicates, the contractive effect of the government's budget on private incomes was sharply reduced in 1948 and 1949 as compared with 1947. The failure to achieve the substantial surpluses on the current budget that were called for in the annual budget proposals to the Riksdag resulted in large cash deficits on the total budget in the fiscal years 1948/49 and 1949/50. The deficit on the total budget rose from 159 million kronor in 1948/49 to 427 million kronor in 1949/50. The financing of these deficits had a substantial expansive effect on the liquidity of the banking system in 1948 and 1949 and greatly complicated the pursuit of monetary policy.

Government expenditures rose rapidly relative to the GNP and in 1950 the proportion of the GNP accounted for by the public sector amounted to 20 percent as compared with 18 percent in 1947. The increased expenditures were the result of the introduction in 1948 of the new social welfare program that had been approved by the Riksdag in 1946 and the utilization in 1948 and 1949 of funds that had been appropriated on the capital budget in previous years but not expended because of shortages in the economy. The new social welfare program increased child allowances and benefits for old age pensions and raised expenditures on social services by 771 million kronor, as compared with 1947, which was an increase from 7.8 percent of national income to 10.6 percent. The increase in investment expenditures by the public sector, which in real terms amounted to 22 percent from 1947 to 1950, was
exceptionally large and more than counterbalanced the reduction in private investment that occurred in 1948 and 1949.

In addition to the better balance that was attained in the domestic economy there was an improvement in the balance of payments in 1948-49. The deficit on trade account, mainly as a result of the restrictions placed on imports, was reduced from 1,985 million kronor in 1947 to 90 million in 1949, which is the first year in the postwar period that Sweden showed an annual surplus on current account. As Figure 1, page 69 shows, the Riksbank's foreign exchange reserves increased by 800 million kronor from June, 1948 to December, 1949 and remained stable in 1950.

When Great Britain devalued the pound sterling relative to the US dollar in September, 1949, the question arose as to whether Sweden should also devalue. The Swedish dollar deficit was not serious, although Swedish exports, especially forest products, were experiencing difficulties and declining prices in the North American trade. The Swedish government took the position that the necessity of preserving the competitive position of Swedish exports in the sterling area made a devaluation of the krona parallel with the pound unavoidable. Consequently, Sweden followed Britain's lead and devalued the krona by 30.5 percent with respect to the dollar.

The coincidence of the devaluation and the cyclical recovery of the American economy resulted in a rapid increase in Swedish export as well as import prices reckoned in kronor. The index of export and import prices rose by 21 and 19 percent respectively from the third
quarter of 1949 through the first half of 1950. It was only through the use of subsidies that the government was able to prevent the devaluation from causing an increase in the cost of living and thereby breaking the wage freeze. When the rate of increase in the level of international prices was further accelerated by the Korean crisis in June, 1950, it became obvious that it would no longer be possible to maintain unchanged domestic prices.

Swedish foreign trade expanded rapidly after the devaluation of the krona. The expansion of imports as well as exports was encouraged by the liberalization of trade restrictions that was undertaken late in 1949 as part of Sweden's participation in the European Recovery Program. The growth of foreign trade gave impetus to an expansion of domestic economy. Business reported plans to increase its investment by 19 percent in 1950 as compared with 1949 and applications for building permits rose by 30 percent from 1949 to 1950. The period ended with renewed threats of inflation, negotiations by labor for wage improvement, end of devaluation-subsidization protection of the cost of living, increased international prices, expansion of credit, increased demand from rising incomes, and decreased supplies. These conditions produced a wage-price explosion in 1951. The details of this development will be examined in Chapter V.

In summary it can be said that economic developments during the period under review were, from the point of view of the goals of the government's economic policy, very favorable. In comparison to the immediately preceding years, most indications pointed to a temporary
equilibrium or at least an easing of inflationary pressures. The
growth of production was particularly large; a five percent annual
average increase of the GNP in the years 1948-50. Employment was main-
tained at a high and stable level and, although the intensity of demand
continued to exert a distorting and disorganizing influence on the
labor market, the extent of the excess demand for labor was substan-
tially reduced. The increase of consumers' prices, aside from the
effect of the government's tax policy during the first half of 1948,
was very moderate; the index of consumers' prices rose by only 1 per-
cent per year from August, 1948 to August, 1950. The foreign exchange
reserves increased during the greater part of the period and by mid-
1950 had recovered substantially from the dangerously low level of
1947. The economic development over the three years 1948-50 can be
described best in terms of a period of continued inflation and excess
demand held in check by the income stabilization program adopted by
the government and the eventual effectiveness of the controls that had
been introduced earlier.

III. MONETARY POLICY AND FINANCIAL DEVELOPMENTS

Financial Developments June, 1947-June, 1950

The three phases that can be distinguished in Swedish financial
developments from mid-1947 to the outbreak of the Korean War corre-
spond roughly to the three fiscal years that comprise the period. The
first phase, fiscal year 1947/48, is marked by a rapid decline in the
liquidity of financial institutions, generally tight credit conditions,
a reduction in the rate of credit expansion by the commercial banks, and a rising tendency for those interest rates not subject to the Riksbank's stabilization policy. The second phase, fiscal year 1948/49, involved a significant improvement in the liquidity of the financial system, easier credit conditions accompanied by a reduction in the volume of commercial bank credit outstanding, and a stabilization of the level of interest rates at a somewhat lower level than in the previous period. During the third phase in the fiscal year 1949/50 the liquidity of financial institutions increased at a slower rate, the volume of commercial bank loans and advances increased at a very rapid rate, and the level of interest rates remained relatively stable. In the following discussion special attention will be given to the operations of the Riksbank and their influence on financial developments during the three phases that have been identified.

The end of the credit boom, 1947/48. The outstanding feature of financial developments during 1947/48 was the sharp retardation in the rate of credit expansion by the commercial banks. After having increased by 6.8 percent during the first half of 1947 commercial bank loans and advances rose by only 2.6 and 1 percent in the second half of 1947 and the first half of 1948 respectively.

The development of commercial bank credit was in accord with the expressed aim of monetary policy. The monetary authorities' serious concern over the rate of credit expansion and their intention to take countermeasures was first made evident in March, 1947 when the Riksbank initiated a series of conferences with representatives of the
commercial banks, saving banks, and rural credit associations to explore the possibility of securing their cooperation in restricting credit. The conferences resulted in an agreement on voluntary credit restraint that was announced on September 15, 1947.

The terms of the 1947 agreement on credit restraint were rather vaguely formulated and no provision was made for the supervision of restrictive actions by the Riksbank or penalties for the failure of the banks to fulfill their undertaking. The degree of quantitative restraint intended was not specified nor was any qualitative restriction stated other than the recommendation that caution be used in granting credits in order to prevent speculative tendencies and the financing of excessive inventories. ¹⁰

The modification of Swedish monetary policy that was induced by domestic inflationary pressures and foreign exchange problems in 1947 was not as extensive as in a number of other European countries where similar problems resulted in the complete abandonment of the policy of cheap money that had been pursued in the immediate postwar years. ¹¹ In Sweden the goal of credit restraint was added to the goal of maintaining stable low interest rates. However, this combination of goals soon showed itself to be extremely troublesome. The Banking

¹⁰Bankoutskottets utläsande, No. 8, 1947, p. 6.

Committee in its review of the monetary policy pursued by the central bank in 1947 said,

The Riksbank during the past year has been confronted with the difficult problem of simultaneously holding the market so easy that the desired level of interest rates could be maintained and so tight that the volume of credit was reduced.\(^\text{12}\)

The dilemma posed by the simultaneous pursuit of credit restraint and stable interest rates was more academic than real in 1947. The monetary authorities continued to place the highest priority on the maintenance of stable interest rates. The Banking Committee of the Riksdag in its directive to the Riksbank stressed that the bank should not create or maintain a condition of excess liquidity,\(^\text{13}\) but the Committee did not state whether it meant excessive with respect to the desired level of interest rates or general economic conditions. It was clear, however, that in the Committee's view credit restraint was to be achieved primarily by means of a reduction in the demand for credit brought about by non-monetary means of control, especially construction permits. Thus the goal of credit restraint was subordinated to the aim of interest rate stabilization and the Riksbank was not given any direct function in securing credit restraint.

It is not surprising in view of the formulation of monetary policy that was enunciated in 1947 that the Riksbank's operations

\(^{12}\text{Bankoutskottets utlåtande, No. 6, March, 1948, p. 12.}\)

\(^{13}\text{Bankoutskottets utlåtande, No. 8, June 19, 1947.}\)
during the fiscal year 1947/48 resulted in a net expansion of the money base by 208 million kronor, which is almost twice as large as in the previous fiscal year. Riksbank operations were sufficiently large to offset the change in the government's financial operations that resulted from a reduction in the cash deficit on the government's total budget by 27 percent to 240 million kronor.

The net expansive effect of the Riksbank's operations for the fiscal year as a whole was mainly the result of a heavy concentration of security purchases during the second half of 1947 when the increase in the money base amounted to 433 million kronor. During the first half of 1948, on the other hand, the high level of foreign exchange sales and a decline in the volume of security purchases resulted in a net contraction of 225 million kronor. The Riksbank was materially assisted in the first half of 1948 by the deposit of corporate profits on blocked accounts as a result of the profit sterilization legislation that was adopted in 1947. Thus, it appears that the Riksbank's only positive contribution to credit restraint came well after the beginning of the voluntary restraint program, the introduction of other restrictive measures by the government, and the initial slowing in the rate of credit expansion.

The large scale of the Riksbank's purchase of securities during the second half of 1947 at the same time that steps were being taken to restrict credit was the result of the problems encountered in the attempt to stabilize interest rates. Heavy speculative sales of gilt-edged securities by private holders and financial institutions
severely tested the Riksbank's interest rate policy throughout 1947/48. The deterioration of the liquidity of the credit market institutions and the increase in short-term interest rates that accompanied the outflow of foreign exchange in 1947/48 called forth strong expectations of an increase in the discount rate and long-term interest rates.

Speculative activity in the government bond market was particularly strong during the last quarter of 1947, but the Riksbank refused to permit a general increase in the level of interest rates on the grounds that:

If decisive importance is attached to such activity in the money and capital markets, the result may be that insufficient attention is given to the effect of the change in interest rates upon the various factors which together determine general economic equilibrium.14

The monetary authorities compared the situation in the last quarter of 1947 with the events in the winter of 1939/40 when a liquidity crisis was permitted to drive up interest rates with what the authorities called "disastrous" consequences for the construction industry.

The Riksbank's operations in the open market during the fiscal year were sufficient to stabilize interest rates on long-term government bonds and the closely related basic first mortgage rate (see Figure 6, page 90), but there was a general rising tendency for other interest rates. Expectations of an increase in long-term interest rates and tight conditions in the credit market caused a heavy demand for funds in the capital market. As Table V shows, private borrowing

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14 *Banköutskottets utlåtande*, No. 6, 1948, p. 9.
<table>
<thead>
<tr>
<th>Year</th>
<th>Government</th>
<th>Mortgage Institutions</th>
<th>Corporate Business &amp; Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central</td>
<td>Local</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>1946</td>
<td>+676</td>
<td>+54</td>
<td>+730</td>
<td>+132</td>
</tr>
<tr>
<td>1947</td>
<td>-482</td>
<td>+89</td>
<td>-393</td>
<td>+289</td>
</tr>
<tr>
<td>1948</td>
<td>-35</td>
<td>+101</td>
<td>+66</td>
<td>+258</td>
</tr>
<tr>
<td>1949</td>
<td>-306</td>
<td>+156</td>
<td>-150</td>
<td>+124</td>
</tr>
<tr>
<td>1950</td>
<td>+132</td>
<td>+127</td>
<td>+259</td>
<td>+162</td>
</tr>
<tr>
<td>1951</td>
<td>-426</td>
<td>+198</td>
<td>-228</td>
<td>+298</td>
</tr>
<tr>
<td>1952</td>
<td>+427</td>
<td>+124</td>
<td>+551</td>
<td>+264</td>
</tr>
<tr>
<td>1953</td>
<td>+2,021</td>
<td>-42</td>
<td>+1,979</td>
<td>+259</td>
</tr>
<tr>
<td>1954</td>
<td>+1,492</td>
<td>-131</td>
<td>+1,361</td>
<td>+283</td>
</tr>
<tr>
<td>1955</td>
<td>+585</td>
<td>+35</td>
<td>+620</td>
<td>+490</td>
</tr>
<tr>
<td>1956</td>
<td>+21</td>
<td>+131</td>
<td>+152</td>
<td>+444</td>
</tr>
<tr>
<td>1957</td>
<td>+669</td>
<td>-51</td>
<td>+618</td>
<td>+737</td>
</tr>
<tr>
<td>1958</td>
<td>+630</td>
<td>+46</td>
<td>+676</td>
<td>+706</td>
</tr>
<tr>
<td>1959</td>
<td>+1,747</td>
<td>-55</td>
<td>+1,692</td>
<td>+740</td>
</tr>
<tr>
<td>1960</td>
<td>+732</td>
<td>+84</td>
<td>+816</td>
<td>+873</td>
</tr>
</tbody>
</table>

Source: *Riksbanks årsbok*, selected years.
reached a postwar record level in 1947 and, although somewhat reduced in 1948, it remained at a very high level. New issues of corporate stocks and debentures in 1947 surpassed the previous record figures of the late 1920's as a result of the heavy demand for funds. The interest rate on prime industrial bonds rose from 3 percent early in 1947 to 3.25 percent at the end of the year and reached 3.5 percent in mid-1948.

A substantial portion of the pressure of demand in the capital market in 1947/48 was offset by debt management operations. The National Debt Office in the course of increasing the outstanding national debt by 67 million kronor reduced the placement of funded debt by 392 million kronor and increased the floating debt by 459 million kronor. The funded debt that was retired came mainly from the market and the banking system, while almost all of the floating debt issued was placed in the Riksbank.

The monetary authorities made several innovations in the technique of open-market operations and debt management in 1947/48 in an attempt to achieve the greatest degree of restraint possible within the narrow limits set by the objective of interest rate stabilization. Early in 1947 the Board of the Riksbank stated that it did not think that an increase in the level of short-term interest rates independent of the long-term rates was desirable because of its probable effect of stimulating speculation as to an eventual increase in long-term rates. However, beginning late in 1947 the bank did pursue a differentiated interest rate policy. In addition to permitting an increase in the
level of short-term rates, the Riksbank even attempted to differentiate between certain long-term rates. The support prices of recent issues of long-term government and mortgage institution bonds with a nominal interest rate of 3 percent were pegged at 99.75 percent, but older issues were dropped to 97. The market for medium-term government bonds was permitted to go entirely free, and, as Table VI shows, the interest rates on these securities rose sharply in 1947 and 1948. From November, 1947 to February, 1948 the Riksbank was a net seller of medium-term bonds.

In order to make Treasury Bills more attractive and channel any increase in bank reserves into government bonds rather than loans and advances, the Riksbank undertook an arrangement with the National Debt Office whereby the Office agreed that after every tax collection date, i.e., the fifteenth of every other month, it would redeem as many of the Treasury Bills outstanding as possible. The funds that would be required until the next tax collection date were to be secured by borrowing from the Riksbank against Treasury Bills. The arrangement made it possible for the commercial banks to purchase Treasury Bills any time up to the end of the month before the tax collection date, that is to say, the bills sold by the Riksbank had maturities ranging from 2 months to 2 weeks. The interest rate on the bills was set in accord with the rate on commercial bank day loans, which is analogous to the Federal Funds rate in the United States. The low level of bank liquidity and the attractiveness of the Treasury Bills both contributed to making day loan funds scarce. As the rate on day loans rose so did the rate on Treasury Bills.
<table>
<thead>
<tr>
<th>Type of Loan and Maturity</th>
<th>Dec.31 1946</th>
<th>Dec.31 1947</th>
<th>Nov.30 1948</th>
<th>Dec.31 1948</th>
<th>Dec.31 1949</th>
<th>June 30 1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank day loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1 day</td>
<td>.5</td>
<td>1.5</td>
<td>2</td>
<td>2</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>10 days</td>
<td>1</td>
<td>2</td>
<td>2.5</td>
<td>2.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Treasury Bills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months or less</td>
<td>.5</td>
<td>.75</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Government bonds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 year</td>
<td>1.1</td>
<td>1.85</td>
<td>2.6</td>
<td>1.7</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>2 ½ years</td>
<td>1.75</td>
<td>2.25</td>
<td>2.8</td>
<td>2.7</td>
<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td>over 2 ½ years but under 5 years</td>
<td>2.1-2.6</td>
<td>2.4-2.9</td>
<td>3.1-3.2</td>
<td>2.9-3.0</td>
<td>2.5-2.8</td>
<td>2.5-2.6</td>
</tr>
</tbody>
</table>

Source: Riksbanks Årsbok, selected years.
Although the Riksbank's operations were expansive during the fiscal year 1947/48, they did not prevent a deterioration of the liquidity of the credit market. The low level of commercial bank liquidity rather than the banks' willingness to abide by the spirit of the agreement on credit restraint was the major cause of the retardation in the rate of credit expansion.

The commercial banks' capacity to create credit became seriously strained during the summer of 1947, and remained at a low level throughout the fiscal year 1947/48. The previous expansion of credit and the outflow of foreign exchange that had been financed by a reduction in the banks' security portfolio caused the liquidity rates to decline from 37 percent in June, 1945 to 12 percent in June, 1947. The reduction in liquidity was carried so far in 1947 that for the first time in the postwar period, indeed for the first time since the early 1930's, the banks were forced to undertake extensive rediscoun ting at the Riksbank (see Figure 5, page 88). The peak level of rediscoun ting in September, 1947, when the agreement on voluntary credit restraint was concluded, corresponds to the lowest level, i.e., 7 percent, reached by commercial bank liquidity at any time since the end of World War II. The banks' liquidity ratio improved rapidly from September, 1947 to the end of the year, but then showed a decline during the first half of 1948. The ratio was 9.8 percent in June, 1948. A portion of the reduction in the reserve ratio in 1947/48 was offset by a shift in the structure of commercial bank deposits that was induced by a change in the interest rate paid on long-term
deposits with a notice period longer than 2 months (see Appendix, Table XXIX).

In addition to the stricter rationing of credit by the commercial banks due to their poor liquidity position and the agreement on voluntary credit restraint, there were a number of other factors that contributed to the stagnation in their rate of credit expansion. The import controls introduced in March, 1947 became effective during the second half of the year and substantially reduced the demand for documentary credits. The government's restrictions on building activity reduced the demand for construction credits and in addition to the slowing in the rate at which new credits were granted, the banks began late in 1947 to shift construction credits at a very rapid rate to long-term mortgage financing with other financial institutions; especially the savings banks. In the spring of 1948 the banks refused to grant new construction credits unless evidence could be given that long-term mortgage funds would be available immediately upon completion of the project.

As Tables VII and VIII demonstrate, it was mainly in the field of real estate credit that the rate of commercial bank lending was restricted in 1947. In 1948 the reduction in bank credit that was recorded for the year as a whole was the result of a decrease in real estate credits that more than counterbalanced the increase in other types of loans. Thus, despite the deterioration of their security portfolio, the commercial banks were able to continue their lending to industry and trade through a liquidation of housing and construction
TABLE VII
LENDING BY CREDIT MARKET INSTITUTIONS, EXCLUSIVE
OF LOANS FOR HOUSING AND CONSTRUCTION PURPOSES
ANNUAL CHANGE, 1945-1958
MILLIONS OF KRONOR

<table>
<thead>
<tr>
<th>Year</th>
<th>End of Year</th>
<th>Mortgage Banks</th>
<th>Central Fund for Agricultural Credit</th>
<th>Commercial Banks</th>
<th>Savings Banks thereof</th>
<th>Loans to Agriculture Govt.</th>
<th>Postal Savings Banks &amp; Postgiro Credits</th>
<th>Insurance Companies thereof to Local Govt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945</td>
<td>535</td>
<td>184</td>
<td>3,684</td>
<td>1,301</td>
<td>567</td>
<td>311</td>
<td>380</td>
<td>566</td>
</tr>
<tr>
<td>1946</td>
<td>+26</td>
<td>+47</td>
<td>+933</td>
<td>+162</td>
<td>+23</td>
<td>+65</td>
<td>-1</td>
<td>+7</td>
</tr>
<tr>
<td>1947</td>
<td>+54</td>
<td>+40</td>
<td>+658</td>
<td>+206</td>
<td>+17</td>
<td>+38</td>
<td>+130</td>
<td>+95</td>
</tr>
<tr>
<td>1948</td>
<td>+47</td>
<td>+34</td>
<td>+18</td>
<td>+118</td>
<td>+17</td>
<td>+46</td>
<td>+153</td>
<td>+137</td>
</tr>
<tr>
<td>1949</td>
<td>+33</td>
<td>+43</td>
<td>+145</td>
<td>+107</td>
<td>+26</td>
<td>+44</td>
<td>+96</td>
<td>+124</td>
</tr>
<tr>
<td>1950</td>
<td>+42</td>
<td>+56</td>
<td>+754</td>
<td>+106</td>
<td>+58</td>
<td>+33</td>
<td>+153</td>
<td>+45</td>
</tr>
<tr>
<td>1951</td>
<td>+53</td>
<td>+30</td>
<td>+807</td>
<td>+12</td>
<td>+30</td>
<td>-16</td>
<td>+136</td>
<td>+267</td>
</tr>
<tr>
<td>1952</td>
<td>+78</td>
<td>+50</td>
<td>-310</td>
<td>+84</td>
<td>+42</td>
<td>+45</td>
<td>+541</td>
<td>+190</td>
</tr>
<tr>
<td>1953</td>
<td>+58</td>
<td>+86</td>
<td>-97</td>
<td>+141</td>
<td>+67</td>
<td>+83</td>
<td>+131</td>
<td>+626</td>
</tr>
<tr>
<td>1954</td>
<td>+60</td>
<td>+83</td>
<td>+499</td>
<td>+142</td>
<td>+72</td>
<td>+48</td>
<td>-36</td>
<td>+424</td>
</tr>
<tr>
<td>1955</td>
<td>+68</td>
<td>+56</td>
<td>-66</td>
<td>+49</td>
<td>+67</td>
<td>-1</td>
<td>+68</td>
<td>+207</td>
</tr>
<tr>
<td>1956</td>
<td>+37</td>
<td>+35</td>
<td>-269</td>
<td>+125</td>
<td>+51</td>
<td>+133</td>
<td>-16</td>
<td>+447</td>
</tr>
<tr>
<td>1957</td>
<td>+34</td>
<td>+75</td>
<td>-3</td>
<td>+153</td>
<td>+67</td>
<td>+110</td>
<td>+48</td>
<td>+219</td>
</tr>
<tr>
<td>1958</td>
<td>+53</td>
<td>+81</td>
<td>+664</td>
<td>+211</td>
<td>+76</td>
<td>+126</td>
<td>-74</td>
<td>+345</td>
</tr>
</tbody>
</table>

### TABLE VIII

REAL ESTATE MORTGAGES AND CONSTRUCTION CREDITS
ANNUAL CHANGE, 1945-1958
MILLIONS OF KRONOR

<table>
<thead>
<tr>
<th>End of Year</th>
<th>Central Government</th>
<th>Local Government</th>
<th>City Mortgage Bank</th>
<th>Housing Credit &amp; Lease-Hold</th>
<th>Mortgage Corporations &amp; Lease-Hold Funds</th>
<th>Postal Savings Bank &amp; Postgiro</th>
<th>Insurance Companies Banks</th>
<th>Commercial Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945</td>
<td></td>
<td>180</td>
<td>1,417</td>
<td>201</td>
<td>727</td>
<td>124</td>
<td>1,397</td>
<td>2,829</td>
</tr>
<tr>
<td>1946</td>
<td>+ 194</td>
<td>+ 11</td>
<td>+ 54</td>
<td>+ 11</td>
<td>+ 90</td>
<td>+ 1</td>
<td>+ 49</td>
<td>+ 355</td>
</tr>
<tr>
<td>1947</td>
<td>+ 195</td>
<td>+ 26</td>
<td>+ 149</td>
<td>+ 26</td>
<td>+ 89</td>
<td>+ 5</td>
<td>+ 145</td>
<td>+ 519</td>
</tr>
<tr>
<td>1948</td>
<td>+ 194</td>
<td>+ 50</td>
<td>+ 158</td>
<td>+ 30</td>
<td>+ 57</td>
<td>+ 38</td>
<td>+ 78</td>
<td>+ 427</td>
</tr>
<tr>
<td>1949</td>
<td>+ 179</td>
<td>+ 15</td>
<td>+ 71</td>
<td>+ 24</td>
<td>+ 23</td>
<td>+ 2</td>
<td>+ 48</td>
<td>+ 416</td>
</tr>
<tr>
<td>1950</td>
<td>+ 238</td>
<td>+ 89</td>
<td>+ 72</td>
<td>+ 18</td>
<td>+ 42</td>
<td>+ 100</td>
<td>+ 52</td>
<td>+ 402</td>
</tr>
<tr>
<td>1951</td>
<td>+ 371</td>
<td>+ 37</td>
<td>+ 169</td>
<td>+ 53</td>
<td>+ 70</td>
<td>+ 237</td>
<td>+ 78</td>
<td>+ 333</td>
</tr>
<tr>
<td>1952</td>
<td>+ 533</td>
<td>+ 39</td>
<td>+ 135</td>
<td>+ 30</td>
<td>+ 7</td>
<td>+ 417</td>
<td>+ 274</td>
<td>+ 514</td>
</tr>
<tr>
<td>1953</td>
<td>+ 627</td>
<td>- 209</td>
<td>+ 178</td>
<td>+ 45</td>
<td>- 8</td>
<td>+ 414</td>
<td>+ 128</td>
<td>+ 484</td>
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<tr>
<td>1954</td>
<td>+ 727</td>
<td>- 55</td>
<td>+ 202</td>
<td>+ 17</td>
<td>+ 8</td>
<td>+ 167</td>
<td>+ 135</td>
<td>+ 525</td>
</tr>
<tr>
<td>1955</td>
<td>+1,035</td>
<td>- 4</td>
<td>+ 361</td>
<td>+ 77</td>
<td>- 22</td>
<td>+ 431</td>
<td>+ 146</td>
<td>+ 466</td>
</tr>
<tr>
<td>1956</td>
<td>+ 918</td>
<td>.</td>
<td>+ 337</td>
<td>+ 78</td>
<td>.</td>
<td>+ 64</td>
<td>+ 168</td>
<td>+ 533</td>
</tr>
<tr>
<td>1957</td>
<td>+ 951</td>
<td>.</td>
<td>+ 583</td>
<td>+ 147</td>
<td>.</td>
<td>+ 91</td>
<td>+ 223</td>
<td>+ 652</td>
</tr>
<tr>
<td>1958</td>
<td>+1,063</td>
<td>.</td>
<td>+ 506</td>
<td>+ 160</td>
<td>.</td>
<td>+ 36</td>
<td>+ 230</td>
<td>+ 671</td>
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</tbody>
</table>

credits. Lending to industry and trade for new projects was also facilitated by the shifting of older credits to financing in the bond and credit markets.

Tables VII and VIII also indicate that it was mainly the commercial bank operations that were hampered by the tightened monetary conditions in 1947 and 1948. The process of credit expansion by other financial institutions continued in 1948 at an only slightly reduced rate. A large portion of the government securities that the Riksbank was forced to purchase in order to stabilize interest rates during the period from September, 1947 to November, 1948 came from financial institutions other than the commercial banks who, because of the higher yields on other investments, were tempted to switch. It was mainly through this channel that fresh reserves were indirectly supplied to the commercial banks in 1948. The Riksbank in May and June of 1948 attempted to stem this flow through an extension of the voluntary credit restraint program. The insurance companies agreed in May, 1948 that for a period of six months, barring any change in market conditions, they would not reduce their holdings of government and mortgage institution bonds in order to realize higher yields. The Riksbank was unable to secure a similar agreement with the savings banks, and the agreement with the commercial banks was renewed in June, 1948 without any change in its provisions.

**Improved liquidity and reduced interest rates, 1948/49.** Conditions in the Swedish credit and capital markets began to ease late in the summer of 1948 as the liquidity of financial institutions
improved and the demand for funds by the private sector of the economy declined. This trend continued throughout the fiscal year 1948/49 and was accompanied by a reduction of interest rates to approximately the level that had existed late in 1946. The principal source of the changes that occurred in the supply conditions in the financial markets during the fiscal year was the large deficit incurred by the government and the expansive effect of Riksbank operations.

The net effect of Riksbank transactions in 1948/49 was, as in the previous period, decisively influenced by open market operations and changes in foreign exchange reserves. As a result of the shift from a deficit to a surplus on current account in 1948 and the subsequent continued improvements in the balance of payments the Riksbank's foreign exchange reserves increased by 201 million kronor. Open market operations resulted in a 175 million kronor net increase in the bank's holdings of Swedish securities—mainly non-governmental securities. Together these two items were the principal source of the 304 million kronor net increase in the money base that occurred during the fiscal year. For the first time in the postwar period a net increase in the commercial banks' deposits at the Riksbank made up a significant portion of the increase in the money base.

The expansive effect of the Riksbank's operations was not evenly distributed throughout 1948/49. The main expansive surge came during the second half of 1948 when the money base was increased by 604 million kronor. The greatest part of this increase occurred in the months of November and December, 1948 when the Riksbank's foreign
exchange reserves and security holdings increased by 400 million kronor.

The large increase in the Riksbank's assets during the fourth quarter of 1948 had a decisive influence on the trend of interest rates. Short- and medium-term rates which, as Table VI shows, had been rising during the earlier part of the year reached their peak in November and then began to decline. The large expansive effect of the Riksbank's transactions in the final months of 1948 occurred at the initiative of the Riksbank. This action, which was designed to reduce the growing speculative pressure on long-term interest rates that was associated with the steady upward drift of short-term rates, represents a substantial modification in monetary policy. During the greater part of 1948 the Riksbank had been pursuing a restrictive policy within the narrow confines established by the goal of stabilizing long-term interest rates, but in the last quarter of the year the bank shifted to a policy of active ease. The reasons for this shift in policy will be examined in detail below in connection with our study of the controversy that arose over monetary policy in 1948.

During the first half of 1948 the Riksbank for the first time in the postwar period was able to report net sales of securities over an extended period of time. These sales, which amounted to 77 million kronor, along with small seasonal sales of foreign exchange and the deposit of corporate profits on blocked accounts contributed to a net contraction of 385 million kronor in the money base.

The size and financing of the deficit on the government's budget was a major factor in continuing the trend of developments which was
established in the financial markets by the Riksbank's actions during the latter half of 1948. According to the National Debt Office's balances, the cash deficit resulting from all government operations in 1948/49 amounted to 588 million kronor. This constitutes a 145 percent increase over the previous fiscal year. More than half of the deficit was financed by an increase in the national debt. In the course of placing 374 million of new debt, the funded debt outstanding was reduced by 318 million kronor and the floating debt increased by 692 million kronor. A large part of the increase in the floating debt was accounted for by the 327 million kronor of Treasury Bills which, with the cooperation of the Riksbank, were placed in the commercial banks.

The placement of Treasury Bills in 1948/49 occurred under different conditions than in the previous fiscal year. The Riksbank's arrangements with the National Debt Office were dropped in December, 1948 and thereafter the bills were issued with a minimum term of two months. This change in terms made the bills less attractive to the commercial banks and large issues of the bills had to be sold initially to the Riksbank since the authorities were unwilling to allow any increase in the bill rate. However, the increase in the liquidity of the credit market that resulted from the inflow of foreign exchange and the government's cash deficit induced the banks to take up the bills even at the less favorable terms so that the Riksbank was subsequently able to sell off bills. The methods employed in financing the government's deficit and managing the public debt in
1948/49 closely resemble those used during the war years and they had a similar effect on the liquidity of the economy.

There was an increase in both the absolute and relative liquidity of the commercial banks in 1948/49. An increase of domestic deposits at the same time that loans and advances outstanding decreased resulted in a large cash inflow. After allowing for the cash drain associated with other transactions, primary and secondary reserves increased by 563 million kronor and the liquidity ratio rose from 9.8 percent in June, 1948 to 16.6 percent in June, 1949. The improvement in the liquidity ratio was further enhanced by the fact that the banks continued to experience a shift in the structure of their deposits which reduced liquidity requirements.

The reduction of commercial bank loans and credits in 1948/49 at the same time that bank liquidity was improving suggests that it was mainly a reduction in the demand for credit that accounted for the decline. This interpretation is supported by the fact that gross private domestic investment declined from 5,090 million kronor in 1947 to 4,560 million kronor in 1949.

**Renewed credit expansion and stable interest rates, 1949/50.**

The developments in the credit market during the fiscal year 1949/50 were characterized by a rapid expansion of bank credit. The commercial banks simultaneously increased their holdings of government securities and their credits to the private sector of the economy. The expansion of credit, which occurred without any increase in the level of interest rates, was made possible by an increase in the market's supply of
liquid assets that resulted from the Riksbank's foreign exchange trans-
actions and the large deficit on the government's budget which was
mainly financed with funds borrowed or in some other manner acquired
from the Riksbank.

Although somewhat reduced from the previous fiscal year, the
Riksbank's operations in 1949/50 continued to have an expansive effect
on the money base. Foreign exchange reserves increased by 634 million
kronor. The expansive effect of foreign exchange purchases was further
augmented by the bank's purchase of 182 million kronor of Treasury
Bills. Approximately 600 million kronor of the expansive effect of
these transactions was offset by the Riksbank's sale of bonds. The net
effect of all Riksbank transactions was an increase of 167 million
kronor in the money base, which is 27 percent less than in 1948/49.

Financial developments in Sweden during the fiscal year 1949/50
were similar to those of the previous year in that the government's
budget and its financing continued to be a major factor influencing
the money market. Due to the realization of a 163 million kronor
deficit on the current budget, the government's financial requirements
were greatly increased as compared with 1948/49. From the point of
view of the National Debt Office's accounts the cash deficit resulting
from all government operations was 677 million kronor.

Only a small portion of the deficit, amounting to 212 million
kronor, was financed by an increase in the national debt. The remain-
der was financed by a liquidation of capital assets and a reduction in
the government's cash holdings. Approximately 250 million of the
350 million kronor realized through the liquidation of assets occurred in connection with the National Debt Office’s foreign exchange transactions with the Riksbank, while the remainder represents a repayment to the Debt Office of funds that had been placed at the disposal of various government agencies.

The Riksbank’s open market operations in 1949/50 were dominated by a desire to achieve the maximum possible reduction in the bank’s security portfolio. This open market policy complicated debt management and any attempt to minimize the expansive effects of financing the government’s deficit. Thus, although the Riksbank’s portfolio was substantially reduced, only 31 percent of the deficit was financed by an increase in the national debt. The policy also resulted in a much more rapid increase in the banking system’s holdings than in the private market placement of government debt. The volume of Treasury Bills outstanding in mid-1950 was 80 percent greater than in mid-1947.

There was a sharp change in commercial bank activity during the fiscal year 1949/50. The contractive trend in commercial bank credit that had characterized developments in 1948/49 continued until the end of August, 1949. From September, when the krona was devalued, to October, 1949 loans and advances increased by 260 million kronor. After the turn of the year credit again expanded rapidly throughout the first half of 1950 and for the fiscal year as a whole the increase

was 624 million kronor. According to the available information lending
to industry remained fairly stable and credits for trade and construc-
tion accounted for the greater part of bank borrowing in 1949/50.16

The special characteristic of the wave of commercial bank credit
expansion in 1949/50 is that there was no cash drain associated with
it and, on the contrary, transactions with the domestic public resulted
in a net cash inflow of 140 million kronor. The liquidity position of
the banks improved by 277 million kronor in absolute terms. The rela-
tive position of the banks in late 1949 is indicated by the fact that
they achieved a net debtor position with respect to the private sector
of the economy. This net debtor position was the first attained since
November, 1946. A peak net creditor position had been reached in July,
1948 when the loan surplus stood at 890 million kronor.

If only the period of most rapid credit expansion during the
first half of 1950 is considered, the liquid assets of the commercial
banks decreased by 118 million kronor as loans and credits outstanding
increased by 463 million kronor. However, since the banks also
increased their holdings of Swedish securities during the same period,
the reduction in liquidity occurred solely in terms of cash assets
which had been very large at the beginning of the period. The liquid-
ity ratio, which had risen from 17 percent in mid-1949 to 20 percent at
the turn of the year, declined to 18 percent in mid-1950. The fact

16"Konjunkturläget hösten 1950," Meddelanden från Konjunktur-
institutet, Series A:18, 1951, p. 86.
that the liquidity ratio in mid-1950 was slightly greater than at the end of 1946 suggests that the commercial banks retained considerable unused credit capacity on the eve of the outbreak of the Korean War.

Modifications in the Official View of Monetary Policy

Several important modifications were made in the official view of monetary policy during the period from mid-1947 to the outbreak of the Korean War despite the fact that the policy pursued during this period was not in practice fundamentally different from the policy of the immediate postwar period. Beginning late in 1947 there was a gradual transition in the monetary authorities' attitude toward the active use of quantitative credit controls to combat inflation. The transition period was marked by extensive political controversy and public debate of monetary questions, the development of new techniques of monetary control, and a waning of the confidence of Swedish policy makers in the advisability of attempting to maintain a strict regulation of the economy by means of fiscal policy and direct controls. Developments during this period laid the foundation for the new line of monetary policy that was adopted in 1950.

Although some criticism had been voiced earlier, monetary policy did not become a serious issue until late in 1948 well after the appearance of the first signs of a moderation of inflationary pressures and the slowing in the rate of credit expansion by the commercial banks. The immediate cause of the controversy was the continuation and intensification of the Riksbank's purchase of securities despite
the substantial inflow of foreign exchange that resulted from the improvement of the balance of payments during the second half of 1948. The Riksbank's policy, as we have shown, contributed to a significant easing of the credit market and a downward adjustment of interest rates.

The question of the adequacy of the Riksbank's policy in 1948 and the general issue of the proper role of the central bank in the government's economic policy were forcefully brought to the attention of the public and made a political issue by the resignation from the Riksbank of the President, Ivar Rooth, and the Chairman of the Board, Dag Hammarskjöld, in November, 1948. Rooth's resignation was made specifically in protest to the line of monetary policy that was being pursued.17

It had been generally known in Swedish financial circles from as early as the appreciation of the krona in 1946 that the President of the Riksbank was opposed to the passive credit policy being pursued and favored rigorous monetary restraint. In the course of 1948 Rooth, who had little confidence in the voluntary credit restraint program, became progressively more insistent in his recommendations of highly restrictive measures of credit policy that would have involved increases in the level of interest rates. However, the resistance by the Board of the Riksbank also stiffened and it became clear that Rooth

17 Rooth's criticism of monetary policy in his letter of resignation to the Riksdag has been reprinted in, "Riksbankchefens testament," Balans, 1949:1, pp. 50-53.
had failed in his efforts to secure a change in policy when the government announced in the autumn of 1948 that the monetary phase of its restrictive economic policy would rely exclusively on voluntary credit restraint and that there would be no question of an increase in interest rates. A short time later the Riksbank, under the direction of its Board, actually eased credit and reduced certain interest rates in an action that reaffirmed the stable interest rate passive credit policy of the immediate postwar period.

Ostensibly the main issue in the conflicting views of the President and the Board of the Riksbank, which in turn may be taken as representative of the two main positions that developed in the Swedish debate of monetary policy during this period, was the proper degree of credit restraint and the means of securing it. However, the difference of opinion on this point was only a reflection of a much more fundamental conflict of views concerning interest rate policy and the effectiveness of fiscal policy and direct controls.

In his discussion of anti-inflationary monetary policy Rooth placed primary emphasis on credit restraint achieved by means of open market operations; reduced credit availability was the critical factor and any accompanying change in interest rates was only of secondary

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18 The details of the various proposals and counterproposals put forward in the course of the Riksbank's internal debate of monetary policy in 1948 have been made available by the Banking Committee in Bankutskottets memorial, No. 11, 1949.
importance in his view. According to Rooth an expansion of money and credit, even if not a sufficient condition, is a necessary condition for inflation. Rooth, however, did not claim that a restrictive monetary policy could or should be relied upon to halt inflation, but rather that it was a necessary adjunct to the government's use of fiscal policy and direct controls. He pointed out that any one measure alone was insufficient to stabilize the value of money, but that all measures had to be effected, i.e., wage stabilization, overbalancing of the budget, substantial decrease of investment, decrease in consumption, greatly checked open market bond purchases, and raising of interest rates. Rooth's position assumed that in general the government would not be able to rigidly control aggregate demand so that demand rather than cost factors would be the main driving force in inflation.

The Board of the Riksbank, on the other hand, although it did not deny the desirability of credit restraint under the conditions existing in 1947 and 1948, continued to place the highest priority on the stabilization of interest rates. Thus the Board insisted that both the degree of credit restraint and the means used to attain it

19 The chief spokesman for this position in the discussions outside of the Riksbank was Marcus Wallenberg. See, Nationalekonomiska Föreningens Förhandlingar, 1948, p. 23.

20 Rooth, op. cit.

21 For a statement of the Board's position by its Vice-President and the leader of the opposition to Rooth, see David Hall, "Riksbankens roll i den svenska penningpolitiken," Vårt ekonomiska läge, 1948 (Stockholm: Sparfrämjandets Förlag, 1948), pp. 104-14.
should be consistent with stable long-term interest rates. The Board tended to treat monetary restraint as an interim policy and was mainly concerned with recommending measures that would make fiscal policy and direct controls more effective. Because of their confidence in the adequacy of non-monetary means of controlling aggregate demand, the majority in the Board of the Riksbank and the Banking Committee of the Riksdag continued to treat the control of the cost of credit as the principal means by which the central bank could contribute to the stabilization of the economy.

The arguments used by the Board of the Riksbank to support the stabilization of interest rates in 1948 and 1949 were essentially the same as those advanced at the end of the war concerning the ineffectiveness and potentially undesirable aspects of any increase in interest rates. Belief in the ineffectiveness of interest rate changes was further strengthened by the fact that the government through its administration of construction permits had subjected the most interest-rate sensitive area of investment activity to direct control.22 The critical factor, however, in the decision late in 1948 to take vigorous action to prevent an increase in long-term interest rates was the fear that

22Opinion on this point also appears to have been strengthened by a survey conducted by SNS in 1947-48. The results of the survey indicated that most business firms would be insensitive to small changes in interest rates and that, if any significant effect, a reduction by 15 percent, for example, was to be attained it would require an interest rate change by 2 percentage points or greater.

For a summary of the SNS survey, see Erik Lundberg, Konjunkturer och ekonomisk politik (Stockholm: Konjunkturinstitutet och SNS, 1953), pp. 524-26.
such an increase through its influence on costs and prices, especially rental rates, would seriously disrupt the government's efforts to secure a wage-price freeze. The government's negotiations with the labor unions concerning a wage freeze in 1949 were being carried on at the same time that the crisis stage was reached in the Riksbank's internal discussion of monetary policy.

Views on credit policy and the stabilization of interest rates similar to those held by the Board of the Riksbank were expressed by the majority in the Riksdag. However, the size and strength of the opposition in 1948 was greater than at any previous time in the post-war period. It is noteworthy that the minority, although it called for a rigorous tightening of credit, did not openly propose an increase in interest rates. The level of interest rates was not, except in the case of the Conservative Party, made a key issue in the general election of the autumn of 1948. The opposition parties did, however, campaign on the issue of the inadequacy of the government's economic policy in preventing inflation and the failure to restrict credit. The opposition's success in breaking the Social Democrats' majority position in the Lower House of the Riksdag in 1948 had an important influence on the future course of economic policy.

The lasting significance of the Swedish debates over monetary policy in 1948 and 1949 was that it resulted in general agreement that under certain conditions quantitative credit controls were necessary and desirable. The official view that developed at this time and which prevailed until 1955 was that an effective control of the volume of
money and credit could be exercised without abandoning the goal of stable interest rates. At first, it was thought that this could be done by means of a voluntary credit restraint program. It soon became apparent, however, that voluntary restraint only worked well so long as liquidity conditions were so tight that there was a steady upward pressure on interest rates. Although the dilemma of credit restraint versus stable interest rates was resolved in November, 1948 in favor of stable interest rates, there is abundant evidence of a growing determination of the monetary authorities to exercise a positive countercyclical control over the volume of money and credit in the future.

A special Committee of Experts was appointed by the Board of the Riksbank early in 1948 to study the problem of credit control. Among the topics the Committee considered were the possibility of changing the law concerning the right of the commercial banks to make advances, the means of financing mortgage institutions in such a way that their issues of bonds on the capital market would be minimized, and ways in which the voluntary restraint program could be strengthened. As noted earlier, the Riksbank did attempt to expand voluntary restraints in the spring of 1948, but it only met with success in the case of the insurance companies and this was not sufficient to achieve the desired freezing of the financial system's holdings of government securities.

The failure of the voluntary restraint program to achieve its goals and the recommendations of the Committee of Experts induced the monetary authorities to consider more extensive changes in the
techniques of monetary control. The Board of the Riksbank in a memorandum submitted to the Riksdag raised a number of questions concerning the adequacy of the existing authority to impose reserve requirements on the commercial banks. The Board pointed out that since the basic enabling Act of 1937 exempted all savings and time deposits with a notice period longer than one month from reserve coverage, the effect of the imposition of legal reserve requirements would be made uncertain by the possibility of a shift between different types of deposits.\(^\text{23}\)

The increase in the minimum notice period on commercial bank time deposits from 14 to 45 days had further reduced the usefulness of the Act of 1937.

The Board of the Riksbank in 1948 was not, however, primarily concerned with improvements in the existing legislation on bank reserve requirements which was designed to function as a secondary support for discount rate policy, but rather with a radical change in the regulations that would permit a more direct control of the volume of credit.\(^\text{24}\)

The Board suggested that, if credit control was the primary consideration, the reserve requirements should be set with respect to bank lending rather than deposits. The Board also suggested that this approach be carried one step further by permitting the application of different

\(^{23}\)Such a shift actually occurred during the fiscal year 1947/48 when credit conditions were tight.

\(^{24}\)The Board's thinking on the question of reserve requirements may have been influenced by a Börje Kragh study of the theoretical aspects of the subject; Börje Kragh, "Banksystemets likviditetsregler," *Ekonomisk Tidsskrift*, December, 1948, pp. 197-218.
reserve ratios to different types of bank lending so that it would be possible to control the allocation of credit between different sectors of the economy. This suggestion in 1948 is especially significant because it marks the first official discussion of the type of highly discretionary regulatory system that was actually employed in the early 1950's.

It was not until June of 1949 that the Riksdag undertook a major revision of the basic law on bank reserve requirements. The revision, however, did not follow the lines suggested by the Riksbank. The Riksdag's main concern was with the flexibility of the requirements and the elimination of the uncertainty of the effect of their application.

The new law set the reserve requirements in relation to all commercial bank deposits with the exception of savings accounts. The quotas of total cash and liquid asset reserves to be held by the banks were made variable up to a maximum of 25 percent so that different quotas could be set for different sizes of banks. The new law also provided for discretion in setting the portion of total required reserves that were to be held in cash and the portion to be held in the form of deposits at the Riksbank. The Riksdag in its discussion and revision of the law continued to treat reserve requirements as an extraordinary measure and it was emphasized that the new law was only to be used to tighten credit conditions when other means could not be employed. Although the new law fell short of the Riksbank's request, it greatly strengthened

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the means of policy at the disposal of the monetary authorities. At the very least the Riksbank was given a stronger bargaining position in any future attempt to secure voluntary credit restraint.

Another development in 1949 which is indicative of the change in the attitude of Swedish policy makers and their new determination to achieve greater degree of control over monetary developments was the adoption of plans to establish a number of nationalized commercial banks. The aim of these plans was to transfer the Riksbank's branch network, commercial banking operations, and administration of government loan funds to two commercial banks in which the government's controlling interest was to be expanded to complete ownership. These changes would permit the Riksbank to concentrate on its central banking functions and give the authorities a rather direct means of influencing interest rates and other conditions of credit accommodation applied by the commercial banks. The plans, in a somewhat modified form, were put into effect in January, 1951.

The strengthening of the means of monetary policy in 1948/49

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26 In his commentary on the new law Kragh claims that it came two years too late and that the lack of adequate powers to set reserve requirements was the principal technical limitation of the monetary policy of the immediate postwar policy. See, Börje Kragh, "Affärsbanksreglerna," Balans, 1949:1, pp. 114-15.


28 Lars-Erik Thunholm, Svenskt Kreditväsen (Stockholm: Kooperative Förbundets Bokförlag, 1952), pp. 61-63.
was paralleled by a waning in the confidence of Swedish policy makers in the adequacy of the system of direct controls that was being employed. The Konjunkturinstitutet in its review of the economic developments in 1948 and 1949 concluded that the improved balance of the Swedish economy in these years was based on a set of strict controls which it would be impossible to maintain in the long run. Ohlin attempted to show that the regulatory system being employed distorted and reduced the efficiency of the operation of the economic system. The Finance Minister concurred in these views and declared that although the direct controls would have to remain in force for some time, every effort should be made to abolish the regulatory system as soon as possible. The Finance Minister, who had earlier been one of the leading proponents of the stable low interest rate policy, also modified his position on monetary policy by admitting that the importance of the rate of interest in determining the level of rental rates had been exaggerated. However, he insisted that the only way to stabilize the level of incomes under conditions existing in 1949 was to prevent any increase in the cost of living and for this reason a rise in interest rates and/or a reintroduction of a general sales tax would have to be rejected as a means of anti-inflationary policy.


30 Bertil Ohlin, "Regleringsekonomins underlägsenhet," Balans, 1949:2, pp. 57-63.

Despite the change in the official attitude toward an active monetary policy and the new means of control that were developed, it was not until after the outbreak of the Korean War that the Riksbank's policy was actually changed.

The Depreciation of the Krona

One of the most important actions taken by Swedish monetary authorities during the period under review was the decision to devalue the krona in September, 1949. The fact that the depreciation had a decisive effect on the subsequent development of Swedish foreign trade and domestic prices makes it desirable to review in some detail the conditions existing at the time of the devaluation and the reasoning applied by the authorities in reaching their decision to adjust the external value of the currency. 32

The question of a devaluation of the krona was first raised in 1948. The low level of foreign exchange reserves, especially US dollars, and the increased difficulties being experienced by Swedish exports, particularly paper pulp, to the United States, were the principal reasons for the authorities' concern over the adequacy of the exchange rate. There was no immediate crisis and in fact the overall balance of payments position improved substantially in the course of 1948. This improvement, however, was mainly the result of the rigorous

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32 Some observers feel that the devaluation was the major cause of the strong inflationary pressures experienced during the first half of the decade of the 50's. See, for example, Per Jacobsson, "Return to an Active Credit Policy," Skandinaviska Banken, Quarterly Review, October, 1951, p. 90.
application of highly discriminatory import controls and, therefore, does not represent a strengthening of the position of the krona.

Despite the serious problems of foreign trade, the Swedish government's attitude toward a devaluation of the krona in 1948 was essentially negative. The devaluation was rejected on the grounds that it would, through its effect on prices, destroy the domestic program to stabilize incomes.33 This opposition, however, was mainly directed toward an isolated action by Sweden and participation in a concerted action by European nations was not ruled out.

Underlying the immediate difficulties of Swedish foreign trade in 1948 were certain fundamental problems associated with the Swedish international economic position that contributed to the official concern over the external value of the krona. When the price indexes for various countries are calculated in Swedish kronor at the 1948 exchange rate, as is done in Table IX, it appears that in sharp contrast with the development in the United States, the level of Swedish and other European export prices rose more rapidly than the level of domestic wholesale prices during the ten-year period 1938-1948.34 The data in Table IX also indicate that the level of export and domestic wholesale prices rose more rapidly in Sweden than in the United States.


34 The increase of 40 percent in the level of industrial wages during the period 1945-48 was also a major factor in the deterioration of Sweden's ability to compete on the international market.
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<th>Country</th>
<th>Wholesale Prices</th>
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<td>325&lt;sup&gt;b&lt;/sup&gt;</td>
<td>258</td>
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<sup>a</sup>Raw materials and half-finished goods.

<sup>b</sup>Industrial raw materials.

<sup>c</sup>Export respective import average prices according to the Konjunkturinstitutet's volume calculations.

or Great Britain. The international structure of prices was such that serious problems would be encountered in any attempt to adjust Swedish foreign trade to the buyers' market that appeared to be developing in the international economy in 1948. The Swedish trade position was also complicated by the fact that the German economy, which prior to World War II had been a major source of Swedish imports, was still unable to engage in international trade on a large scale. The United States and the sterling area were the principal sources of supply.

The government's attitude toward a devaluation underwent a change in 1949 when the Finance Minister explicitly advocated Swedish participation in a general readjustment of European currencies when and if such an adjustment were to occur. This change in attitude was induced by developments during the first three quarters of 1949 when a reduction in the Swedish terms of trade forced the government to undertake a further reduction in the granting of import licenses and this in turn placed a heavier burden on the domestic regulatory system that was being employed to prevent price increases. However, the tendency for the volume of exports to increase prevented any serious disturbance to the balance of payments, and foreign exchange reserves actually increased during the first three quarters of 1949. As the American demand for Swedish exports fell, sales were successfully shifted to the sterling area, where Swedish goods commanded premium prices.

When the pound sterling was devalued in September, 1949 it was generally expected in view of the government's attitude and the problems discussed above that Sweden would also devalue. The main question was the extent to which the value of the krona should be changed. After some deliberation the Swedish authorities decided in favor of a change parallel with the pound sterling, i.e., by 30 percent. The principal reasons given for this decision were that a devaluation equal to that of Britain was necessary in order to maintain the competitive position of Swedish exports to the sterling area and that a less extensive devaluation would probably give rise to heavy speculation against the krona.36

Critics of the government's policy claimed that the problems of the Swedish balance of payments were more latent than actual. The fact that there was a surplus on the current account in the balance of payments during the first nine months of 1949 was cited as evidence that the devaluation could have been either avoided altogether or could have been less extensive. The extent of the devaluation was subject to particularly severe criticism. It was claimed that the increase in the volume of exports during the first three quarters of 1949 and the fact that exports to soft currency areas were able to command premium prices before the devaluation indicate a strong rather than a weak Swedish competitive position.37 The principal concern of the critics

36 Bankoutskottets memorial, No. 6, 1950, p. 4.
was the effect of the devaluation on the domestic economy while the main concern of the monetary authorities was the effect on the balance of payments.

The devaluation of the krona greatly complicated the government's domestic economic stabilization program. The basic problem confronting the policy makers in the autumn of 1949 was that of finding the means of preventing the increase in the kronor price of imports, especially those from hard currency countries, caused by the depreciation from giving rise to renewed inflationary pressures in the domestic economy. Prior to the devaluation the government tacitly admitted the continued existence of latent inflationary pressures when it insisted that the wage freeze be continued in 1950. As a result of the narrow margin between the existing level of the cost of living and the ceiling set by the unions as a condition for the continuation of the wage freeze, the situation at the time of the devaluation was such that even a small increase in the cost of living would break the wage freeze and initiate a wage-price spiral. In view of this situation the government decided to use a reduction in the level of indirect taxes and new and increased subsidies on domestic agricultural products and certain imported goods to prevent any immediate increase in the cost of living due to the devaluation.

The main reason for the government's decision to continue the postponement of nominal wage increases and use subsidies to prevent any increase in the cost of living appears to have been the expectation that prices in the United States would continue to decline. There was
even some fear in Sweden that the recession in the United States was the prelude to the long anticipated postwar depression. A substantial fall in prices on the American market would serve to restrict the increase in the export prices of the soft currency nations who had devalued, and would permit a reduction of Swedish import prices to their level at the time of the devaluation or perhaps even lower. An increase in the level of Swedish costs due to rising wage rates would be particularly undesirable if the American price level continued to decline.

There were a number of serious disadvantages associated with the domestic stabilization policy that the Swedish authorities elected to pursue in connection with the devaluation of the krona. The primary disadvantage stems from the fact that the success of the policy of preventing any immediate increase in the level of prices or wages ultimately depended upon the accuracy of the government's forecast of price developments in the United States. This situation induced one writer to liken the price subsidies to a time bomb placed under the value of money in Sweden. Should the gamble fail and prices abroad rise rather than fall as forecast, the government would be forced to remove the subsidies and permit an explosion of the price level. It is doubtful, in the light of their previous behavior, that the Swedish authorities would be willing to undertake so large an appreciation of the krona and/or pursue a domestic economic policy sufficiently

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38 Jacob Wallenberg, "Några av senaste tidens ekonomiska frågor," Balans, 1951:2, p. 54.
restrictive to prevent domestic price increases under these circumstances.

A second disadvantage of the line of policy that was adopted in the autumn of 1949 was the effect that it had on the other means of economic policy. The confidence of the monetary authorities in the efficiency of the combination of price controls and the wage freeze in preventing any increase in the level of domestic prices tended to reduce the emphasis placed on the other means of a restrictive economic policy. The subsidies employed to make the wage freeze possible amounted to approximately 350 million kronor and were a major contributing factor in the government's failure to balance the current budget in 1949/50. In the case of monetary policy the increased importance attached to the wage freeze resulted in a renewed emphasis on the prevention of any cost increase due to rising interest rates. This greatly handicapped the Riksbank in its attempt to offset the expansive effect of the inflow of gold and foreign exchange that resulted from the effect of the devaluation on foreign trade. Thus, in general the case with which the chosen line of policy was able to prevent an overt manifestation of inflation greatly enhanced the development of a new and more severe condition of suppressed inflation.

Subsequent developments indicate that the size of the devaluation in 1949 was excessive and was a major factor in the upward pressure that prices in Sweden and Western Europe were exposed to during
the following decade. The devaluation resulted in a distortion of price relation between the devaluing and non-devaluing countries which, given the downward price rigidities in the latter group, could only be rectified by price increases in the devaluing countries. A comparison of the internal price developments in countries which depreciated by the full amount, less than the full amount, and not at all shows that price rises are in direct proportion to the size of the devaluation.

IV. SUMMARY AND CONCLUSIONS

A review of the economic developments in Sweden from 1947 to 1950 indicates that the government with the aid of a system of direct controls similar to those employed during the war years was able to secure a significant improvement in the stability of the domestic economy and a moderation of the symptoms of repressed inflation. The government's efforts were directed principally toward filling the inflationary gap by increased production and restraining demand. The policy of income stabilization based on a wage-price freeze actually did not close the gap between purchasing power and current supplies, but prevented any further widening of the gap on the income side. The stabilization that was attained did not represent a fundamental equilibrium in either the domestic economy or the balance of payments.

as latent inflationary pressures could only be held in check by direct controls. 41

Many of the regulations that were employed, e.g., the wage freeze and import controls, were of such a character that they only shifted the effect of accumulated tensions and postponed a basic readjustment. When the Swedish participation in the general European currency depreciation of 1949 proved excessive in view of the subsequent cyclical upturn in the American economy, it became inevitable that the stability of the Swedish economy would be disturbed by an upward adjustment of prices. The stabilization period 1948-50 ended with the Korean War boom, but even if this had not occurred, an adjustment process and price increases of some magnitude would have been necessary to ease the tensions that were built up by repressed inflation. 42

The temporary nature of the stability that was attained during the period under review is due to the impermanent nature of the factors on which it was founded, i.e., an unusually large increase in the volume of output, an unusually low level of imports, the decline in world business conditions from early in 1948 to the autumn of 1949, and the general wage freeze. As the developments from late in 1950 were to demonstrate, the government's system of controls was not capable of

41 The situation that was obtained in 1949 was termed a "labile state of balance" by one writer. See, Erik Westerlind, "Från labil till stabil balans," Ekonomisk Revy, February, 1950, p. 19.

42 Jacobsson, op. cit., p. 87.
maintaining stability in the absence of one or more of these factors.

International economic developments rather than the restrictive measures adopted by the government in 1947-48 appear to have been the decisive factor in ending the immediate postwar boom and bringing the economy under control. The government's actions served to retard the rate of growth of spending through limitations placed on the possibility to invest and consume. However, the changes in spending that actually occurred during this period and the fact that no great pressures were placed on the restrictive regulations indicate that there was a general dampening of inflationary expectations and a reduction in the propensities to invest and consume. As a result of the recession in the United States, Swedish export prices fell throughout the greater part of 1948 and from the beginning of 1949 the rate of decline accelerated. The Swedish economy, which normally exports between 15 and 20 percent of its national product and from 25 to 30 percent of its industrial production, is very sensitive to changes in international market conditions. According to the Konjunkturinstitutet the decline in international prices was the major factor in the reduction in the propensity to invest that was reflected in the sharp cutback in industrial investment plans in 1948. Through their dampening effect on inflationary expectations the changes in business conditions abroad were also a major psychological factor which, along with the saturation

of the pent-up wartime demand for durable goods, account for the sharp rise in household savings from 1947 to 1949.\textsuperscript{44} International developments were prevented from having a serious contractive effect on the Swedish economy by the fact that although prices fell the volume of exports was not impaired and was even able to increase. When a rapid increase of prices in the international market in 1950 again generated inflationary expectations in Sweden, the government's restrictive measures were no longer adequate to maintain stability.

The autonomous changes in spending and the direct controls that were simultaneously introduced make it difficult to evaluate the contribution of monetary policy to the stabilization of the economy. However, our analysis of financial developments indicates that credit restraint in 1947-48 was limited to the commercial banks and that even in this area it was applied mainly to housing and construction credits which were already being influenced by direct controls on construction activity. The fact that commercial bank lending for other purposes continued to expand and that industrial investment, especially in the field of machinery and equipment, did not show any appreciable retardation until 1949 would seem to indicate that the Riksbank's policy of credit restraint did not make any significant independent contribution to the stabilization of the economy. It did, however, work in the right direction.

The degree of credit restraint that was attained in 1947-48 was very moderate considering the highly disturbed state of the economy and cannot be attributed to any positive action by the Riksbank. The tightening of credit was mainly the result of the imbalance of foreign trade which through the outflow of foreign exchange reduced bank liquidity to a restrictive level. In order to maintain stable low interest rates the Riksbank was forced to employ open market operations to compensate for the reduction in liquidity and was unable to pursue a rigorous policy of credit restraint. Even after the introduction of the voluntary credit restraint program, which in and of itself contributed little to the slowing of the rate of credit expansion, the Riksbank was technically unable to achieve its desired goals of monetary restraint and stable interest rates. The Riksbank could not control the quantity of credit by varying required liquidity reserve requirements. Instead, this had to be done through open market operations. Since the commercial banks count government securities as part of their liquid reserves and since no effective non-bank market existed for bills, only the sale of long-term bonds could affect bank liquidity. Without the aid of special controls credit restraint could not be attained without sacrificing interest rate stabilization.

The goal of stable interest rates was compromised somewhat during the fiscal year 1947/48 by modifications in open market and debt management policy that were introduced in an attempt to achieve a greater degree of credit restraint. However, these actions were nullified by the heavy speculative pressures on long-term interest rates.
that were generated by the upward drift of short- and medium-term interest rates that resulted from the authorities' new policy. The failure to coordinate monetary and fiscal policy was the principal reason for the inability of the monetary authorities to maintain the low level of commercial bank liquidity and sustain the degree of credit restraint that was attained in mid-1948. For the period 1947-50 as a whole monetary and fiscal policy interacted in such a way that each tended to offset monetary restrictions originating in the other.

The critical shortcoming of the monetary policy pursued during the period under review was not that monetary restraint was only moderate but that it was abandoned at too early a date. The rapid expansion of liquidity that was permitted in 1949 and 1950 was directed toward the stabilization of interest rates and was not required to maintain economic activity. Any serious attempt to offset the expansive effects of the inflow of foreign exchange that resulted from the improvement in the balance of payments and the financing of the government's deficit would have conflicted with the goal of stable interest rates.

As Figure 9 shows, the real liquidity position of the private sector of the economy increased sharply from 1948 to 1950 and reached a level comparable to that which existed at the end of the war. A very rapid increase in the quantity of money (in a broad sense) relative to the increase in prices and real income prevented any decrease in liquidity during the stabilization period, and on the eve of the Korean War inflation there was excess liquidity and a monetary potential for
NOTE: Real liquidity is defined as the ratio between the index of the money supply indicating the magnitude of the annual stock figure derived from the average of the end of month figures for the public's holdings of cash and deposits in commercial banks, savings banks, agricultural credit funds, postal savings bank, and postgiro, and the index of the GNP in current prices.


FIGURE 9
REAL LIQUIDITY OF THE PRIVATE SECTOR OF THE ECONOMY, 1946-1960
INDEX 1954=100
inflation almost equal to that of 1945. Monetary policy was one of the major factors impeding the fundamental adjustments that would have been required to prolong the stability of the economy.

From our historical vantage point it is easy to see that the main defect of Swedish economic policy in 1949-50 was the failure to prevent a build-up of tensions which, when they were released in 1951, greatly intensified the inflationary impact of external disturbances associated with the Korean War. The heavy reliance of the government's stabilization program on direct controls and the wage freeze, despite the continued high level of demand for goods and labor, resulted in serious distortions such as the sacrifice of high priority housing construction and tensions due to the effect of the unequal rate of wage drift on the structure of wages. A shift of emphasis from direct controls and the wage freeze to restrictive measures of general monetary and fiscal policy, as suggested by Rooth, would have made it easier to maintain the balance that was attained in 1949 with the aid of the change in international business conditions.

If the devaluation of the krona, which was an unwise action in so far as it was taken in response to a short-term international liquidity crisis rather than a fundamental disequilibrium in Swedish trade relations, had been less extensive, the break in the development toward a more stable economy would not have been so sharp. Under these conditions a further tightening of monetary and fiscal policy to compensate for the cyclical upturn in business activity and expansion of credit during the last quarter of 1949 would have eased the pressure
on regulations and made possible free wage negotiations and the elimination of the critical tensions in the labor market in 1950. Some import price subsidization may still have been necessary, but its size and undesirable effect on fiscal policy would have been significantly less.

The principal obstacle to the alternative line of policy that we have sketched was the Social Democrat Government's political commitment to the goals of improved social welfare and rising real income that had been announced at the end of the war. The government was unwilling to take any action that might even temporarily reduce consumers' real income. Any policy measure that would increase the cost of living was ruled out because the government with its political commitment to the labor movement could not, even after the signing of the wage freeze agreement, oppose any compensating wage increase and eventual increase in the entire level of nominal incomes. In the case of monetary policy this position meant that any restrictive policy that would involve an increase of interest rates was opposed because of its effect on the cost of living via rental rates.

The authorities' reasoning with respect to the interrelation of interest rates, housing costs, and wage demands was faulty.46

45 The fear that unemployment may have resulted from a more restrictive policy does not seem to have been an important factor. See, Erik Dahmén, "Penningpolitiska problemställningar," Ekonomisk Tidskrift, December, 1953, p. 292.

46 For an extensive discussion of these relations, see Einar Huss, "Interest Rates and Rents," Skandinaviska Banken, Quarterly
There was a tendency to confuse short- and long-term effects. Because of the nature of real estate financing only a small portion of the outstanding mortgages would be affected. Radhe estimates that at the level of the cost of living index in 1948 (160-165) a one percent increase in the long-term rate of interest would only cause a one point rise in the index. However, even this effect could have been prevented by a subsidization of rents if the rise in interest rates was to be temporary. This would have the added advantage of putting the social cost of the housing program explicitly on the government's budget.

The experiences during the first phase in the postwar development of Swedish monetary policy would seem to indicate that the social and economic advantages which were expected to result from the stabilization of the interest rate can easily be replaced by heavier disadvantages associated with the risk of a worsening of the value of money which such a policy produces. This is not to say that monetary policy was the cause of inflation or that a change in interest rate policy would have been sufficient to correct the situation. However, for balance to be restored it would in any case be necessary that monetary policy cease to be in direct opposition to the other measures.


47 Radhe, *op. cit.*, p. 177.
of stabilization policy and instead offer some degree of support. As
Montgomery pointed out,

In a planners' paradise where production, investment and foreign trade are rigidly controlled, where wages and other incomes as well as savings and consumption are determined by the Government it would be possible to dispense with the services of interest rate policy.48

But such a situation did not exist in Sweden from 1945 to 1950.

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CHAPTER V

THE KOREAN WAR INFLATION AND THE FIRST STEPS IN THE RETURN TO AN ACTIVE MONETARY POLICY, 1950-1951

I. INTRODUCTION

Beginning in 1950 Swedish monetary policy entered the second stage in its postwar development. The new line of policy that emerged during the years 1950-54 reflected a substantial modification in Swedish thinking concerning the function and importance of monetary elements in the economy. The introduction of a new monetary policy was undertaken as part of a major reformulation of the government's economic policy. As of 1950 the main emphasis in economic stabilization policy was shifted from the direct controls that had been employed during the previous decade to the more general working means of monetary and fiscal policy. The importance attached to monetary policy and the problems encountered in its formulation as a means of combating inflation was enhanced by the difficulties experienced by the authorities in their attempt to pursue a restrictive fiscal policy and the fact that inflation after 1950 became more severe and open than earlier.

After a number of false starts during the Korean War inflation there was a complete revision of the aims and means of monetary policy from the beginning of 1952. It was the policy introduced at this
time that is generally referred to in Sweden as the "new" monetary policy. The policy which continued to be founded on the maintenance of low stable interest rates, was new in two important respects: first, it was new for Sweden in so far as it was intended as the key element in the government's anti-inflationary policy. Second, the policy was new in that it not only aimed at a strict control of the quantity of money and credit independent of the level of interest rates, but also at a qualitative control of the allocation of the nation's financial resources that required a greater degree of intervention in the operation of the financial system than had ever been attempted previously in Sweden.

With the return to an active monetary policy in 1950 a new element is added to the question of the efficiency of monetary policy. Now, in addition to the general question of the general economic efficiency of the policy in terms of the ultimate target variables of the nation's economic policy, there is the question of the technical efficiency of the means employed to bring about desired changes in the volume and distribution of money and credit. In attempting to answer these questions we will contrast, in the light of the actual economic developments and general economic policy in 1950-54, the effectiveness

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II. ECONOMIC DEVELOPMENTS AND GOVERNMENT POLICY, 1950-1951

The Business Cycle, 1949-1955

Economic developments in Sweden from 1949 to 1955 can be divided into two main cycle phases. The nature and timing of these phases is readily apparent in the Konjunkturinstitutet's business cycle indicators presented in Figure 10 and the behavior of the Swedish price and wage indexes illustrated in Figure 11. The first phase, which occurred in 1950-51, is identified by a cyclical expansion of economic activity and the inflationary price increases which were associated with the outbreak of the Korean War and its international economic repercussions. The peak of the expansion phase was passed in 1951 but domestic prices, which tended to lag, did not reach their peak until early in 1952. The second phase in 1952-53 is marked by a stagnation in the rate of expansion of economic activity, rapidly declining international prices, and stable or moderately declining domestic prices. The low point of the post-Korean slump occurred during the first half of 1953 and a rapid recovery was begun during the second half of the year.

Economic developments in Sweden from mid-1953 to mid-1954 were very well balanced with full employment, stable prices, and a favorable
Figure 10

Business Cycle Indicators, 1949-1955

Scales: 1. Index 1949=100  5. Millions of kronor
2. Percentage of union members  6. Millions of kronor
3. Percentage of union members  7. Index par=100
4. Number of applicants per  8,9. Index 1935=100
 100 job openings  10,11. Index 1949=100

Source: "Konjunkturläget våren 1955," Meddelanden från Kon-
FIGURE 11

PRICE AND WAGE INDEXES, 1946-1954
INDEX 1948=100

Source: Statistisk Årsbok, 1955, p. 87.
balance of payments. It was not until late in 1954 that the first signs of a new wave of inflationary disturbances became apparent.

The Korean War Inflation, 1950-1951

The inflationary pressures that developed in Sweden during 1950-51 can be distinguished from those experienced in the years 1946-48 by the fact that the disturbances in 1950-51 were greater in magnitude, primarily external in origin, and resulted in an open inflation. Only during the years immediately following World War I had the Swedish economy undergone an inflationary shock of comparable magnitude.

The so-called Korean War inflation, in which the indexes of Swedish wholesale and consumer goods prices rose by 41 percent and 37 percent respectively in the twenty-one month period from September, 1949 to June, 1952, was the result of the conjunction of the expansion of economic activity and price increases set in motion by the devaluation of the krona in September, 1949, the inflation of world market prices caused by the Korean War, and a fundamental modification of Swedish economic policy. Foreign price increases rather than excess domestic demand were the main driving force in the inflationary process. However, the effect of the foreign price increases was heavily influenced by conditions in Sweden which greatly increased the inflationary potential of the economy. Given the external disturbances
associated with the Korean War, the analysis of the developments in 1950-51 is mainly,

... a question of how impulses toward higher prices are transmitted horizontally and vertically through the economic system, how changes in income distribution affect the demand for consumption and investment goods, and how wages are determined.3

The immediate effect on the Swedish economy of the Korean crisis in June, 1950 was a sharp acceleration of the rate of increase of import and export prices, an increased burden on the government's budget due to a rise in defense expenditures, the stimulation of a speculative build up of inventories, especially of imported raw materials, and hoarding by consumers in anticipation of rising prices and shortages. The rise of external prices, which is illustrated in Figure 12, posed the most serious problem for Swedish policy makers. The situation was made especially complicated by the highly uneven character of the increase in foreign prices. The rise in the price of the products of the forest industry, for example, accounted for nearly nine-tenths of the increase in export prices that occurred immediately after the outbreak of the Korean War. The rise in the level of import prices, on the other hand, was slower and more evenly distributed, but several raw materials such as textile fibers, metals, hides, and rubber played a dominant role in raising the general level of import prices.

The formulation of a short-term economic policy designed to

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FIGURE 12

SWEDISH EXPORT AND IMPORT PRICES, 1950-1956
INDEX 1949=100

cope with the inflationary disturbances associated with the Korean War was seriously complicated by the revision of economic policy that had been undertaken by the government late in 1949 and early in 1950. The policy reform, which was mainly political in motivation, was concerned with the means rather than the goals of economic policy.\footnote{The Social Democrat Party had lost its majority in the Lower House of the Riksdag in the General Elections of 1948 and in addition to concessions made to the opposition in the field of economic policy, the Social Democrats formed a coalition with the Farmers Party in 1951 in order to maintain a strong control of the government.} In his annual budget message to the Riksdag in January, 1950 the Finance Minister stated that the essential aim of the policy reform was the establishment of a "natural balance" in the economy.\footnote{Statsverksproposition. Bilaga 1, 1950, p. 10.} This was interpreted to mean an internal and external equilibrium of the economy at full employment and stable prices that could be maintained without the use of the type of direct controls that had been employed during the immediate postwar period.

Some actions designed to restore "natural balance" were taken in 1949 when 50 percent of the trade with OEEC nations was freed from import restrictions, the remainder of the wartime system for the rationing of consumer goods and allocation of industrial raw materials was abolished, and the regulations on the issuance of construction permits greatly liberalized. The main actions proposed in the budget message and subsequently adopted by the Riksdag early in 1950 were the removal of the devaluation subsidies on consumer goods and the
ending of the wage freeze as of January, 1951. The possibility of abolishing price controls and terminating the regulation of construction activity was discussed but no definite date was set for the action.

The revision in economic policy was not based on the assumption that a vigorous stabilization policy was no longer necessary. The Finance Minister, although he did not give specific details, called for powerful measures in the field of general monetary and fiscal policy to restrain the latent inflationary forces that were still thought to exist in the economy. In the spring of 1950 the Riksdag debated the question whether the Riksbank ought to pursue a stricter policy of restraint in order to moderate the rapid expansion of commercial bank credit and aggregate demand that had been set in motion by the devaluation of the krona. However, no action was taken until after the outbreak of the Korean War.

The main problem confronting Swedish policy makers after the Korean crisis in June, 1950 was to prevent external price disturbances from causing a cumulative process of domestic price and wage increases. An appreciation of the krona was rejected in the autumn of 1950 on the grounds of the uncertainty as to what the full extent of the foreign price increases would be, the highly uneven distribution of the foreign price increases that had already occurred, and the low level of foreign exchange reserves. Given the unchanged foreign exchange rate and the

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impossibility or unwillingness to pay subsidies sufficiently large to neutralize the increase in import prices, an increase in the level of domestic prices was required to maintain the internal and external equilibrium of the Swedish economy. Since the government was not able to guarantee an unchanged cost of living in 1951, the wage freeze could not have been prolonged even if there had not been a prior decision to terminate it at the end of 1950.

The policy that was adopted by the Swedish government in the autumn of 1950 was directed toward securing a rapid one step adjustment, i.e., a so-called "one time inflation," of the level of prices, wages, and money incomes to the level dictated by external developments. The means of economic policy were to be used to restrict price increases to a minimum and prevent the generation of an independent cumulative process of expansion based on internal conditions. The aim of the policy was to relieve the existing tensions in the economy and thereby create the conditions for a new stabilization of prices at a higher level.

The critical element in the pursuit of the policy of "one time

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7 In theory a number of alternative lines of development are possible without an increase in the level of domestic prices, but these would require a reduction in the level of employment and/or a substantial redistribution of income from wages to profits which made them politically impossible in practice. See, Bengt Metelius, Utlands-transaktionerna och den svenska ekonomin, SOU 1955:13, pp. 171-77.

8 Proposition, 220, 1950, p. 42.
inflation\(^9\) was the behavior of wages. As Metelius points out,

Experience during the war and postwar period of full employment indicates that there are wide margins for wage and income developments in the case of external price disturbances and it is of the utmost importance for the value of money just where within these margins the actual development occurs.\(^9\)

The principal element of instability in the Swedish economy prior to the outbreak of the Korean War was the distortion of the structure of wages generated by the wage drift that occurred during the years of the wage freeze. The Konjunkturinstitutet claimed that,

\[
\ldots \text{even if prices had remained stable a certain, not insignificant, increase in wages would have occurred in 1951 as a reaction to the years of wage stabilization.} \quad \text{10}
\]

The wage situation in 1950-51 was further complicated by the fact that the unions were determined to secure compensation in 1951 for any increase in the cost of living due to the Korean War and the removal of the devaluation subsidies on consumer goods. The government took the position that an increase of wages was justified in order to compensate for price increases and thereby prevent any unjustified reduction in labor's standard of living.\(^11\) Collective bargaining agreements concluded early in 1951 on the basis of negotiations carried on in November and December, 1950 resulted in a

\(^9\)Metelius, op. cit., p. 120. See also Johan Akerman, "Löne-nivå och stabiliseringspolitik," Ekonomisk Revy, December, 1950, pp. 398-405.


\(^{11}\)Per Edvin Sköld, Priser, löner, skatter, Socialdemokratisk skriftserie No. 34 (Stockholm: Tidens Förlag, 1952), p. 6.
14 percent increase in industrial wages and in addition there was a record 8 percent wage drift during the year.

The inflationary process—a variety of cost push—to which the Swedish economy was subject in 1951 was very complex. According to the ex post calculations of the price control authorities the relative share of the various inflationary forces that contributed to the 20 percent increase in the cost of living in 1951 were as follows:12

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import price increases</td>
<td>29.5%</td>
</tr>
<tr>
<td>Export price increases</td>
<td>13.1%</td>
</tr>
<tr>
<td>Increases in the wages of agricultural workers</td>
<td>21.2%</td>
</tr>
<tr>
<td>and farmers</td>
<td></td>
</tr>
<tr>
<td>Other wage increases</td>
<td>20.8%</td>
</tr>
<tr>
<td>Removal of devaluation subsidies</td>
<td>4.2%</td>
</tr>
<tr>
<td>Removal of agricultural subsidies</td>
<td>2.6%</td>
</tr>
<tr>
<td>Increased indirect taxes</td>
<td>3.7%</td>
</tr>
<tr>
<td>Other causes</td>
<td>4.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Space does not permit an exhaustive analysis in the present study, but an understanding of the potential and actual role of monetary factors in the development requires at least a schematic treatment of the dynamics of the inflationary processes that produced these results.13

In attempting to summarize the developments in 1951 it can be said that the greater part of the increase in the aggregate supply

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that resulted from a 20 percent improvement in the terms of trade and increased production were utilized in a build-up of inventories and foreign exchange reserves which together amounted to approximately 2 billion kronor. *Ex post* equilibrium was attained by an increase in the savings of the business and government sectors of the economy that was used to finance the increase in inventory and foreign exchange. Along the lines of the old Wicksellian theories of the dynamics of inflation, the rise in prices created its own purchasing power and the controlling factor in the speed and extent of inflation was the change in the distribution of income generated by the rise in the price of goods and the factors of production.

The rise in the level of external prices and the reaction of the Swedish economy to them resulted in the transfer of forced savings from consumers and firms selling on the home market to export industries and government. Although labor unions secured a very large increase in the nominal wage rate, they failed to correctly anticipate the effect of rising external prices and their own actions on the cost of living, and there was no significant increase in the real wage. The large increase in profits during the year was heavily concentrated in the export sector of the economy, especially the forest industry, and did not give rise to any immediate increase in the demand for investment in fixed capital. The weak development of consumers' income resulted in buyers' resistance to increased prices and those industries, especially textiles and clothing, selling on the home market that experienced a disproportionately large share of the increase
in the cost of imported goods had their profit margins substantially reduced. A significant portion of the build up of inventories in 1951, which amounted to approximately 1 billion kronor, was unplanned accumulation. After having risen very rapidly during the first half of 1951 domestic prices slowed during the second half of the year as the pressure of rising external prices eased and "... the inflationary process tended to exhaust itself precisely because of its very uneven effect on income—or profit—distribution."\textsuperscript{14} However, there remained a latent inflationary threat for 1951 in the high level of profits and the wage demands which in real terms had not been satisfied in 1950.

The policy actions taken by the Swedish government after the outbreak of the Korean War were mainly directed toward the sterilization of profits and the prevention of a boom in private investment. These actions included the introduction of a restrictive credit policy, the reimposition of the export levy, a temporary tax on investment, and an increase in certain indirect taxes.

The introduction of a restrictive monetary policy in August, 1950, which will be treated below in our discussion of financial developments, was one of the first actions taken. Rapid employment of direct controls to restrict the growth of private investment was seriously handicapped by the fact that the existing regulatory system in the field of construction could not be made immediately effective

because of the backlog of outstanding permits that had been built up during 1949 and the early months of 1950.

The imposition of a ten percent tax on investment was an especially important action in view of the difficulty that was encountered in the pursuit of a restrictive credit policy in 1951. The stated aim of the tax, which was only to apply in 1951, was to restrict investment in fixed capital and inventories thereby bringing under control those areas of investment activity not covered by the regulation of construction. With respect to fixed capital the investment tax liability applied to all firms with annual sales in excess of 300,000 kronor who invested during the tax year 1951 in equipment with a usable life of three years or more. The tax was to be paid on a sum which, in principle, corresponded to the write-off taken for income tax purposes and the actual depreciation of the capital. In the legislation that established the investment tax a write-off of ten percent was arbitrarily assumed to correspond to the actual rate of depreciation. However, if a firm could show that the average annual depreciation on all of its fixed capital in use amounted to at least twenty percent, it was permitted to use the figure of twenty percent in the computation of its investment tax liability. With respect to inventories the investment tax was to apply if the increase in inventories that occurred in 1951 was accompanied by an increase in the so-called "hidden

inventory reserves," i.e., the difference between the actual value of the inventory, the lower of cost or market value, and the book value reported for income tax purposes. The ten percent investment tax was to be paid on any change in the hidden reserve up to a figure equal to the change in the actual value of inventory in 1951.

The main objective of the investment tax appears to have been the elimination of the internal source of investment finance associated with the corporate income tax laws, which permitted a firm complete freedom to write off any amount up to the full cost of an investment in any year. The investment tax, as formulated in 1951, might be expected to induce firms to take less depreciation on their new equipment and write off their inventories less. While they would have to pay more income tax and have less liquid assets available for investment by so doing, they would save the ten percent investment tax. On the other hand, their total income tax liability would not be increased since the investment tax was only temporary and when it expired firms could recoup the extra income tax paid during the investment tax period through unlimited depreciation and write offs. Thus, the investment tax, through the inducement it offered firms to pay more income tax in periods of excess demand and less in a period of slump, would affect the amount of funds available for investment but not the cost of investment. As formulated in 1951 the investment tax was more in the nature of a complement than a substitute for a restrictive credit policy.

The automatic stabilizing effect of the highly progressive
structure of Swedish income taxes rather than the active counter-
cyclical management of the government's budget was the basis for fiscal
policy's contribution to economic policy during the Korean War infla-
tion. In general, the goal of Swedish fiscal policy during a period
of inflation is a surplus on the current budget sufficiently large to
offset the deficit on the capital budget and prevent any substantial
increase in the national debt. However, this goal was not very dili-
gently or successfully pursued during the period under review.

When the budget for 1950/51 was enacted in the spring of 1950
the Korean crisis was not anticipated and a certain easing of the
economic situation was expected. Thus, planned expenditures were
increased somewhat despite a small expected decrease in revenues.
The budget as planned called for a balance on the current budget and
600 million kronor of borrowing to finance the deficit on the capital
budget. The rapid rise in prices and nominal incomes that followed
the outbreak of the Korean War expanded the tax base and resulted in
tax revenues 19 percent greater than had been expected. The outcome
of the budget was thus a surplus of 327 million kronor on the current
budget and a deficit on the total budget of 196 million kronor. While
the budget had not been planned as deflationary, the automatic sta-
bilization effect of the tax structure did serve to limit the growth of
excess demand.

16 "Översikt över det ekonomiska läget 1950" (Nationalbudget för
When the budget proposals for the fiscal year 1951/52 were being drawn up in January, 1951, the danger of a serious inflation was clear and apparent. The Finance Minister urged as great a surplus on the current budget as possible, but in the final proposals succeeded in reducing the planned deficit to 71 million kronor. Planned expenditures on the capital budget were heavily influenced by the government's acceptance of a new long-term economic plan that had been drawn up in connection with the reform of economic policy in 1950. The long-term plan, which was mainly concerned with the goal of economic growth, called for an increase in the society's investment quota and a reallocation of spending in which there would be a retardation in the rate of growth of private consumption and investment and a acceleration of the government's investment spending. The need for a substantial expansion of housing construction was especially stressed by the long-term planners. In the pursuit of this plan the deficit on the capital budget was increased from the previous year's plan of 353 million and actual result of 568 million to 926 million kronor. The planned deficit on the budget enacted for 1951/52 thus amounted to 997 million kronor. Government borrowing required was estimated to be 550-600 million kronor.

What was to become the chronic problem of Swedish government

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17Statsverksproposition, Bilaga 1, 1951, pp. 15-16.
18For the final report of the Committee on Long-Term Economic Planning, see Ekonomisk långtidsprogram, 1951-55, SOU 1951:30.
finance during the decade of the 1950's first made its appearance in
the spring of 1951. Having committed itself to an ambitious growth
program requiring a rapid expansion of government investment the need
for new sources of revenue on the current budget, especially during
periods of inflation, was obvious. However, great difficulty was
encountered in making any major changes in tax legislation. Until
1960 there was a high degree of political inelasticity of taxes in an
upward direction.

A number of very difficult issues were raised in the course of
the government's search for new sources of revenue. For example, in
the field of business taxation, the Committee for Long-Term Economic
Planning in 1951 advocated more business taxation but, because it was
opposed to any increase in the net profits' tax, recommended that some
form of gross taxation be introduced. This recommendation touched off
a long debate on the relative merits of gross and net business taxa-
tion during which the government was unwilling to take any decisive
action. 19 With regard to personal taxes the final report of the
Committee on National Direct Taxation in 1951 found that the existing
very heavy marginal taxes on income were having a serious effect on
incentive and, along with the taxes on wealth, substantially reducing
savings. 20 The Committee was not only opposed to any increase in the

19 For a review of the debate and its outcome, see Lars G.
Sandberg, "Net Profits versus Gross Business Taxation: The Swedish

20 Betänkande angående den statliga direkta beskattningen,
SOU 1951:51, pp. 96-115.
personal income tax rate, but strongly recommended actions to make them less progressive. It became apparent in time that the only economically feasible type of a major tax increase was some form of general indirect taxation. However, political agreement on this issue was not reached until late in the 1950's and action was first taken in 1960.

Some attempt was made to raise additional revenues for the fiscal year 1951/52 through "temporary" tax increases and the introduction of some new forms of special taxation such as a tax on the use of electrical energy. However, the revenue produced by these measures was relatively unimportant in terms of the size of the total budget. The continuation of the inflation during the fiscal year caused income tax collections to be fifty percent greater than had been expected. This plus the fact that not all appropriations on the capital budget were utilized resulted in a total budget surplus of 808 million kronor. Despite the size of the ex post surplus there can be no question that the budget was far too weak to have made any important contribution to restraining inflation and the increase in government expenditures may even have been an important factor in prolonging the process.

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III. FINANCIAL DEVELOPMENTS AND MONETARY POLICY

For the purpose of our study financial developments in Sweden from 1949 to 1955, the main features of which are illustrated in Figures 13, 14, and 15, and the monetary policy associated with them may be conveniently divided into two stages or phases. The first stage is distinguished by the rapid monetary expansion that accompanied the Korean War inflation and the initial steps taken in 1950-51 to institute a policy of quantitative credit control. The second stage, dating from the introduction of new quantitative and qualitative credit controls in February, 1952 through the first half of 1954, is characterized by the problems encountered in an attempt to maintain economic stability and finance a rapid expansion of government expenditures and investment of high social priority without excessive monetary expansion or disturbance to the level of interest rates.

First Steps in the Return to an Active Monetary Policy, 1950-1951

Conditions in Sweden at the beginning of 1950 were characterized by conflicting inflationary and deflationary tendencies with a relatively balanced position as a result. The prospects of maintaining the balance that had been attained in 1949 were regarded with considerable confidence. Due to the financing of the government's budgetary deficit credit conditions were easy despite substantial bond sales by the Riksbank and the expansion of credit, dating from the devaluation of the krona in September, 1949, was not considered alarming.
FIGURE 13

POSITION OF THE COMMERCIAL BANKS, 1950-1955
BILLIONS OF KRONOR

Source: Riksbanks årsbok, selected years.
Gold and foreign exchange bonds (incl. Treasury Bills)

Note circulation

Source: Riksbanks årsbok, selected years.

Figure 14

Position of the Riksbank, 1950-1955
Billions of Kronor
FIGURE 15

THE DEVELOPMENT OF INTEREST RATES, 1950-1958

The first sign of a change in monetary policy came early in the spring of 1950 when the Finance Minister warned that it would be necessary to take up the question of the enforcement of the new reserve requirement law of 1949 if the expansion of commercial bank credit continued.22 The sentiments in favor of a more active monetary policy were not, however, very strong at this point as indicated by the fact that the Banking Committee in its commentary on the policy of "natural balance" recommended the continued use of direct controls and did not find any reason for a change in the basic guide lines of monetary policy.23

In the discussion of the Banking Committee's recommendation it became clear that the principal objection to a change in monetary policy in a more restrictive direction was an unwillingness to permit any change in interest rates. The aversion to interest rate changes was based on the undesirable effects they were expected to have on housing construction which, after having been substantially reduced in 1948 and 1949, was again expanding rapidly. In view of the increasingly severe housing shortage the volume of housing construction was given a high social and political priority. The shortage of housing was estimated to be the equivalent of at least two years' full production at the record 1939-level.

It was only in June of 1950 when the expansion of commercial

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bank credit, which up to that time amounted to 742 million kronor or ten percent from September, 1949, began to accelerate in connection with the Korean crisis that the monetary authorities became seriously concerned. The earlier expansion had been considered more or less justified on the basis of the free listing of imports, rising prices on the world market, and the easing of the restrictions on construction activity. In the summer of 1950, however, the Riksbank took the position that a further acceleration of the expansion could not be justified on these grounds and that there existed "... a serious risk for an inflationary development based on domestic credit expansion."\(^24\) The Banking Committee announced that a "restrictive credit policy is needed ... agreements with banks, or if necessary, a law concerning bank liquidity (is required)."\(^25\)

The policy actions taken in July and August, 1950 reflect a substantial change in Swedish thinking about the role of money and credit in the economy. The essential theoretical foundation for the policy that was introduced in 1950 was what can best be described as a modified quantity theory of money. Unlike the quantity theory approach that Ohlin and Myrdal rejected in the 1940's, the emphasis in the new version was placed on bank credit rather than the circulating currency. According to Dahmen the essence of the new theoretical position was the realization, largely as a result of the

\(^24\)Bankoutskottets memorial, No. 1, 1951, p. 5.

experience gained in 1946-48, that even if money is not the cause of inflation this does not limit the ability of monetary policy to apply a brake to the process of inflation with measures which, via bank liquidity, influence the credit market. Emphasis was placed on the supply of credit and not the effect of interest rate changes on the demand for goods and services as the principal means by which monetary policy could influence the economy. Thus, it was thought that the central bank could make a substantial contribution to anti-inflationary policy without changes in the interest rate, which for social and political reasons were thought to be undesirable. The monetary authorities in the summer of 1950 sought the technical means whereby bank liquidity could be restricted and credit rationing induced without causing significant changes in interest rates.

The first step in the introduction of a restrictive credit policy was taken in July, 1950 when the Board of the Riksbank requested the government to issue a directive placing the reserve requirement law into effect. The directive, issued August 10, 1950, announced the new compulsory reserve ratios and ordered the commercial banks to conform to them as of October 1, 1950. The main provisions of the reserve requirement directive were as follows:

1. Bank liquidity in the form of cash holdings and secondary

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27. SFS 1951:483.
reserve assets (mainly Treasury Bills, government securities, and sight claims on other domestic banks) together must amount to at least ten percent of adjusted total liabilities, i.e., total liabilities exclusive of savings deposits and contingent liabilities. The ten percent rate applied only to the five largest banks, being instead eight percent for medium size banks and six percent for small banks.

2. A minimum of forty percent of the banks' required reserves of liquid assets were to be held in cash (vault cash plus sight deposits at the Riksbank).

3. A minimum of twenty-five percent of the required cash reserves were to be held on deposit at the Riksbank. In the case of the five largest banks this meant that they were to hold a minimum of 2.5 percent of their adjusted total liabilities on their account at the Riksbank.

The announced reserve requirements, which according to the provisions of the 1949 law could have been made much higher, were very modest in terms of the banks' liquidity position in 1950. According to the requirements the banking system's deposits at the Riksbank were to average 215 million kronor during the last quarter of 1950. The actual deposits during the period averaged 362 million kronor. The banks' total liquidity ratio declined from 20 percent at the beginning of the year to 16 percent at the end of 1950, but was still sufficient to support a substantial volume of credit in 1951. The Board
of the Riksbank subsequently explained that the reserve requirements were not made more restrictive because

... the Riksbank in the first place desired to counteract the tendency to credit expansion by means of voluntary agreement on credit restraint and felt that cooperation with the banking system offered a smoother and for the Swedish economy less disturbing way of reaching generally satisfactory results.  

As a second step in the introduction of a restrictive policy negotiations with representatives of various institutions in the financial system were opened in July, 1950 and an agreement on voluntary credit restraint was reached in August. The new agreement, like those concluded in 1947 and 1948, did not attempt to quantify the degree of restraint to be attained. The banks agreed to exercise all possible restraint in their lending activities but to differentiate these restrictions so as to favor projects calculated to lead to increased exports or increased production of goods essential to the community in the existing crisis situation. On the other hand, to refrain in so far as possible from supporting the initiation or extension of productive activities which could not be regarded as essential, and from the granting of credits for non-productive speculative purposes. It was further agreed that the banks in their investment banking operations would not undertake the issuance of bonds or debentures without prior consultation with the Riksbank concerning the priority of the borrowing, time of issue, interest rate, etc.

28 Bankofullmäktiges skrivelse, April 28, 1951, p. 3.
The third, and perhaps the most significant action taken by the monetary authorities in the summer of 1950 was the decision in July to temporarily suspend the policy of open market operations in support of the price of long-term government bonds. The support prices in effect in 1950 were those announced in November, 1948 when the Riksbank committed itself to the maintenance of a three-percent level of long-term interest rates. During the first half of 1950, when the financing of the government's budgetary deficit resulted in an easy money market, the Riksbank had been able to sell net 351 million kronor of bonds, especially mortgage institutions bonds. During the early summer the situation changed and there was a reduction of demand in the bond market which resulted in a rising tendency for short-term bonds (see Figure 16). The resumption of support purchases at this time would have been in direct opposition to the measures being taken to restrict bank liquidity and credit.

There is no evidence that the Riksbank desired or expected that the change in open market policy would produce a substantial increase in the level of interest rates. On the contrary, the government announced that it did not intend to abandon its low interest rate policy, but that a policy of limited fluctuations in interest rates was, nevertheless, possible.\(^{29}\) The reasoning employed in formulating open market and interest rate policy in 1950 appears to have been a variety of the "locking in" thesis. It was expected that the

\(^{29}\)Riksbanks Årsbok, 1950, p. 36.
3% perpetual government bonds of 1934
Government bonds, 10 years to maturity
Government bonds, 3 years to maturity
3% industrial bonds, circa 12 years to maturity
3½% convertible government bonds, circa 30 years to maturity


FIGURE 16

EFFECTIVE INTEREST RATES ON BONDS, 1950-1952
voluntary agreement, backed by the new liquidity requirements, would prevent excessive credit expansion and pressure on the bond market by the commercial banks and new private issues. The capital losses associated with a temporary decline in bond prices would then tend to discourage bond sales by the savings banks, insurance companies, and other financial institutions which had been so troublesome in 1948. The authorities stressed that any change in interest rates would be temporary and, as Senneby reports, "official quarters have emphatically rejected the idea of a rise in the discount rate." 30

The initial effect of the change in open market policy was in line with the authorities' expectations. From July to the beginning of the fourth quarter of 1950 the quotations of the 3 percent perpetuals of 1934 that had been pegged at 99 fell to 95 and subsequently stabilized at 94 percent. (See Figure 16.) The fall in prices meant an increase in the effective rate of interest from 3.05 to 3.22 percent. The market maintained a wait-and-see attitude during August and September and the turnover of bonds on the Stock Exchange was lower than normal.

Credit conditions in the last quarter of 1950 were beginning to tighten and bank liquidity to deteriorate under the pressure of an outflow of foreign exchange. These conditions plus the distortions in the structure of interest rates caused by the increase in long-term

rates while other lending and deposit rates remained fixed, induced the Riksbank to announce on October 6, 1950 an increase in the special rediscout rate—normally \( \frac{1}{2} \) percent below the official discount rate—applied to the rediscouting of commercial bank bills. The special rediscout rate was raised from 2.5 to 3 percent, i.e., to the same level as the official discount rate. The Riksbank also increased its rate for loans on security of government bonds from 2.5 to 3 percent. These changes were interpreted as a signal that the discount rate was to be raised and the entire structure of interest rates began to rise.

The Riksbank continued to refrain from open market support purchases following the increase in the rediscout rate and on November 30 the Board of the Riksbank decided to raise the official discount rate by \( \frac{1}{2} \) percent to 3 percent. The increase in the discount rate was followed by a general adjustment upward of all loan and deposit rates in the financial system. The level of interest rates on long-term bonds rose to approximately 3.5 percent. (See Figure 16.) The Treasury Bill rate reached 2 percent and other short-term rates adjusted accordingly.

The increase in the discount rate in December, 1950, which can be considered as the final step in the introduction of a restrictive credit policy, was the first change in the discount rate since February, 1944. In the announcement of the increase the Board of the Riksbank stressed that it did not mean that the Board considered higher interest rates in the long run as desirable and that, on the contrary, as soon as conditions would permit there would be a reduction
of the discount rate in order to bring about a general reduction of interest rates.\textsuperscript{31} The authorities interpreted the action as

\ldots an unavoidable adjustment within the framework of the low interest rate policy in order to eliminate the existing tensions in the structure of interest rates and make possible continued activity on the capital market.\textsuperscript{32}

Shortly after the turn of the year the Riksbank resumed its open market operations in support of the long-term rates at the 3.5 percent level.

\textbf{Riksbank Operations and Commercial Bank Credit Expansion}

Despite the restrictive policy that was introduced in the summer of 1950 commercial bank credit increased by 1,568 million kronor or 18 percent from June, 1950 to December, 1951. The bulk of the expansion, amounting to 1,336 million kronor, occurred in the period from June, 1950 to June, 1951. The first sign of a moderation in the rate of expansion came in May, 1951 which is the first month after April, 1949 in which the increase in commercial bank credit was less than during the corresponding month of the preceding year. Credit expanded by only 3 percent during the second half of 1951 as compared with 7.3 percent during the first half of the year. Thus it appears that the credit expansion did not show any significant slowing until after the initial wave of inflationary pressures associated with the Korean War had spent itself.

Although the means of restrictive policy were available, the

\textsuperscript{31}\textit{Bankoutskottets memorial, No. 1, 1951}, p. 6.

\textsuperscript{32}\textit{Bankoutskottets utlåtande, 1951:5}, p. 7.
Riksbank experienced great difficulty in using them in a rigorous manner. As in 1948-49 the authorities again encountered a dilemma in their attempt to reconcile the goals of credit and interest rate policy. The fiscal policy of the period was also an important factor complicating the attempt to pursue an active monetary policy. This was especially true during the second half of 1950.

Following the introduction of the reserve requirements agreement on voluntary credit restraint and modifications in open market policy the Riksbank's actions were mainly directed toward the goal of credit restraint. The authorities were willing to permit a limited interest rate increase and this gave broader scope to the Riksbank's efforts to limit bank liquidity. The final result of the Riksbank's transactions in foreign exchange, securities, etc., would have been a small decrease in the money base if the National Debt Office had not been forced by its concern for the development of long-term interest rates to finance the government's deficit and refunding operations with Treasury Bills that were directly or indirectly placed with the Riksbank. A net increase in the Riksbank's holdings of Treasury Bills by 596 million kronor, most of which were acquired in December, 1950, was the main factor accounting for the 572 million kronor increase in the money base that resulted from Riksbank operations during the second half of 1950 (see Appendix, Table XXXI). As a result of the increase in Riksbank credit, commercial bank cash assets were increased by 254 million kronor and their total holdings of liquid assets only reduced by 38 million kronor. Thus, despite a 18 percent increase from June, 1950
in their credits outstanding and the new required reserve ratios, the commercial banks had at the end of the year, on the eve of the very sharp increase in prices and the large credit demand, sufficient liquidity to support a substantial further increase in lending. There were only the general terms of the voluntary agreement on restraint to hinder them.

It was during the first half of 1951 that the dilemma of credit and interest rate policy again appeared. Emphasis in the Riksbank's policy actions was shifted from credit restraint to interest rate stabilization in the early months of 1951. The shift was heavily influenced by pressures from outside. The raising of the discount rate gave rise to strong criticism in the Riksdag. It was feared that any further rise in interest rates would, along with the very rapid rise in construction cost—approximately 35-40 percent from 1950 to 1951—cause a disaster in the housing industry.33 The necessity of raising rental rates was also deplored.

The Riksbank through limited open market operations during the first months of 1951 broke the market's expectations of a further rise in interest rates, and long-term rates developed a downward trend

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33 Later in the year the Riksdag increased the direct subsidies and made available special supplementary interest free loans in an effort to counteract the increase in construction costs. Subsidy payments were also increased as a result of the 3 percent interest rate guaranty that had been granted on government supported housing construction in the 1940's.

(see Figure 16). However, commercial bank credit expansion continued unabated during the first quarter of 1951, and under the pressure of this expansion and the outflow of foreign exchange, the credit market tightened and long-term interest rates again began to rise. These developments forced a decision. In April, 1951 the Riksbank brought to an end the vacillating policy, which had allowed both an increase in the supply of credit and an increase in the discount rate, because of the unwillingness to either tighten credit regardless of the effect on the rate of interest or defend the interest rate at any cost. In a major statement of policy the Board of the Riksbank said,

Concerning the monetary policy to be pursued in the immediate future, without committing the Bank to any position regarding interest policy in general, the Board wishes to state categorically that, in existing circumstances, there should be no revival of the upward slide in interest rates which occurred from the summer of 1950 until the end of November, 1950. Should any speculation arise in anticipation of such a development—certain signs of which have appeared this month—the Riksbank intends to put a stop to it, even if this would result in a temporary abandonment of the attempt to keep the money market tight. Changes in the interest rate should, in the opinion of the Riksbank, be the result of decisions taken by the responsible authorities in consideration of all the tendencies in the existing situation and after they weigh up the probable effects of a change in interest rates on economic developments as a whole; changes should not be all wed to occur merely as a result of accidental and speculative factors which happen to appear on the market.34

The Board of the Riksbank and the Banking Committee insisted that a continued expansion of credit could only be prevented if monetary policy were combined with a strongly restrictive economic

34 Bankoutskottets utlåtande, 1951:20, p. 22.
policy in other respects. More effective fiscal, investment, price, and wage policies were recommended. The Board of the Riksbank claimed that the commercial banks under the intense pressure of the demand for credit had not abided by their agreement to exercise restraint. The banks, on the other hand, took the position that the expansion that had occurred was fully justified under the terms of the agreement. While the Bankers Association, although it advised its members in June of 1951 to exercise greater restraint, claimed that the Riksbank could only expect to restrict credit if it curtailed bank liquidity.

The Riksbank's bond purchases amounted to 322 million kronor during the first half of 1951 and the net result of all Riksbank operations was a 181 million kronor increase in the money base. Commercial bank deposits at the Riksbank increased during a period in which there is normally a seasonal contraction and they were able to increase their holdings of Treasury Bills by 177 million kronor.

Financial conditions in Sweden changed decisively during the second half of 1951. The export boom resulted in a tremendous increase in foreign exchange reserves. The Riksbank’s purchase of 1,236 million kronor of gold and foreign exchange increased reserves by over 100 percent. The principal offset to the expansive financial effect of exchange purchases was a 897 million kronor reduction in the Riksbank’s


security portfolio. The greater part of this reduction resulted from the redemption of debt by the National Debt Office with funds secured from the price equalization levy on exports. The net result of Riksbank operations during the period was a 606 million kronor increase in the supply of cash assets. The commercial banks' liquidity rose sharply in the second half of 1951 as deposits increased by 805 million and advances by only 264 million kronor. As Figure 15, page 213 indicates, long-term interest rates developed a strong downward tendency during the second half of the year.

Despite the essentially passive monetary policy that was being pursued, the rate of credit expansion slowed during the second half of 1951 as the rate of advance of price levels at home and abroad moderated and imports slacked. There was no immediate boom in investment, but the extremely high level of profits and the prospects of further wage increases made a continuation of inflation appear likely. Thus, the inflow of foreign exchange and the easing of financial conditions that resulted from it solved the problem of rising interest rates, but it also presented the Riksbank with the problem of finding means of preventing the increased liquidity of the banking system from serving as the basis for a new wave of inflationary credit expansion. It was under these circumstances that the monetary authorities first conceived of the radical revision of monetary policy that was put into effect from the beginning of 1952. The details of the new policy and the reasoning on which it was founded will be treated in Chapter VI.
IV. SUMMARY AND CONCLUSIONS

From a technical point of view the Riksbank's policy in 1950-51 can scarcely be judged efficient. Even prior to the revision to a strict policy of interest rate stabilization in April, 1951, the Riksbank did not succeed in its efforts to prevent a rapid expansion of commercial bank credit. In general, the measures taken in 1950 signify a new approach to monetary policy which was appropriate to the economic problem of the period. Perhaps the most significant aspect of the policy that was pursued is that at last in Sweden monetary policy was recognized as a potentially powerful weapon in the fight against inflation.

The monetary authorities had the means available to carry on an anti-inflationary monetary policy and actually embarked on such a program. However, the Riksbank was disinclined to use its new arsenal of weapons as forcefully as the situation demanded. The principal shortcoming of the policy was the assumption that the existing means would permit a tightening of the supply of credit without a significant increase in the level of interest rates. The rise in interest rates following the first steps in the introduction of a restrictive credit policy was the main factor inhibiting a more vigorous use of monetary policy. Even if somewhat modified as compared with the immediate postwar period, the policy of stable low interest rates continued to handicap monetary policy.

The activization of the reserve requirements law of 1949
supplied the Riksbank with a potentially powerful means of credit control. The liquidity ratio could be set at any level up to a maximum of twenty-five percent and the banks could be required to hold up to 100 percent of this in cash. When combined with open market operations, the variable cash reserve requirement makes it possible to rigorously limit bank liquidity. The secondary liquidity reserve provisions of the law also made it possible to prevent the banks from improving their cash position by a reduction in their holdings of gilt-edged securities.

The authorities did not attempt to exploit the possibilities offered by the reserve requirement law in order to force the banks to curtail their lending operations. The requirements that were applied in 1950 were very mild with regard to the existing level of bank liquidity. Although they reduced the potential expansion, the reserve requirements did not impose any immediate restriction on the granting of credits. The required reserve ratios were in principal variable, but in practice they were fixed. The framers of the law had not intended to imitate the American system of variable reserve requirements and their use by the Federal Reserve System. Any attempt to make rapid or frequent adjustments was limited by the fact that the power to make changes was vested in the government and not the Board of the Riksbank. The main aim of the reserve requirements applied in 1950-51 appears to have been the establishment of a minimum reserve ratio that would prevent the banks from carrying credit expansion to a point where, as in 1947, their liquidity approached the minimum
required for the purpose of safety by the basic banking law of 1911.

Given the fixing of reserve requirement at a relatively low level this left open market operations as the principal means by which bank liquidity could be reduced to a restrictive level. However, the lack of an extensive market for Treasury Bills outside the banking system and the fact that the banks could use these bills as part of their required reserves, meant that the Riksbank could only put pressure on bank liquidity by selling long-term bonds outside the banking system. Thus, any serious attempt to restrict or reduce credit would tend to push up interest rates.

The failure to take more vigorous action to restrict bank liquidity was the result of both a desire not to disturb the level of interest rates and a belief in the effectiveness of voluntary agreements on credit restraint. Despite the other measures that were taken, "moral suasion" remained the principal means of monetary policy in 1950-51. However, the agreement concluded in 1950 was more specific about the qualitative restrictions to be placed on credit than on the quantitative limitation that was to apply. The volume of credit was left very much to the discretion of the banking system. The voluntary agreement, like the reserve requirements, also had the disadvantage of not being quickly adjustable at the will of the central bank.

The Riksbank's discount rate policy did not make any significant contribution to monetary restraint. The action was late and the monetary authorities' view of the change as being forced on them and their statements concerning the continued validity of the goal of low
interest rates and the temporary nature of the 4 - ½ percent rise in long-term interest rates, served to modify any restrictive effect that the small increase could have had on the demand for funds. However, the main shortcoming of the interest rate policy was the limited flexibility that was permitted and the consequent efforts that were made to stabilize at the new higher level. According to Jacobsson,

... if one had the courage to avoid support purchases it would have been scarcely necessary to go up to 4 per-cent to reach equilibrium on the Swedish capital market.37

The question now remains as to whether a policy of flexible interest rates, which would have permitted a technically efficient policy of credit restraint, would have made any significant contribution to the control of inflation. The issue is not, in view of the government’s policy of one-time inflation and the fact that the inflation was primarily external in origin, whether price increases could have been entirely avoided. The goal of the government’s policy was only to limit price increases to those justified by developments in the international market. In general, the means of anti-inflationary policy, including monetary policy, that were available in Sweden on the eve of the Korean War inflation were inadequate, inflexible, and too infirm for the task at hand. However, given the size and speed of the disturbances that occurred, it is doubtful that it would have been possible under any circumstances to have maintained the

equilibrium of the Swedish economy during the Korean War cycle. The question, then, is whether a successful policy of credit restraint would have contributed to minimizing the disturbance to the price level.

Our review of economic developments in 1950-51 indicates that the Korean War inflation was of the cost-push rather than the demand-pull variety. A domestic wage-price spiral was initiated by a rise in external prices and the process of its transfer to the domestic economy. The limiting factor in the spread and extent of the inflation resulting from the dynamic interaction of foreign prices and domestic wages and prices was the deficit of consumers' demand that resulted from the uneven development of incomes. However, this brake on the inflationary process was in part offset by changes in the relation between savings and investment. It was at this point that monetary factors played an important role.

The rapid expansion of commercial bank credit in 1950-51 tended to ease the tension created by the uneven distribution of profits and savings. Business savings came to be heavily concentrated in the export sector, especially the forest industry, as a result of the uneven development of profits in which there was a diversion of profits from home enterprises to export industries. The inflation resulted in unexpectedly large government revenues which produced a record budget surplus for the fiscal year 1951/52. The increased savings by the business and government sectors were the counterpart of the deficit in consumers' demand and served \textit{ex post} as the means
of financing the increase in inventories, especially of imported goods, and foreign exchange holdings that occurred in 1951.

As a result of the timing of the shifts that occurred in profits and savings there was an increased demand for credit. The rise in the profits of exports was not realized until the second half of 1951 and it was the inflow of foreign exchange associated with it that caused the easing of the credit market. On the other hand, the large, essentially speculative, purchase of imported raw materials for inventory purposes occurred during the autumn of 1950. This along with the contraction of profit and increased inventory in several branches of industry producing for the domestic market, were the main factors in the increased credit requirements and tightening of the credit market that developed late in 1950 and the early months of 1951. The elastic supply of credit by permitting an increase in investment, especially in inventory, offset any immediate decrease in demand. This served to prolong the inflationary process and facilitated the spread of increased foreign prices through the Swedish economy. That monetary factors were conducive to a wage-price spiral is indicated by the fact that the total supply of money increased by 20 percent from 1949 to 1952 and velocity rose by 15 percent during the same period.

On the basis of our analysis of the inflationary process it would appear that a restrictive credit policy would at least have moderated the domestic effects of rising external prices. However, too great or exclusive reliance on credit restraint could have had undesirable consequences. The vigorous use of monetary policy means
that the allocation of resources will be influenced by the credit mar-
ket in a decentralized way. This is no disadvantage when market prices
and profits reflect the society's preferences. However, in 1950-51,
when the great fluctuations of prices created distortions in the market
mechanism and very uneven profits, a tight monetary policy would have
had its main impact on the already hard pressed domestic market indus-
tries. From a long-run point of view such a policy would be undesir-
able with regard to the impermanent nature of the existing price
relations and probable rapid changes. Fiscal policy, which offers
the possibility of more directly influencing the allocation of the
society's resources, would also have to be used to prevent a mis-
allocation of resources. With an appropriate fiscal policy the rise
in interest rates associated with an effective policy of credit
restraint would have been minimized.
CHAPTER VI

THE "NEW" MONETARY POLICY AND THE POST-KOREAN
SLUMP AND RECOVERY, 1952-1954

I. INTRODUCTION

The situation that developed in Sweden during the latter half of 1951 was, from a monetary point of view, untenable. However, an escape from the dilemma posed by the conflicting goals of credit restraint and stable interest rates required a radical new approach to monetary policy. The orthodox means of control had proven inadequate. However, as a result of a more general acceptance of the importance of money, especially the availability of credit, and the recognition of the limitations of fiscal policy in practice as a means of combating inflation, there could be no return to the passive monetary policy of the 1940's.

The new monetary policy introduced in February, 1952 marks the first successful Swedish attempt in the postwar period to effectively limit the supply of credit. Through a series of innovations in the techniques of control, which permitted a more direct control of the financial system than had ever been possible previously, the monetary authorities acquired the means of restricting bank liquidity independent of interest rates. The aim of interest rate stabilization was, however, modified to the extent that flexibility of short-term
interest rates was to be permitted provided it did not force up the level of long-term interest rates. The immediate goal of monetary policy thus became "credit restraint without a general glide upward in the level of interest rates." In order to realize this goal it became necessary to break the existing relation between the money and capital markets and to employ credit rationing as an explicit technique of monetary control.

One of the most distinctive features of the new monetary policy was the importance attached to the qualitative or selective control of credit. In addition to prohibitions on certain types of credit the monetary authorities undertook the new positive task of assuring an adequate supply of credit for essential sectors and activities. The restrictions on the supply of credit were not to affect either the availability or cost of credit for purposes of high social priority: notably housing construction and government investment. It was this feature of the new monetary policy that caused it to be retained as an element in the government's long-term economic planning program even after the immediate threat of a continuation of the Korean War inflation had passed.

After studying the economic developments of the period in which it was pursued and the mode of operation of the new monetary policy, we will consider the question of whether it provided a more efficient means of stabilization policy than the traditional forms of monetary policy employing full flexibility of interest rates.
II. ECONOMIC DEVELOPMENTS AND GOVERNMENT POLICY, 1952-1954

The Post-Korean Slump and Recovery

Economic conditions in Sweden at the beginning of 1952 were very heterogeneous in character. Despite a continued rise in wages and prices there were signs that the slowing of production that had occurred during the second half of 1951 in certain home-market industries was spreading to other branches of economic activity. However, inflationary pressure still appeared to be the main threat to the stability of the economy.

Late in the autumn of 1951 the government, fearing a second round of inflation, undertook a general tightening of its policy. The main elements in the government's restrictive policy were summarized by the Finance Minister under the following points:


2. An investment levy to supersede the investment tax as a means of preventing an inflationary increase in investment; temporary restrictions on permissible write-offs for income tax purposes.

3. Increase of the price equalization levy on exports of forest products and the extension of the levy to other types of goods.

4. Legislation on the sterilization of profits earned in the sale and use of forest resources.

5. A restrictive monetary policy directed toward a tightening
of credit without sacrificing the stable low interest rates; special legislation concerning the regulation of interest rates.

6. An active fiscal policy involving restrictions on government expenditures and the attainment of a surplus on the current budget.

7. More effective price controls.

8. Negotiations with labor market organizations with a view of securing restraint in wage increases.¹

The new restrictive policy measures, which for the most part were not put into effect until the beginning of 1952, continued to be directed primarily toward the level of liquidity and investment of the private sector of the economy.

The high level of profits, especially in the forest industry, became a matter of increased concern late in 1951 because it was feared that it would stimulate excessive wage demands. It was for this reason that in addition to an increase in the export price equalization levy a special "fee," amounting to as much as 25 percent, was imposed on revenues earned from the sale and use of forest resources in 1952 and 1953.

The levy and fee imposed on the forest industry were not taxes but a form of forced loan to the government. All of the fee and 60 percent of the levy less income taxes were to be repaid at a future

date. These measures had important monetary implications since the funds paid to the National Debt Office by the forest industry were only to be used to reduce the government's indebtedness to the Riksbank. During the fiscal year 1951/52 820 million kronor of public debt held by the Riksbank was retired in this manner. The levy and the fee were both removed in July, 1952 after the international market price of forest products dropped sharply.2

The two main actions directed toward the control of private investment in 1952 were the "new" monetary policy introduced at the beginning of the year and the so-called "investment fee" that replaced the investment tax when it expired at the end of 1951. In its new form the investment tax was levied directly at the rate of 12 percent on the value of fixed capital assets, old or new, with a useful life of three years or more, acquired by business firms in 1952 and 1953. Residential construction was specifically exempted from the tax. Inventories were also exempt, but a temporary limitation was placed on the right of firms to write off changes in inventory in 1952 and 1953 for income tax purposes. The unlimited depreciation of fixed capital, allowed under the existing corporate tax laws, was also

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2 This action was not completely voluntary. Foreign buyers objected to Swedish exporters shifting the levy to them and there was a concerted action by importing nations to bring down what they considered excessive prices. The imposition of a ceiling price on pulp imported into Great Britain in the spring of 1952 forced a removal of the Swedish export levy on this product. See, W. G. R. Howell, Sweden, Economic and Commercial Conditions, Overseas Economic Surveys (London: Her Majesty's Stationary Office, 1954), p. 42.
toremarily modified and depreciation in excess of 20 percent per annum was not permitted in 1952 and 1953. These changes considerably tightened the restrictions on investment as compared with 1951.

It is difficult to determine the effect of the various restrictive measures undertaken in 1952. As in our analysis of the developments in 1948-49, the effect of the government's policy cannot be separated from the effect produced simultaneously, via the demand for Swedish exports, by the changes that occurred in economic conditions abroad. Export prices weakened late in 1951 and fell sharply from the beginning of 1952 due to a collapse of the speculative boom in forest products. In the course of a few months timber prices fell by 30-35 percent and pulp prices by 50-60 percent. There was a general reduction in the international demand for raw materials in 1952 as a reaction set in to the overstocking of inventories that had occurred in 1951. The changes in international economic conditions were only prevented from assuming crisis proportions by a break in the usual close synchronization of cyclical developments in Western Europe and the United States; expansion continued in the United States while European countries experienced recessions.

Economic conditions in Sweden changed decisively early in 1952. As Table X indicates, the volume of both industrial production and exports in the second quarter of 1952 was less than in the corresponding quarter of 1951. The slump in economic activity following the Korean War boom took the form of what has been called a rolling
## TABLE X

<table>
<thead>
<tr>
<th></th>
<th>1952</th>
<th>1953</th>
<th>1954</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
</tr>
<tr>
<td>Industrial production</td>
<td>+0</td>
<td>-1</td>
<td>-6</td>
</tr>
<tr>
<td>Capital goods industry</td>
<td>+5</td>
<td>+3</td>
<td>-3</td>
</tr>
<tr>
<td>Consumption goods industry</td>
<td>-6</td>
<td>-7</td>
<td>-10</td>
</tr>
<tr>
<td>Exports</td>
<td>+8</td>
<td>-27</td>
<td>-15</td>
</tr>
<tr>
<td>Imports</td>
<td>-1</td>
<td>-19</td>
<td>-10</td>
</tr>
</tbody>
</table>

readjustment.\(^3\) One feature of this process was the lack of conformity of the expansion and contraction of the capital and consumer goods industries illustrated by the data in Table X. The disparity of the cyclical developments in the industrial sector of the economy during 1952 and 1953 is also illustrated in Figure 17 by the timing of the changes of employment in various branches of industry. In spite of the fact that there was no general decrease in total production, these fluctuations in the various branches of economic activity brought about some retardation in the rate of economic progress at large which helps to explain the stability of prices that was attained from mid-1952 through 1954.

The changes that occurred in the volume of gross expenditures for goods and services in Sweden over the course of the Korean War cycle are illustrated in Table XI. Private expenditures fell from 1950 to 1952 due to a sharp reduction, especially in 1952, in investment exclusive of inventories. The decline was, however, more than compensated by an increase in the expenditure of the public sector. The decline of private investment during this period is largely accounted for by a reduction in industrial investment, which under the pressure of worsening business conditions internationally and the increased restrictiveness of the government's economic policy, amounted to 25 percent from 1951 to 1953.

FIGURE 17

EMPLOYMENT IN VARIOUS BRANCHES OF INDUSTRY, 1950-1955
SEASONALLY ADJUSTED SERIES, INDEX 1949=100

<table>
<thead>
<tr>
<th></th>
<th>1950</th>
<th>1951</th>
<th>1952</th>
<th>1953</th>
<th>1954</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private gross expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consumption</td>
<td>100</td>
<td>99</td>
<td>99</td>
<td>104</td>
<td>110</td>
</tr>
<tr>
<td>gross investment</td>
<td>100</td>
<td>98</td>
<td>91</td>
<td>101</td>
<td>112</td>
</tr>
<tr>
<td><strong>Public gross expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consumption</td>
<td>100</td>
<td>103</td>
<td>115</td>
<td>127</td>
<td>134</td>
</tr>
<tr>
<td>gross investment</td>
<td>100</td>
<td>105</td>
<td>112</td>
<td>119</td>
<td>124</td>
</tr>
<tr>
<td><strong>Total gross expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>103</td>
<td>109</td>
<td>115</td>
</tr>
</tbody>
</table>

A survey of industrial investment plans for 1953, undertaken in the autumn of 1952, showed that for the first time in the postwar period firms in this sector of the economy planned a substantial reduction in investment. A summary of the responses of industrial firms to a questionnaire concerning the factors influencing their investment plans in 1952 is presented in Table XII. As these data indicate difficulty in obtaining financial accommodation was a significant factor retarding investment.

Despite the decline in industrial investment from 1952 to 1953 gross private investment increased due largely to a 15 percent increase in the volume of housing construction. The liberal granting of construction permits and government subsidies were used to channel the resources freed in the industrial sector in 1952 and 1953 into housing construction.

As Table XI indicates, the expansion of government expenditures during the slack that followed the end of the Korean War boom was not just a temporary compensatory action. Public expenditures continued to rise, albeit at a slower rate, as private expenditures rose sharply from 1953 to 1954 due to a 18 percent increase in the volume of industrial investment and a further 10 percent increase in housing construction. The increase in private investment in 1954 was the result of the removal of the investment tax at the beginning of

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### TABLE XII

**SUMMARY OF FIRMS' RESPONSES TO A QUESTIONNAIRE CONCERNING THE FACTORS INFLUENCING THE FORMULATION OF INVESTMENT PLANS FOR 1953**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Expansive Influence</th>
<th>No Influence</th>
<th>Restrictive Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong</td>
<td>Some</td>
<td>Strong</td>
</tr>
<tr>
<td>Change in sales conditions</td>
<td>27</td>
<td>95</td>
<td>165</td>
</tr>
<tr>
<td>Current level of cost with respect to:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>building and construction</td>
<td>7</td>
<td>11</td>
<td>95</td>
</tr>
<tr>
<td>machinery and equipment</td>
<td>3</td>
<td>15</td>
<td>146</td>
</tr>
<tr>
<td>Difficulty to finance desired investment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

the year and the substantial improvement in liquidity and profits that
began in 1953 when the international market for Swedish exports recov­
ered. The boom in domestic investment and the shortage of labor that
developed in association with it were the principal elements in the
inflationary pressures that appeared in the second half of 1954.

The unequal increase in wages that occurred in 1951 and the
failure to improve real wages due to price increases resulted in union
demands for large wage increases in 1952 and protection against any
further price increases through escalator clauses. The wage contracts
that were signed early in 1952 before the general dampening of busi­
ness conditions had made itself felt, resulted in a 11.6 percent
increase in industrial wages and in addition there was a wage drift
of 5.9 percent. Thus, total wage increases in 1952 were almost as
large as in 1951. The increase in labor costs resulted in a squeeze
on firms' profit margins, which, along with the international devel­
opments and the restrictive economic policy that was being pursued,
caused price-increasing pressures emanating from aggregate demand to
moderate and there was some reduction in employment. The conditions
necessary for any further substantial increase in wages were, there­
fore, eliminated and contractual increases in 1953 amounted to only
1.1 percent, while the wage drift of 2.5 percent was the smallest
recorded in the postwar period up to that time (see Figure 11,
page 193). Despite the rapid expansion of economic activity in 1954
the increase in wages was only moderate; the total wage increase was
only 4 percent. This was in part due to the government's strong
request for restraint in wage demands. However, the substantial shortage of labor that developed during the second half of 1954 caused heavy demands to be made when negotiations were opened for 1955.

The substantial reduction of export prices relative to a moderate decrease in import prices resulted in a worsening of the Swedish terms of trade by approximately 6 percent from 1951 to 1952. At the same time the volume of exports fell by more than the volume of imports so that an import surplus of 800 million kronor developed in the balance of trade in 1952. However, foreign exchange reserves continued to rise in 1952 because of the favorable balance on current account produced by a very rapid increase in the earnings of the Swedish merchant marine. Despite the pessimistic forecasts that had been made for 1953, exports recovered during the year in connection with an improved market for forest products while imports stayed at approximately their 1952 level. Thus, although there was a small worsening in the terms of trade during 1953, a surplus on current account was achieved. With the rapid expansion of the economy from 1953 to 1954 imports rose sharply and the deficit on the trade balance was increased by 400 million kronor to 996 million kronor. The deficit on current account of 166 million kronor in 1954 was relatively moderate, but it caused questions to be raised concerning the adequacy of the existing foreign exchange reserves in the event of a further rapid expansion of the Swedish economy and the ability of the Swedish industry to compete in the international market because of the disproportionately
large increases in wages and prices that had occurred in Sweden relative to other nations.\(^5\)

When economic conditions changed in 1952, the question of easing the government's restrictive policy was quickly raised. There was a certain limited easing as the export levy and fee imposed on the forest industry was removed, the limitation on inventory valuation abolished, and the restrictions on the granting of construction permits relaxed, but in general the restrictive policy was retained. The explanation for the decision to retain anti-inflationary measures, especially the restrictive credit policy, can be found in a review of the fiscal policy that was pursued in the period 1952-54.

When the budget proposals for the fiscal year 1952/53 were formulated in January, 1952, the need for a highly restrictive fiscal policy was stressed.\(^6\) In the budget proposals for 1951 the goal had been a surplus on the current budget, but in 1952 the aim was a surplus on the total budget. However, the budget that was enacted fell short of this goal. A total budget deficit was forecast despite an expected surplus of 956 million kronor on the current budget.

Expenditures on both the capital and the current budgets rose as rising prices increased government costs. The outcome forecast for the

\(^5\)The increase in the wage level in Sweden during the years 1950-52 raised the average wage costs per unit of output by 38 percent. The comparable increase computed for Great Britain was 21 percent, the United States 11 percent, Belgium 9 percent, Western Germany 6 percent, and Holland 5 percent.

\(^6\)Statsverks propositionen, 1952, Bilaga 1, p. 20.
1952/53 budget was an improvement over the large total deficit that had originally been expected from the 1951/52 budget, but it was quite poor compared with the surplus of 372 million kronor that projections, made in January, 1952, indicated would actually result from the 1951/52 budget. Thus, the Finance Minister was forced to admit that the proposed budget was weaker than the one currently in effect. This may be a partial explanation for the fact that the general statement of economic policy, made in connection with the 1952 budget message, was the first in the postwar period in which the need for a restrictive monetary policy was heavily stressed. 7

The outcome of the 1952/53 budget was very much different than the forecast. Due to a slackening of inflationary pressures, government revenue did not rise by as much as had been expected and there was an expansion of government investment as private investment decreased. Late in 1952 the Riksdag actually reduced revenue somewhat when it enacted the Committee on Direct Taxation's 1951 recommendations concerning a less progressive schedule of personal income tax rates. Consequently, the deficit on the total budget amounted to 609 million kronor in the fiscal year 1952/53.

When the budget for 1953/54 was enacted, it was thought that economic conditions had returned to "normal" so that there was no longer a need for a total balancing of the budget. The principal assumption underlying the government's policy was that ,

7 Ibid., p. 12.
... the current economic situation with certain limited depressive tendencies, but on the whole well balances business conditions, will persist during the coming year. However, the Finance Minister recommended the retention of the investment tax and limitations on the depreciation of fixed capital in order to restrict private investment. One of the chief reasons for the continuation of the government's restrictive policy in 1953 was the fear that any increase in imports induced by an increase in domestic demand, or any decrease in exports due to a rise in costs, would, in view of the decline in the international demand for Swedish exports that was forecast in the national budget, cause a serious disequilibrium in the balance of payments. Another important consideration in the formulation of the government's policy was the desire to carry out an expansion of government investment and housing construction according to the long-term program of 1951 without the danger of stimulating new inflationary pressures. Planned expenditures on the capital budget were increased by 33 percent to 1,300 million kronor, and the total deficit on the 1953/54 budget was estimated at 1,537 million kronor. The deterioration of the budget as a means of economic stabilization was explicitly recognized by the Finance Minister, who insisted that the restrictive monetary policy would have to be retained and given an even more important role in future policy.

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8*Statsverksproporsitionen, 1953, Bilaga 1, p. 8.

9*"Översikt över det ekonomiska läget 1953 (Nationalbudget för år 1953)," Meddelanden från Konjunkturinstitutet, Series B:15, 1953, pp. 78-80.
Economic developments in 1953 were more favorable than had been forecast in the national budget. The realized deficit on the total budget was "only" 1,055 million kronor. Despite the expansive fiscal policy, prices remained stable.

The apparent success of the policy pursued in 1953/54 caused a continuation in the same direction for the next fiscal year. According to the budget proposals presented to the Riksdag in January, 1954, the deficit on the total budget in 1954/55 would be slightly larger than that which had been expected for 1953/54. There was a reduction in the pressure of regulations on private investment when the temporary investment tax was not renewed when it expired at the end of 1953. No significant increase in private investment in 1954 was expected. However, the Finance Minister in his comments on economic policy stated that "... developments have reduced the possibility of using fiscal policy to restrict the purchasing power and effective demand of consumers and firms."10 He went on to say that it had become politically impossible to overbalance the budget through either tax increases or a drastic reduction in expenditure so that monetary policy must "... be pushed into the foreground."11

In summarizing the economic developments in 1952-54 it can be said that the post-Korean slump was very mild and short-lived. There was no significant departure from full employment and real output

10 Statsverkspropositionen, 1954, Bilaga 1, p. 11.
11 Ibid.
continued to rise, although at a slower rate than previously in the postwar period. The expansion of government expenditure in 1952 and 1953 filled the gap created by a reduction in industrial investment that had resulted from the collapse in the international market price for Swedish exports and the restrictive policy measures undertaken by the government to break the wage-price spiral triggered by the Korean War. Recovery in the private sector of the economy started in 1953 as the value of exports began a strong and well balanced increase due to volume increases that were to continue through 1955. The increase in the demand for Swedish exports and the sharp increase in the private investment that was associated with it, especially from 1953 to 1954, was not counter-balanced by any decrease in government expenditures. Available resources were sufficient at first to accommodate the increase in demand in 1953 and 1954 without an increase in prices. However, toward the end of 1954 the supply of resources began to be seriously strained. Prices began to rise and the demand for labor obviously exceeded the supply at the end of 1954.

III. FINANCIAL DEVELOPMENTS AND MONETARY POLICY

The Background of the "New" Monetary Policy

The policy that actually came into being in February, 1952 had a relatively long gestation period dating from the middle of 1951. During this period the monetary authorities carried on an extensive discussion of the ways and means of credit control. It was in this
discussion, and the legislative proposals that were its focal point, that the character and motivation of the "new" monetary policy was first revealed.

The Interest Rate Control Act of 1951. The main lines of the new monetary policy were worked out in connection with the Board of the Riksbank's recommendation of legislation that would permit the direct control of interest rates. The principal provisions of the legislation proposed by the Riksbank in August, 1951 were as follows:

1. The Riksbank may prescribe that all credit institutions shall report to the Riksbank all rates charged for loans or paid to depositors, and that proposed changes in such rates shall be reported to the Riksbank at least eight days before they take effect.

2. The Riksbank may fix all deposit allowances and lending rates of credit institutions or other lenders as of a certain date, and prescribe that any changes in the rates shall be dependent upon the approval of the Riksbank. The Riksbank may also prescribe that loan rates shall be lowered or deposit rates raised and, in so doing, may differentiate between various types of loans and deposits.

3. The Riksbank may prescribe that bonds, debentures or similar securities may not be issued without the prior approval of the Riksbank.12

The Board of the Riksbank in explaining its proposals said that the powers requested were necessary if the Riksbank was to realize the goal of creating conditions in the money and capital markets so that the expansion of credit could be restrained and stable interest rates maintained. Experience, it was claimed, had shown that voluntary agreements by the commercial banks were not sufficient to prevent an expansion of credit that bank liquidity would otherwise have permitted. The Board concluded, therefore, that credit restraint required a reduction in bank liquidity that would force the banks to limit their supply of credit. The problem, according to the Board, was that although existing means (open market operations and reserve requirements) were sufficient to induce a tightening of the credit market, there was no way of preventing their use from "... resulting in a cumulative process of interest rate increases."\(^{13}\) The Board cited the development in 1950 in support of its argument. It was concluded that the power to directly regulate interest rates was a necessary supplement to the existing means of control "... in order to make possible an effective anti-inflationary monetary policy and at the same time avoid politically unacceptable consequences concerning the interest rate."\(^{14}\) The Banking Committee in its commentary on the Riksbank's proposals took the position that changes in the interest rate have no function of their own but are merely an unfortunate by-product of tight credit.\(^{15}\)

\(^{15}\) *Bankoutskottets utlåtande* No. 30, 1951.
As the Board of the Riksbank pointed out, the proposed direct control of interest rates would, at least in principle, make it possible to divorce entirely interest rates from the supply and demand for credit. This would permit the formulation of anti-inflationary monetary policy solely in terms of the quantity of credit without regard to its cost. The Board implied that under these circumstances it would be possible to use monetary policy as the principal defense against inflation. It was recognized that such a use of the new powers would raise the question of how, in the absence of the rationing function normally performed by the rate of interest, a restriction on the total supply of credit would affect the availability of credit for different purposes.

The Board claimed that sole reliance on the rationing of credit by private institutions would be unsatisfactory from the point of view of the government's economic policy. However, the Board was opposed "for the time being" to any central rationing of credit and rejected the method of control proposed by the Superintendent of Banks. According to this second proposal, the regulations on reserve requirements would be revised in such a way that the banks' power to grant credit would be limited to a certain percentage of their capital and deposits. A certain portion of the credit quota would be reserved for real estate finance.\(^\text{16}\) The essential purpose of this scheme of regulation was to guarantee the supply of credit for housing purposes.

\(^{16}\) *Proposition, 1951:221, p. 37.*
Board of the Riksbank thought that it would be possible to reach a similar result through voluntary agreements on the allocation of credit, if the agreements were supported by the type of restrictive policy that the interest rate control act would permit.

Since the aim of interest rate stabilization policy was the long-term rate of interest, especially the first mortgage rate which is directly associated with the rate on mortgage institution and government bonds, the Interest Rate Control Act seems to have been based on the assumption that it would be possible to separate the money and capital markets in such a way that a tightening of the former would not affect the latter. The question can be raised as to whether the proposed legislation, which offered far less than comprehensive control of interest rates, would be adequate for this purpose. However, such a discussion would be an academic one since both the Board of the Riksbank and the Finance Minister, who strongly favored the law, changed their position in response to the severe criticism and opposition of the majority of the government agencies and private organizations to whom the Riksbank's proposals were submitted for commentary.

When the Finance Minister presented the interest rate control bill to the Riksdag in October, 1951, he emphasized that the aim was

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17 This point was stressed by the Swedish Banking Association in its criticism of the law. See, "Från debatten om ökad statskontroll av kreditmarknaden," Ekonomisk Revy, October, 1951, pp. 350-51.

18 It is standard procedure in the Swedish legislative process for a bill to be submitted to interested parties for their commentary. The results of this review (remissyttranden) are appended to the bill when it is submitted to the Riksdag.
not to provide the means of isolating interest rates from the influence of supply and demand conditions so that interest rates inconsistent with market conditions in the long run could be maintained. The principal advantage of the law, the Finance Minister claimed, was that it provided the power to prevent credit restrictions in the short run from causing an unnecessary and undesirable upward drift in the entire structure of interest rates as in 1950. The intention was to permit a certain flexibility of interest rates without endangering or causing a departure in the long run from the policy of stable low interest rates. However, the active use of the powers granted by the new law was not advocated. According to the Finance Minister, the Riksbank would rely primarily upon voluntary agreements in the pursuit of its credit policy, and the Interest Rate Control Law was mainly intended to strengthen the Riksbank's bargaining position in negotiating these agreements. The law, which was passed and became effective on December 8, 1951, was to remain in force until June, 1953.

The real significance of the Interest Rate Control Act seems to lie in the fact that it gives evidence that the monetary authorities clearly recognized the nature of the problem confronting them and forcefully stated their intention to exercise an active anti-inflationary control over the supply of money and credit. The Act and the discussion associated with it are also important because they mark the first appearance of a problem, i.e., how to exempt certain interest

\[^{19}\text{Proposition 1951:221, pp. 56-62.}\]
rates and types of credit from the effect of a restrictive monetary policy, that was to preoccupy the monetary authorities for the remainder of the decade. This legislation was the first step in the Swedish attempt to alter fundamentally the institutional structure and operation of the financial system.

The Credit Restraint Agreements of 1952

Immediately after the Interest Rate Control Act became valid in December, 1951 the Riksbank opened negotiations with the representatives of the various institutions in the financial system. The existence of the new law was unquestionably an important factor in the willingness of the financial institutions to accept the Riksbank's proposals aiming at a more restrictive credit policy on a "voluntary" basis without a general rise in interest rates. Early in February, 1952 a series of agreements were announced. Although they were somewhat modified in succeeding years, the agreements concluded in 1952 remained the essential foundation of Swedish monetary policy until 1955. In contrast with the earlier agreements those concluded in 1952 tended, especially in the case of the commercial banks, to be much more specific in their provisions.²⁰

²⁰It is important in the light of subsequent developments to note the form these agreements took. They were made by the Riksbank and the central organizations for the various groups of institutions. The central organization only agreed to recommend to its members that they follow the guidelines drawn up in the negotiation with the Riksbank. In some cases, but not all, the individual institution was expected to express its willingness to abide by the recommendations.
The main point in the Riksbank's agreement with the commercial banks was a revision and tightening of reserve requirements. According to the agreement a certain level of cash reserves would no longer be required, but the ratio of liquid assets to deposit liabilities, computed according to the concepts employed in the reserve requirement law of 1949, would be substantially increased. The banks were divided into five size categories and the liquidity ratio was set at 33, 29, 25, 20, and 15 percent respectively for each category. On February 8, 1952 the legal reserve requirement that had been imposed in 1950 was abolished and the banks agreed to establish and maintain the new ratios by July, 1952 at the latest. The banks also agreed to submit monthly reports on their liquidity policy and a new system of regularly scheduled conferences between the Riksbank and the representatives of the commercial banks and other financial institutions was introduced. There was no provision in the agreement for a penalty to be imposed in the event that a bank failed to maintain the agreed liquidity ratio.

The new reserve requirements implied a very significant tightening of the supply of credit. As Figure 18 shows, the average required liquidity ratio of 30 percent established by the agreement was higher than the banking system's actual liquidity ratio which stood at 27.5 at the end of 1951. The variation between the individual banks was quite large, and only five of the seventeen commercial banks had excess reserves. The gross deficit in liquid assets was approximately

21 The main points of the 1952 agreements are summarized in Bankoutskottets memorial No. 1, 1953, pp. 5-7.
A = Actual liquidity ratio
B = Average required liquidity ratio

Source: Svenska Handelsbanken, Index, March, 1956, p. 4.

FIGURE 18

COMMERCIAL BANKS' LIQUIDITY RATIOS, 1952-1954
500 million kronor when the new requirements went into effect. The banks agreed to reduce the volume of loans outstanding and use any increase of funds to make up the liquidity deficit rather than as a basis for new lending.

In addition to a stricter quantitative control of credit, the provisions of earlier agreements concerning the qualitative regulation of credit were reaffirmed in the new agreement. This meant that in their lending operations the commercial banks were to attempt to maintain the supply of credit for such purposes as essential production and exports, while refraining from the granting of credits for speculative purposes and consumer finance. Special importance was attached to housing and construction credits in the new agreement. In the Swedish Banking Association's announcement of the agreed conditions on the qualitative restrictions it was stated that the restrictions placed on the total volume of credit were not to be permitted to reduce the relative share of housing credits. 22

The agreements with the commercial banks were supplemented by agreements between the Riksbank and the savings banks, insurance companies, mortgage institutions, and others. The main purpose of these agreements was to safeguard a certain priority for housing credits and loans to local government authorities (a large portion of which indirectly served to finance housing). The agreements, with the exception of the one with the insurance companies, tended to be rather general.

22 Svenska Bankföreningens cirkulär, February 4, 1952.
The emphasis was placed on the greatest possible restraint in the granting of credit without any attempt to quantify the goal to be obtained.

The agreements with the insurance companies, which became the source of considerable difficulty later in the period, were somewhat more specific than the agreements with other financial intermediaries. The capital investments of life insurance companies in Sweden have historically been subject to detailed legal restrictions. According to the regulations 90 percent of the "life assurance fund," corresponding to the companies' obligation to policy holders, had to be invested in gilt-edged securities, first mortgages on real estate, municipal loans, and certain other low risk instruments. The remainder of the life assurance fund, as well as the "free reserves," which consist of retained profits, could be freely invested, except in corporate equities. Property insurance companies were, for the most part, free to invest at their own discretion. In the immediate postwar period about half of all insurance companies' funds were invested in bonds and about 30 percent in real estate mortgages. In order to prevent a shift in these funds to industrial loans as commercial bank credit tightened, the Riksbank sought an agreement whereby the insurance companies would be committed to retaining an unchanged distribution of assets in their investment portfolio. The insurance companies, with some reluctance, agreed.

One provision common to all agreements concluded in 1952 was an undertaking to peg certain interest rates. The main objective was to avoid an increase in the cost of financing housing and official
borrowing. Thus, all financial institutions agreed that 3.5 percent would be the maximum basic rate on redeemable first mortgage loans on real estate and municipal loans with the right of redemption after ten years. As regards the issue of non-governmental bonds the Riksbank, according to the agreements, reserved the right to examine the terms and to decide not only the time of issue but also the consecutive order of issue. In the case of commercial credits and other short-term interest rates, a certain upward movement of limited extent was to be permitted.

Although it came somewhat later in the year, the Riksbank’s attempt to modify the role of the discount rate in the financial system was an essential part of the interest rate policy introduced at the beginning of 1952. The official discount rate, which before 1950 was normally one-half percent above the rediscount rate, is traditionally normative for the determination of the commercial banks’ deposit and lending rates, which in turn influence all other rates in the system. Even though the difference between the rediscount and discount rates was abolished during the period from October, 1950 and June, 1951, the accepted relations were such that any change in the Riksbank’s rediscount or the rate charged on loans secured by government securities implied a change in the discount rate and all the rates based on it. Beginning in June, 1952 the Riksbank reserved the right to fix the rediscount rate independent of the official discount rate and charge whatever rate it considered appropriate in the circumstances of each rediscounting operation. This change would permit the Riksbank to
discriminate against the commercial banks without a general movement in the structure of interest rates. The official discount rate, the Riksbank said, was henceforth to be considered purely as an indicator of the aim of monetary policy and not the basic short-term cost of funds.  
23 This action can be considered a part of the authorities' efforts to "separate the money and capital markets."

The Operation of the "New" Monetary Policy

In our study of the financial developments that were associated with the pursuit of the new monetary policy attention will be directed mainly toward conditions in the money and capital markets in 1952 and 1953. It was in these years that the efficiency of the new monetary policy received its main test. The developments in 1954 will be treated in somewhat less detail. The modified version of the new monetary policy that was pursued in 1954, especially during the later half of the year, is mainly of interest as a part of the transition to the next phase in the postwar development in Swedish monetary policy which will be treated in Chapter VII.

Tight money, 1952. Seen from one point of view—that of its effect on the financial system—the results of the new monetary policy during the first year of its operation were mixed. The immediate quantitative goal of the policy was attained, but considerable difficulty was encountered in fulfilling the qualitative aims.

23 Bankekottets memorial No. 1, 1953, p. 15.
Monetary conditions were generally tight throughout 1952. The rapid expansion of bank credit that had been going on since 1949 stopped in 1952. For the year as a whole commercial bank loans and credits outstanding fell by 329 million kronor or 3 percent, while deposits declined by 155 million kronor. The liquidity ratio of the banking system as a whole improved during the year and as of December, 1952 stood at the agreed level of 30 percent. However, there remained, despite an improved distribution of reserves, a significant number of individual banks with deficit liquidity.

As the Banking Committee pointed out in its report to the Riksdag, it is extremely difficult to isolate the effect of the new monetary policy on financial developments and economic conditions in 1952.\textsuperscript{24} This is especially true of the first half of the year when a number of factors other than the agreements on credit restraint heavily influenced financial developments. Among the more important of these other factors were the large cash surplus on the government's budget, the reduction of liquidity through the sterilization of funds derived from the levy and fee imposed on the forest industry, and the decline in the world market price of Swedish forest products, all of which had a dampening effect on business expectations in Sweden. The tightening of conditions in the money market and the restrictions placed on the supply of credit were greatest during the first half of 1952 and thereafter a certain easing occurred, especially at the end of the year.

\textsuperscript{24}Ibid., p. 6.
The treatment of financial data for 1951-54, presented in Table XIII, represents an attempt along the lines of the approach developed in Sweden during these years to estimate the effect of central bank operations and fiscal policy on the money market. Since only the principal liquid assets are included—other cash assets and net foreign liquid assets are the main exclusions—the analysis cannot be considered a complete treatment of the sources of commercial bank liquidity. However, this new approach does permit a more detailed study of money market developments than was previously possible.

As the data in Table XIII indicate, the cash surplus of 1,490 million kronor on the government's current budget and the sterilization of 390 million kronor through the export price equalization levy were the main factors in the 541 million kronor reduction in the liquid assets of the commercial banks during the first half of 1952. The budget surplus was used to build up the government's cash position and retire Treasury Bills held by the Riksbank. Some of the effect of the reduction in the commercial banks' holdings of liquid assets was offset by a very sharp reduction in deposits that amounted to 576 million kronor or 5 percent during the first half of the year. However, the liquidity ratio fell and at mid-year the banks were substantially

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<th>1952</th>
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<td>Foreign currency and</td>
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<td>gold</td>
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<tr>
<td>Bonds</td>
<td>+93</td>
<td>+41</td>
<td>+102</td>
<td>+99</td>
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<td>Other transactions</td>
<td>+7</td>
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<td>+35</td>
<td>+136</td>
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<td>Deposits of certain</td>
<td>+80</td>
<td>+62</td>
<td>-51</td>
<td>-113</td>
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<td>Currency in circulation</td>
<td>+574</td>
<td>+7</td>
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<td>Total B</td>
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<td>+55</td>
<td>+428</td>
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<td>Total A-B</td>
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<td>+90</td>
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<td><strong>National Debt Office</strong></td>
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<tr>
<td>Cash surplus on current budget (-)</td>
<td>-474</td>
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<td>Capital budget, net expenditures</td>
<td>+676</td>
<td>+499</td>
<td>+562</td>
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<td>Govt. working capital credits</td>
<td>+215</td>
<td>+269</td>
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<td>Price equalization levy</td>
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<td>Other transactions</td>
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TABLE XIII (continued)

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<td>Government long-term borrowing</td>
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<td></td>
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<td></td>
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<tr>
<td>Total D</td>
<td>-366</td>
<td>-406</td>
<td>-20</td>
<td>-425</td>
<td>+32</td>
<td>+357</td>
<td>+389</td>
<td>+1192</td>
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<tr>
<td>Total C-D, net govt. borrowing in the money market</td>
<td>+280</td>
<td>+631</td>
<td>+728</td>
<td>+96</td>
<td>-151</td>
<td>+997</td>
<td>+846</td>
<td>+88</td>
<td></td>
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<tr>
<td>Total (A-B)+(C-D)</td>
<td>+1,084</td>
<td>+541</td>
<td>+436</td>
<td>-106</td>
<td>+241</td>
<td>+634</td>
<td>+875</td>
<td>-545</td>
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<td></td>
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<tr>
<td>Commercial banks</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Treasury Bills</td>
<td>+897</td>
<td>-532</td>
<td>+119</td>
<td>-413</td>
<td>+316</td>
<td>+299</td>
<td>+615</td>
<td>+599</td>
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<td>Short-term bonds</td>
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<td>+272</td>
<td>0</td>
<td>+272</td>
<td>+361</td>
<td>+277</td>
<td>+638</td>
<td>+83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total E</td>
<td>+1,084</td>
<td>-541</td>
<td>+436</td>
<td>-106</td>
<td>+241</td>
<td>+634</td>
<td>+875</td>
<td>-545</td>
<td></td>
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</tr>
</tbody>
</table>

below the agreed target level (see Figure 18). Bank credit declined by 168 million kronor during the period and there were reports of banks frequently refusing loan applications. It is noteworthy that the interest rate on bank loans did not increase by more than one- to three-tenths of one percent despite the very tight conditions.

Given the fiscal developments in the first half of 1952, it appears that the banks would have been forced to restrict credit even in the absence of the new system of voluntary agreements. It is significant, however, that the Riksbank's foreign exchange and bond transactions were essentially neutral with respect to their effect on bank liquidity during the period. The Riksbank was not required to actively intervene to restrict credit nor, on the other hand, did it feel compelled to offset the tightening that occurred in order to preserve interest rate stability. Interest rates did rise sharply, but the politically sensitive rates on local government bonds and housing finance remained pegged at the level set in the agreements at the beginning of the year.

During the second half of 1952 the main forces influencing commercial bank liquidity reversed themselves and became expansive. There was a cash deficit of 180 million kronor on the government's current budget and the collections of the price equalization levy on exports were only nominal as compared with the first half of the year. The total cash deficit of 708 million kronor was financed through a

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26 Arvidsson, op. cit., p. 84.
reduction in the government's cash position and the sale of Treasury Bills in the Riksbank. The Riksbank's operations also changed in an expansive direction during the second half of 1952. Although the bank's operations during the first eleven months of 1952 resulted in a 191 million kronor decrease in the money base, i.e., currency in circulation and commercial bank deposits at the Riksbank, an expansion of 715 million kronor in December caused the net change for the year as a whole to be 524 million kronor. As Table XIII shows, the liquid assets of the commercial banks increased by 436 million kronor in the second half of 1952.

The large expansive effect of the Riksbank's operations in the final month of 1952 did not mark the return to an expansive open market policy. Rather it was a manifestation of the strong seasonal pattern of financial flows that characterized the operation of the Swedish monetary system in the 1950's.²⁷ There is a general tendency for financial conditions to be tight during the first half of the year and easy during the second. This is partly due to the seasonal pattern of Swedish foreign trade. Export receipts tend to be heavily concentrated in the autumn months, while payments for imports are more or less evenly distributed throughout the year. The government's finances are the major factor in the seasonal monetary changes. The Swedish tax system is such that the cash budget tends to show a deficit during the

²⁷ For a detailed discussion of seasonal variations, see Ake Liljebrors, "Säsongvariationerna i statens finanser," Balans, 1957:1, pp. 38-44.
first half of the fiscal year and a surplus during the second half.

The government's largest temporary cash requirements come at the shift of the calendar year when tax refunds are made. The cash requirements of the private sector of the economy are, of course, also at their peak at the end of the year.

In 1952 the government's seasonal cash needs were met by Treasury Bills amounting to 350 million kronor which were placed in the Riksbank. In addition, the Riksbank was forced to take over 369 million kronor of maturing Treasury Bills held by the commercial banks. The increase in the money supply that resulted from these transactions was expected to be only temporary, but the Riksbank found the situation highly unsatisfactory.28 The Banking Committee in its commentary on financial developments in 1952 noted that the situation in December, 1952 illustrates the problem that could be expected to arise should there be any increase in the government's credit requirements.29 These were prophetic words. However, there was no immediate increase in commercial bank credit and the Riksbank's holdings of Treasury Bills were substantially reduced immediately after the turn of the year.

The policy of quantitative restraint was successful during the second half of 1952. With the exception of the last month of the year, the money market remained tight. Commercial bank liquidity, although increasing, remained deficient and bank credit outstanding declined

29 Bankoutskottets memorial No. 1, 1953, p. 7.
by 161 million kronor despite a continued heavy demand for credit. The interest rate on bank loans still did not show any strong tendency to rise. However, the very success of the quantitative policy was an important source of the difficulty that was experienced in achieving the qualitative goals of the new monetary policy.

Considerable difficulty was encountered during the second half of 1952 in maintaining the supply of credit for priority purposes without relaxing the quantitative restrictions on credit. This problem was closely associated with the development of interest rates. There was a serious distortion of the structure of interest rates as the rates on first mortgages and local governments' bonds remained frozen at the agreed level, while rates on long-term credits, other than government bonds, rose sharply. The increase ranged from one-half to one percent. With regard to government bonds the increase in the long-term rates was negligible, but the medium- and short-term rates rose substantially (see Figure 16, page 220). The rise in interest rates was an expression of the tightening of the capital market that resulted from the restrictions that were placed on the money market and bank credit.

Both the supply and the demand for funds in the capital market increased substantially in 1952. On the supply side of the market the loanable funds of institutions granting long-term credits increased by 37 percent. However, the increase in demand was even sharper. The increase in the supply and demand in the capital market reflects the changes in the composition of savings that occurred in 1952. The gross savings of business firms declined, while the savings of
households and the central government increased. It was the increase in the savings of the household sector that accounted for the greatly increased funds of insurance companies and deposits of savings institutions. The decline in business savings that resulted from falling profit margins in 1952 is illustrated in Figure 19. Although business investment also declined somewhat, it remained at a high level and, as Figure 19 shows, firms remained heavily dependent on external finance. Part of this financial requirement was met by drawing down the high level of commercial bank deposits that had been built up during the second half of 1951.

As Figure 20 shows, the commercial banks fulfilled their agreement concerning the qualitative restrictions to be placed on credit. It was mainly their loans to trade and industry that were reduced in 1952, while lending to local government authorities and the housing sector increased. The decline in business liquidity and the difficulty in securing short-term credits created a strong desire to consolidate bank loans and demand was shifted to the capital market. The effective yield on industrial and public utility bonds rose to 3 3/4-4 percent and there was a strong demand for such securities. However, the Riksbank used the power secured in the credit restraint agreements to limit new issues and a long queue of prospective borrowers waiting for Riksbank permission to float new issues was built up.  

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FIGURE 19

GROSS SAVINGS AND INVESTMENT BY INDUSTRIAL FIRMS, 1950-1955
MILLIONS OF KRONOR

FIGURE 20

LOANS OUTSTANDING TO VARIOUS SECTORS OF THE ECONOMY, 1951-1954
BILLIONS OF KRONOR

Despite the restraint placed on private issues and the fact that the government also refrained from new bond issues in the long-term market during this period, great difficulty was experienced in attempting to place local authority and mortgage institutions bonds at the agreed interest rate of 3.5 percent. The demand for this type of credit rose rapidly in 1952 due to an expansion of housing construction and a peculiarity of the Swedish fiscal system.

The strain on local government finances created by an estimated deficit of 563 million kronor was mainly due to the low level of revenue.\(^{31}\) Under the Swedish system the central government collects all taxes, including those levied by the local authorities, but dispersals occur only after a two year lag. Due to this lag, local government receipts in 1952 were based on the relatively low level of personal incomes in 1950, while expenditures were being made at the higher cost level appropriate to 1952. On the other hand, the difference between the central government's receipts and dispersals on local government account added 500 million kronor to the cash surplus for the year. However, when this sum came due to the local government authorities in 1954, it added substantially to the cash deficit of the central government that had to be financed in that year.

Although a large part of the difficulty encountered in satisfying the credit needs of housing and local authorities was the result

of the interest rate differential, an important contributing factor was the lending policy adopted by the insurance companies, who are the largest of the capital market institutions. As Figure 20 shows, lending by insurance companies to industry and trade rose sharply in 1952 and almost completely compensated for the reduction in commercial bank credits to this sector. Taken as a whole, lending to business firms increased rather than decreased in 1952 despite the supposed restriction on credits to this group. The increase of 106 million kronor is quite modest as compared with the 1,025 million kronor increase that occurred in 1951. This was not, however, satisfactory from the point of view of the Riksbank. Because of the thin market for priority loans that resulted from the increased share of business borrowing in the capital market, the Riksbank was forced to purchase directly 100 million kronor of mortgage institution bonds which could not be marketed, while the local government authorities were forced to resort to short-term financing in the commercial banks.

In September, 1952 the Riksbank approached the insurance companies with suggestions concerning a revision and extension of their agreement on credit restraint. The insurance companies, however, declared that they were not even prepared to accept a prolongation of the agreement then in force, in any case not without a change in monetary policy; still less were they willing to cooperate in a credit policy along the lines suggested by the Riksbank. Faced with the prospect that an agreement with the other credit institutions might not be reached, if the insurance companies refused to cooperate, the
Riksbank requested the government for special legislation that would permit the detailed regulation of insurance company investments.32

Under this threat the insurance companies came to terms in November, 1952 before the passage of the new law. Shortly thereafter the agreements with the other financial institutions were renewed without major amendments for 1953.

The main provisions of the new agreement with the insurance companies were much more specific and stricter than previously. The companies agreed not to acquire bonds issued before October, 1952—this made the supply of such investments dependent upon the Riksbank’s issue policy—and that lending to industry would be maintained in the same proportion to the increase in the insurance companies’ loanable funds as in 1951.

As later developments were to show, the measures adopted in the second half of 1952 were only a stopgap solution to the problem of maintaining the supply of priority credit. It is significant in this respect that the central government’s long-term financial requirements were only nominal in 1952.

*Increased liquidity, 1953.* Financial developments in 1953 were even more heterogeneous than in 1952. The contrast between the first and the second half of the year was very sharp and much greater than could be accounted for by the normal seasonal pattern. However,

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32 *Riksbanks årsbok*, 1952, p. 56.
Despite the diversity, one basic trend can be discovered in the financial developments for the year as a whole—that of increased liquidity for the banking system and the private sector of the economy. Fiscal policy and debt management dominated the financial developments in 1953, but the effect produced by the government’s actions was due in a large part to the nature of the monetary policy that was being pursued.

The essential problem of monetary policy in 1953 was to find means of financing the large cash deficit on the government’s budget, which amounted to 1,235 million kronor, and an increase of investment in high priority housing construction without abandoning the goals of credit restraint and stable interest rates. Monetary policy remained "restrictive" in 1953, but the character of the policy changed significantly. The function of monetary policy in 1953 was not to counter an immediate inflationary threat from the private sector of the domestic economy or from abroad since no such threat existed at this time. The expansion of government expenditures compensated for a reduction in private investment, a part of which was itself the result of the government’s economic policy. The fiscal policy of this period was not one of temporary counter-cyclical compensation, but rather it was a part of the long-range growth program that had been adopted in 1951.

As Browaldh has noted, the term "restrictive monetary policy" became something of a catch phrase in the political debate of economic policy during the early 1950’s and was subject to a wide range of different interpretations. See, Ernfrid Browaldh, "Economic Policy," Svenska Handelsbanken, Index, March, 1953, p. 2.
A more or less permanent shift in the composition of investment was desired. Thus, the basic aim of monetary policy in 1953 was to prevent a revival of private investment, especially in the industrial sector. Given the inability of the authorities to finance the increase in government expenditures through taxation, this meant that the Riksbank was required to find the means, exclusive of interest rate changes, of financing the government's budget in such a way that private expenditures did not receive a stimulus.

The problem of government finance did not become acute until the second half of 1953. There was a surplus of 119 million kronor on the total cash budget in the first half of the year as contrasted with a deficit of 1,354 million kronor in the second half. The main problem confronting the monetary authorities during the first half of 1953 was that of maintaining the supply of credit for priority purposes, especially housing construction.

There was some easing of the short-term credit market as the commercial bank holdings of liquid assets increased by 241 million kronor during the first half of 1953. However, there was no excess liquidity in the banking system (see Figure 18, page 262), and the volume of bank credit remained essentially stable showing an insignificant decrease of only 11 million kronor. Due to a decline in business investment expenditures, there was little or no excess demand for industrial and commercial credits early in 1953.34

34The Konjunkturinstitutet reports that the "abnormal" credit rationing exercised by the banks immediately after the introduction of
Conditions in the capital market, on the other hand, became even tighter. The demand for real estate finance and local government credits showed a further substantial increase in 1953 over the already high level of the previous year. Detailed statistical data on capital market developments are not available on a monthly or semiannual basis. However, annual estimates of the ex post supply and demand for long-term credit can be constructed as in Table XIV. These calculations indicate that the demand for funds, exclusive of the central government, exceeded the supply from capital market institutions in 1953. Despite the fact that the Riksbank continued to refuse permission to private bond issues, difficulty was encountered in placing new issues of local authority and mortgage institution bonds.

The differential between the interest rates on priority and non-priority credits, which was only prevented from becoming greater by the Riksbank's control of new issues, continued to be a major source of the problem encountered by priority loans. As the Konjunkturinstitutet pointed out,

the credit restraint agreements in 1952 moderated during the second half of the year and disappeared entirely in 1953. According to the Konjunkturinstitutet's spring report, "It is now generally admitted in banking circles that the rejection of loan applications that are now being made are for the most part those which would have been made independent of the credit restraint agreements." See, "Konjunkturläget våren 1954," Meddelanden från Konjunkturinstitutet, Series A:25, 1954, p. 85.
### TABLE XIV

**SUPPLY AND DEMAND IN THE CAPITAL MARKET, 1951-1954**

**MILLIONS OF KRONOR**

<table>
<thead>
<tr>
<th></th>
<th>1951</th>
<th>1952</th>
<th>1953</th>
<th>1954</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net loanable funds of capital market institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance companies</td>
<td>775</td>
<td>810</td>
<td>900</td>
<td>960</td>
</tr>
<tr>
<td>Savings banks</td>
<td>452</td>
<td>659</td>
<td>664</td>
<td>662</td>
</tr>
<tr>
<td>Postal savings banks</td>
<td>166</td>
<td>351</td>
<td>218</td>
<td>154</td>
</tr>
<tr>
<td>Postgiro-system</td>
<td>160</td>
<td>177</td>
<td>196</td>
<td>74</td>
</tr>
<tr>
<td>Agricultural Credit Associations</td>
<td>52</td>
<td>99</td>
<td>60</td>
<td>92</td>
</tr>
<tr>
<td>Total A</td>
<td>1,523</td>
<td>2,096</td>
<td>2,098</td>
<td>1,942</td>
</tr>
<tr>
<td><strong>Commercial banks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonds</td>
<td>-148</td>
<td>301</td>
<td>1,026</td>
<td>328</td>
</tr>
<tr>
<td>Construction credits</td>
<td>134</td>
<td>-6</td>
<td>320</td>
<td>571</td>
</tr>
<tr>
<td>Local government loans</td>
<td>1</td>
<td>113</td>
<td>-87</td>
<td>-13</td>
</tr>
<tr>
<td>Agricultural real estate</td>
<td>17</td>
<td>-18</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>The public's bond holdings</td>
<td>-9</td>
<td>97</td>
<td>-1</td>
<td>678</td>
</tr>
<tr>
<td>Net export of bonds</td>
<td>23</td>
<td>7</td>
<td>-23</td>
<td>-12</td>
</tr>
<tr>
<td>Total B</td>
<td>36</td>
<td>494</td>
<td>1,238</td>
<td>1,582</td>
</tr>
<tr>
<td>Total A+B</td>
<td>1,559</td>
<td>2,590</td>
<td>3,306</td>
<td>3,560</td>
</tr>
<tr>
<td><strong>Demand</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local government authorities</td>
<td>308</td>
<td>617</td>
<td>195</td>
<td>154</td>
</tr>
<tr>
<td>Housing credits in the open market</td>
<td>1,126</td>
<td>1,252</td>
<td>1,521</td>
<td>1,609</td>
</tr>
<tr>
<td>Agricultural loans</td>
<td>135</td>
<td>148</td>
<td>219</td>
<td>246</td>
</tr>
<tr>
<td>Other mortgage loans with capital market institutions</td>
<td>57</td>
<td>105</td>
<td>64</td>
<td>250</td>
</tr>
<tr>
<td>Other investments with capital market institutions</td>
<td>241</td>
<td>220</td>
<td>96</td>
<td>-3</td>
</tr>
<tr>
<td>Cash holdings of capital market institutions</td>
<td>165</td>
<td>-19</td>
<td>-7</td>
<td>-66</td>
</tr>
<tr>
<td>The public's holdings of bonds</td>
<td>3</td>
<td>56</td>
<td>153</td>
<td>63</td>
</tr>
<tr>
<td>Total C</td>
<td>2,035</td>
<td>2,379</td>
<td>2,241</td>
<td>2,253</td>
</tr>
<tr>
<td>Market balance (A+B)-C</td>
<td>-476</td>
<td>211</td>
<td>1,065</td>
<td>1,307</td>
</tr>
<tr>
<td>Government's bonded debt</td>
<td>-426</td>
<td>427</td>
<td>2,081</td>
<td>1,491</td>
</tr>
<tr>
<td>National Debt Office's other borrowing from the capital market</td>
<td>29</td>
<td>-173</td>
<td>57</td>
<td>-48</td>
</tr>
<tr>
<td>Riksbank's holding of bonds</td>
<td>-84</td>
<td>-100</td>
<td>-1,020</td>
<td>-138</td>
</tr>
<tr>
<td>Total D</td>
<td>-481</td>
<td>154</td>
<td>1,058</td>
<td>1,305</td>
</tr>
</tbody>
</table>

Source: Meddelanden från Konjunkturinstitutet, selected years.
So long as there is a large potential supply of securities for non-priority purposes, the difficulty in placing government and mortgage institution bonds can be expected to persist.\(^{35}\)

The situation was aggravated by the fact that the agreements that established the obligation to support priority credits were not comprehensive in scope. A number of important sources of long-term finance, such as pension funds, foundations, etc., remained free of any qualitative restrictions on their lending. Another important factor contributing to the deterioration of the market for priority credits in 1953 was the decline in the rate of expansion of deposits in savings and postal savings banks. As Table XIV shows, the net loanable funds of these institutions, which comprised 50 percent of the supply from capital market institutions in 1952, actually declined in 1953.

In the spring of 1953 the Riksbank opened negotiations with the representatives of the various financial institutions to explore the possibility of a revision of the credit restraint that would eliminate the priority credit problem. Attention was mainly directed toward the commercial banks and the insurance companies.\(^{36}\) The Riksbank recommended that the commercial banks expand their construction credits and thereby take complete responsibility for the financing of housing


\(^{36}\)For a summary of the negotiations and their outcome, see Riksbanks Årsbok, 1953, pp. 13-16.
during the construction period.\(^\text{37}\) This would relieve the local government authorities of the burden they had to an increasing extent assumed in the housing area and which made an important contribution to their financial difficulties in 1952-53. The Riksbank emphasized that this new arrangement did not imply any change in the agreement on liquidity quotas or relaxation of credit restraint.\(^\text{38}\) The expansion of the banks' building credits would have to be at the expense of the other types of loans. The commercial banks in July, 1953 agreed in principle under the conditions that an acceptable understanding could be reached with the capital market institutions concerning the final long-term financing of finished construction projects.\(^\text{39}\)

The Riksbank again experienced difficulty with the insurance companies when in mid-1953 it attempted to modify the earlier agreement and secure a commitment from the companies that they would assume the responsibility for a greater share of the long-term financing of housing. Several of the companies objected as a matter of principle to any agreement with the Riksbank. However, the companies did express willingness

\(^{37}\)Building credits are a normal form of lending by the Swedish commercial banks. They are essentially short-term credits on demand accounts (overdrafts). However, as Thunholm has pointed out, there is a strong tendency for such credits to remain outstanding even after the completion of the construction work. The building credits that are not shifted to long-term financing with other financial institutions take the form of short-term mortgages. See, Lars-Erik Thunholm, Svenskt kreditväsen (Stockholm: Kooperative Förbundets Bokförlag, 1952), p. 15.

\(^{38}\)Bankouksottets memorial No. 1, 1954, p. 8.

to abide by the recommendation made by the Riksbank. A similar situation arose at the end of 1953 when the Riksbank requested an extension in 1954 of the agreements with the commercial banks. The result was that all agreements were terminated at the end of the year and were replaced by a recommendation from the Riksbank that the banks and other financial institutions continue to abide by the conditions that had been specified in the former agreements. As later developments were to show, the shift from formal agreements to unilateral recommendation was only a technicality. However, because of uncertainty as to how effective its recommendations would be, the Board of the Riksbank requested that the government extend the life of the Interest Rate Control Act and revise the law on reserve requirements. In this last regard the Riksbank requested that the new law permit the required liquidity ratio to be set as high as 50 percent.

Perhaps the most important action taken by the Riksbank in mid-1953 was the announcement that the allowable interest rates on private bond issues were to be reduced by 0.15-0.25 percent. This narrowed the differential between the rates on priority and non-priority loans, but even more importantly it constituted a forceful announcement that there was to be no departure from the policy of stable low interest rates. This appears to have broken the expectations of rising interest rates that had become strongly established in the capital market during the first half of 1953. During the second half of the year the general expectation was for falling interest rates.

Developments during the second half of 1953 made the new
arrangements for housing finance superfluous and it was not until 1955 that the Riksbank's ability to maintain the price and supply of priority credit, while pursuing a generally restrictive monetary policy, was seriously tested. Beginning in mid-1953 the financing of the government's cash deficit greatly relieved the tightness of the short-term credit market that had been the principal cause of the difficulty in the long-term market. The deficit of 1,354 million kronor in the second half of the year was mainly financed through the sale of Treasury Bills and short-term bonds to the commercial banks.

For the year 1953 as a whole the commercial banks' holding of government securities increased by 1,629 million kronor or 95 percent. Bank deposits increased by 1,481 million kronor or 15 percent. The expansion of bank credit in 1953 was largely confined to the government sector and, as Figure 20 shows, lending to industry and trade did not show any significant increase. The net increase of commercial bank loans and credits by 84 million kronor was the result of a 343 million kronor increase in credits for housing purposes, while other lending, especially to local government authorities, was reduced by 259 million kronor. As of December, 1953 the banking system had substantial excess reserves and their liquidity ratio of 38 percent closely approached that which had existed at the end of the war.

As a result of the substantial increase in liquidity that occurred during the second half of 1953, the Riksbank was induced to announce a reduction of the discount rate from 3 to 2 3/4 percent on November 20, 1953. The bank emphasized that this action was not to
be regarded as a change in the bank rate of the traditional type and should, therefore, not be interpreted as a signal for a general reduction of the level of interest rates in the banking system.\(^{40}\) In line with the policy of separating the money and capital markets, the reduction of the discount rate was to have primary significance for the short-term money market. However, the Riksbank stressed that the decision to reduce the discount rate did not mean any change in the policy of credit restraint that it had recommended to the banks. The objective of the Riksbank's discount rate policy was apparently to increase the spread between the rate for long-term and short-term funds and to relieve the pressure on the capital market by inducing some flow of funds from the short-term market.

The decision to finance the government's budget deficit through the sale of short-term securities to the commercial banks was influenced by a number of factors. The conditions in the capital market were such that any large issue of long-term government debt would have seriously overburdened the already tight market and could only have been placed after a very substantial increase in interest rates. This type of financing would also have impeded the shifting of short-term housing credits from the commercial banks to the capital market as was agreed at mid-year.

Another important factor influencing debt management in 1953 was the arrangement concluded by the Riksbank and the National Debt

\(^{40}\textit{Riksbanksfullmäktiges skrivelse}, January 7, 1954, p. 10.\)
Office early in the year. The Riksbank had from time to time been sub-
ject to especially heavy criticism for its practice of purchasing secu-
rities directly from the National Debt Office. The bank itself had
also complained of the burden this practice placed on its efforts to
pursue a restrictive monetary policy. After discussions with the
Riksbank the National Debt Office announced in February, 1953 that in
the future it would finance its operations in the open market rather
than in the Riksbank. The Debt Office also agreed that when it became
necessary to borrow from the Riksbank to cover extraordinary seasonal
cash requirements, it would only do so against Treasury Bills falling
due in the next tax payment period. The importance of these technical
changes, aside from their influence on the manner in which the deficit
was financed in 1953, lies in the fact that they constitute a further
step in the attempt to establish a short-term open money market as a
distinct part of the total credit market. As long as the Riksbank was
the primary market for Treasury Bills, short-term interest rates did
not really reflect the conditions in the money market nor did they
serve any important function in regulating the supply of commercial
bank credit.

Since there was no significant market for Treasury Bills and
short-term bonds outside of the commercial banks, the decision to mar-
ket these securities meant in effect that they would be placed almost
exclusively with the banks. Actually, from the point of view of the
effect on bank liquidity, it made little difference with a liquidity,
as opposed to cash, reserve requirement whether the government's
The financial and the debt management policy adopted in 1953 was subject to extensive criticism and debate. From as early as 1951 questions had been raised concerning the financial aspects of the government's long-term program. The main question was whether the desired expansion and reallocation of investment could or should be financed by borrowing without an increase in long-term interest rates if inflation was to be avoided. There was a strong tendency for the authorities to ignore or minimize the financial aspects of the plan. The official attitude was perhaps best stated by Westerlind, one of the authors of the plan, who said,

Since the political authorities are in agreement that there should be an acceleration of the rate of expansion of investment and a corresponding decrease in the rate of increase of consumption, a technical factor such as the liquidity of the credit market should not be decisive in the formulation of our program. The question of the rate of economic growth must be considered from a real point of view and not with regard to special financial rules.

Essentially the same position was taken in the 1953 debate over the inflationary impact of government finance. Thus, the Konjunkturinstitutet late in 1953 claimed that,

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In an economic situation such as that which currently exists, the method of financing the expansion of the government sector that is presently being used does not imply any inflationary threat. The development of prices and employment indicates that the expansion of housing construction and the government's investment activity is within the scope of available resources...

One group of critics argued that the tightness of the capital market and the inability of the government to finance its deficit with long-term borrowing at the existing interest rate, was indicative of an imbalance of savings and investment and the inflationary character of government expenditures. This claim stimulated renewed interest in the study of the relation between real and financial developments. These studies tended to show that the difficulty encountered in securing long-term financing for the government's deficit was the result of a shift in the composition rather than the inadequacy of total savings. The development of financial savings, i.e., the difference between gross cash receipts and expenditures, which is illustrated in Table XV, indicates that it was mainly an increase in the savings of business firms that offset the government's expenditure surplus in 1953. A sharp reduction in investment, especially in inventories, while profits

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44 See, for example, Lars-Erik Thunholm, "De offentliga investeringarna och inflationssifran," Balans, 1953:3, pp. 120-21.

TABLE XV

CHANGES IN FINANCIAL SAVINGS, 1950-1954
MILLIONS OF KRONOR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>+ 440</td>
<td>+ 950</td>
<td>- 350</td>
<td>- 80</td>
</tr>
<tr>
<td>Firms</td>
<td>- 330</td>
<td>-1,800</td>
<td>+1,040</td>
<td>- 530</td>
</tr>
<tr>
<td>Central government</td>
<td>+1,100</td>
<td>+ 310</td>
<td>-1,310</td>
<td>- 130</td>
</tr>
<tr>
<td>Local government</td>
<td>- 450</td>
<td>- 220</td>
<td>+ 770</td>
<td>+ 260</td>
</tr>
<tr>
<td>Foreign(^a)</td>
<td>- 760</td>
<td>+ 760</td>
<td>- 150</td>
<td>+ 480</td>
</tr>
</tbody>
</table>

\(^a\)Balance of trade with signs reversed.

showed only a slight decrease (see Figure 19, page 276), permitted firms to improve their liquidity through increased bank deposits and repayment of loans. Thus, it was mainly the commercial banks rather than capital market institutions that experienced a substantial increase in loanable funds in 1953.

Another group of critics was mainly concerned with the effect of the government's debt management policy on the liquidity of the banking system and the private sector of the economy. Attention was directed toward the implication of this development on the future pursuit of a restrictive monetary policy. Government borrowing in the commercial banks, like borrowing in the Riksbank, increases both the public debt and the money supply. Such, of course, would not be the case with long-term borrowing in the capital market. In 1953 the increased liquidity of the private sector took the form of business balances at the commercial banks. Approximately 90 percent of the estimated 605 million kronor net increase in the business sector's claims against the financial system was with the commercial banks, where business deposits rose by 700 million kronor. The commercial banks' liquidity ratio, as has been noted, exceeded the required level by almost one-third. It was this high level of liquidity that was thought by the critics to be

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47 "Konjunkturläget våren 1954," Meddelanden från Konjunkturinstitutet, Series A:25, 1954, p. 120.
a serious potential threat to the continued stability of the economy and the efficiency of monetary policy.

The government's evaluation of the liquidity situation early in 1954 was expressed by the Finance Minister, who stated that,

With regard to the often voiced fear that the currently good liquidity of the money and capital markets, would, in an economic situation with more pronounced expansionary tendencies than presently exist, result in an expansion of credit and thereby prove to be undesirable from the point of view of the continued maintenance of equilibrium, I would like to point out that the Riksbank in such a situation would have to take the initiative on the question of a tightening of liquidity through increased reserve requirements or some other measure.48

The situation at the end of 1953 was such that monetary policy had become the main line of defense against inflation and as such the requirements for its efficient operation were greatly increased. The principal new requirement was that it operate rapidly. The balance attained in 1952-53 was somewhat precarious in that it depended to a large extent on the fortuitous developments in the international economy. There was a danger of a new inflation whenever a pronounced international revival again stimulated domestic activity. The fact that a high level of production and employment was being maintained by an expansion of government expenditures, which was intended to be permanent, meant that there was very little scope for an expansion of the private sector. Thus, it became necessary in the event of an improvement in the export situation to take immediate countermeasures to offset

any substantial increase in investment and profits if a new wage-price spiral was to be avoided.

The monetary conditions generated by the policy pursued in 1953 were not well suited to the requirements for an efficient monetary policy in 1954. A tightening of the credit supply which would prevent any significant expansion of credit could, as the Finance Minister suggested, rather easily be accomplished. However, this would not prevent a rapid expansion of private expenditures from occurring by means of the activation of the idle balances that were built up in 1953. A reduction in the quantity of money not just the prevention of an increase would be required. A policy designed to achieve this goal would, and in fact did in 1954, come in conflict with the desire to stabilize the interest rate.

The criticism of debt management policy in 1953 appears to be well founded. However, the alternative lines of policy had very strong political disadvantages which mitigated the likelihood of their use in anything but a crisis situation. The immediate alternative would have been long-term borrowing in the capital market. This would, of course, have resulted in a rise in the long-term interest rate and would have conflicted with the government's housing and rental policies. Another alternative, the one in fact that was suggested in

49 A Royal Investigating Commission recommended a major revision of housing policy to minimize the conflict with efforts to stabilize the economy, but the government tabled the recommendation. See, Betänkande angående generella metoder och fysiska kontroller inom investeringspolitiken, SOU 1953:6, pp. 64-66. The importance of rental policy in the formulation of monetary policy was stressed by the
the original formulation of the long-term program, would have been to finance government investment through increased government savings generated by a surplus on the current budget. However, as has been pointed out, the existing level and structure of Swedish taxes made it extremely difficult to find an economically and politically feasible means of increasing government revenue. The final alternative, one that was extensively discussed in Sweden at this time, would have been a limitation of government expenditures to the level that could be supported with a balanced budget. This clearly would have required the temporary acceptance of a lower level of employment than that which was actually maintained. The failure to adopt any of these alternatives is indicative of the fact that the government assigned a higher priority to full employment and the goals of social policy than to the avoidance of inflation. It was only when inflationary pressures late in 1954 posed a serious threat to the balance of payments that the government was forced to reconsider this question.

**Credit expansion, 1954.** Banking trends in Sweden during 1954 reversed the pattern of the previous year. The government was able to reduce its borrowing from the banks as the higher level of liquidity

Chairman of the Board of the Riksbank; see, David Hall and Torsten Gårdlund, "Frihet och kontroll på kreditmarknaden," Vårt ekonomiska läge, 1953 (Stockholm: Sparfrämjandets Förlag, 1953), pp. 41-71.

50See, for example, Knut Ewerlöf, "Kan och bör statsutgifterna begränsas?" Balans, 1953:2, pp. 65-77.
in the economy permitted a greater volume of long-term borrowing in the capital market. The demand for bank credit by the private sector of the economy, on the other hand, showed a substantial increase. Commercial bank loans and discounts increased by 10 percent in 1955 as compared with a 3 percent decrease in 1953.

In the autumn of 1954 there were clear signs that the economy's resources were being overstrained. Labor became increasingly short, delivery time lengthened, and unfavorable developments appeared in the balance of payments. The authorities' concern over the growing inflationary pressures became acute in October when preliminary discussions of the new wage contracts for 1955 showed that the demands for wage increases were likely to be particularly large. The deterioration of fiscal policy as a means of economic stabilization meant that the main share of the task of countering the threat of inflation was assigned to the Riksbank.

Monetary conditions in the second half of 1954 posed a number of serious problems for any new attempt to reduce the supply of credit without raising interest rates or restricting the availability of credit for priority purposes. The commercial banks' liquidity ratio, which had been excessive at the beginning of the year, remained above the recommended level of 30 percent throughout the year (see Figure 18, page 262). The ratio fell from 38 to 31 percent during the first half of the year due to the rapid growth of deposits caused by the expansion of bank credit. However, after mid-year the ratio recovered as a result of the financing of the government's cash deficit, which
amounted to 1,472 million kronor in the second half of 1954. As the Riksbank had recognized in 1951, voluntary credit restraint did not work well in the absence of a tight liquidity position. Increases in reserve requirements could provide the means of eliminating excess reserves and preventing deficit financing from creating a new excess position. However, they would not prevent an increase in the money supply if the deficit continued to be financed in the banks. Thus, it appeared that the supply of money and credit could only be tightened if the government was willing to issue long-term bonds to cover its deficit and allow a reduction of the banks and Riksbank holdings of bills. Monetary restraint and stable interest rates were once more placed in opposition to one another.

An attempt was made in 1954 to go between the horns of the dilemma of stable interest rates or credit restraint. After consultation with the Riksbank, the National Debt Office on October 14 announced the issue of a new government bond of sixteen-years maturity and unlimited amount carrying interest at 4 percent. The objective of the new issue, which came to be known in Sweden as the "shock loan," was apparently twofold. In the first place, it was designed to mop up some of the excess liquidity in the economy. Secondly, the government hoped to achieve a psychological effect that would counter the inflationary mentality that had begun to influence the attitude of the trade unions and businessmen.

At first glance the shock loan would seem to imply the final abandonment of the low interest rate doctrine and a general upward movement of the entire structure of interest rates. This was the initial impression in financial circles, but doubt was created when the Riksbank announced that it would maintain the official discount rate unchanged at 2 3/4 percent and that it would no longer make official quotations for any other lending rate—including its rate on loans secured by government bonds. This seemed to leave the banks and other credit institutions free to decide for themselves the extent to which the change in the rate on long-term bonds should affect their lending rates. It was understood, however, that the various financial institutions would consult with the Riksbank before making any changes effective.

The negotiations between the Riksbank and the financial institutions concerning interest rate increases were protracted and it was not until late in November that the question was finally settled. A clue to the Riksbank's policy was given by the Prime Minister when he stated in the Riksdag that, if the shock loan was to fulfill its objective of reducing liquidity, the difference between short- and long-term interest rates would have to be kept as large as possible. It was known that the Riksbank had rejected the commercial banks' suggestion that they be permitted to raise their loan and deposit rates by one-half percent. Given this uncertainty on future short-term

rates, the shock loan was very heavily subscribed with 670 million kronor being sold, about 40 percent of which was placed outside of the financial system. When the issue was closed, its price rose and the effective yield fell to 3 3/4 percent.

In addition to a desire to achieve the maximum effect in liquidity, the reluctance of the Riksbank to come to terms on the size of the increase in interest rates that was to be permitted, was the result of the authorities' determination that the interest rate on housing credits should not be affected by the shock loan. The danger of large wage increases gave renewed importance to the prevention of increases in rental rates. When the issue was finally settled, the commercial banks were permitted to raise certain rates on business loans by 1/4 - 1/2 percent, but they agreed to maintain unchanged all rates affecting housing finance. Likewise, no change was permitted in the deposit rates of the commercial and savings banks. After extended negotiations with the insurance companies, mortgage institutions, and savings banks the basic first mortgage rate was increased from 3.6 to 3.7 percent.

The Riksbank's interest rate policy backfired. The effect of preventing interest rates in general from rising in conformity with the shock loan was to drain off most of the liquid funds available in the capital market. This produced a virtual stalemate in housing finance. The commercial banks were no longer able to shift construction credits on completed projects to long-term financing in the capital market. Thus, the Riksbank had again placed itself in a dilemma.
Wishing to prevent the interest rate on housing loans from increasing, it had created a situation where these loans were the first to be affected when credit was tightened. The alternatives were to raise the mortgage rate sufficiently to make them attractive to institutional investors or increase liquidity sufficiently to drive down the yield on long-term bonds. Developments at the end of 1954 and early in 1955 indicate that it was the latter alternative that was at least temporarily accepted. The monetary authorities' dissatisfaction with the situation was, however, the immediate cause for the change in policy that marks the beginning of the third phase in the postwar development of Swedish monetary policy.

IV. SUMMARY AND CONCLUSIONS

The Swedish government's economic policy during the period 1952-54 was a success in the sense that it can be given the credit for preventing a serious slump in economic activity as an aftermath of the Korean War boom. However, from the point of view of the longer term problem of preventing inflation, the government's policy failed in so far as it was a major factor in the creation of a condition of latent inflation which greatly complicated the task of price stabilization in 1955.

The price stability that was attained in Sweden in 1952-54 was, as in the case of the stabilization period 1948-49, essentially the result of external developments. Although monetary and fiscal policies were, for the first time in the postwar period, coordinated in
an effort to combat inflation, the restrictive policy was very poorly timed. The main impact of the government's restrictive measures came in the first half of 1952 and was aimed at preventing further inflation as a result of large wage increases. It is doubtful, however, as to whether even in the absence of these restrictive measures the cumulative inflationary process triggered by the Korean crisis could have continued in 1952 in view of the sharp decrease that occurred in the demand for Swedish exports. The tightening of the government's economic policy in 1952 came only after the boom in the international market passed its peak and thereby eliminated what had been the main driving force in the inflation of 1950-51. The restrictive policy applied early in 1952 served more to exaggerate depressive pressures on private economic activity than to prevent an increase.

The post-Korean slump was, from the point of view of Swedish policy makers, a fortuitous event since it permitted a much desired expansion of the government's expenditures. The authorities were able to avoid, at least temporarily, the knotty political problem of how private expenditures were to be reduced to prevent an expansion of the government sector from causing inflation. The expansive fiscal policy that was adopted during this period had the twofold advantage of maintaining full employment and at the same time furthering the achievement of the long-term goals of social and economic policy. However, the more or less permanent nature of the increases in government spending that occurred in 1952-53 meant, paradoxically, that the central problem of economic policy during the post-Korean slump was...
not how to promote but rather how to prevent a recovery of private economic activity. Until late in 1953 the solution to this problem was supplied by the relatively depressed state of international economic conditions. However, the prognosis was for renewed inflationary pressure when, as was inevitable, international conditions improved.

Thus, when the improvement in external market conditions began to exert a strong expansive influence on the domestic economy in 1954, the Swedish authorities were faced with the choice of either cutting government expenditures or introducing new restrictive measures directed toward private spending. The political impossibility of significantly increasing government revenue meant that the main burden of the restrictive policy would have to be placed on monetary policy.

The continued emphasis on the stabilization of at least certain long-term interest rates seriously impaired the efficiency of monetary policy as a means of combating inflation. The desire to avoid interest rate changes in connection with the financing of the government's budget deficit in 1953 eased the restrictiveness of monetary policy and resulted in the creation of excess liquidity in the banking system and the private sector of the economy. Given the conditions of excess liquidity and a continuation of the problem of financing the government's budget deficits, any attempt to pursue an effective policy of credit restraint in 1954, even by means of the "new" monetary policy, required a substantial increase in interest rates. It was only after the inflationary pressures reached serious proportions late in 1954 that the impasse in monetary policy was broken with the shock loan
technique which, at least temporarily, permitted a reduction in the liquidity of the banking system without raising the critical interest rate on housing finance. Later developments were to show, however, that the shock loan technique and the extensive direct control of the financial system introduced with the "new" monetary policy did not offer a final solution to the dilemma posed by the conflict of the goals of credit restraint and stable interest rates.
CHAPTER VII

THE RENAISSANCE OF INTEREST RATE POLICY, 1955-1957

I. INTRODUCTION

The revival of monetary policy as an active means of stabilizing the Swedish economy began in 1950, but it was not until the latter half of the decade that the policy of flexible interest rates experienced a renaissance. The shock loan technique employed in 1954 was the first clear indication of a weakening of the stable low interest rate doctrine that had up to this time been the cornerstone of postwar monetary policy. The change over to a flexible interest rate policy was not sudden and complete, however. It was only in 1957 after considerable experimentation with alternative formulations that the authorities settled upon an interest rate policy distinctly different from that pursued prior to 1955.

The transition to a flexible interest rate policy was not the result of any major change in the monetary theory underlying Riksbank operations. The reasons for the change in policy were, aside from the economic developments of the period, essentially technical and pragmatic. It was only by default that monetary policy became the principal means of combating inflation when it became apparent that it would be politically impossible to use fiscal policy or direct controls for this purpose. The increased importance attached to monetary policy further aggravated the problems that had been experienced by the
authorities in their earlier attempts to restrain money and credit independent of interest rate changes. Thus, while there was no renewal of confidence in the effectiveness of interest rate changes as a means of controlling expenditures, it did become increasingly clear that such changes were in practice a necessary condition for an efficient policy of credit restraint under existing institutional arrangements.

The revival of interest rate policy that began in 1954 was not simply a return to the classic bank rate and open market policy of the prewar years. The monetary policy—what we will call the new orthodoxy—that was built on the foundation laid down during the transition period 1955-57 was far more ambitious than that of the prewar years and it used flexible interest rates as a part of a policy aiming at both the volume and allocation of credit.

In the present chapter we will be concerned with tracing the steps in the introduction of a flexible interest rate policy and evaluating the effect the changes had on the efficiency of monetary policy as a means of combating inflation.

II. ECONOMIC DEVELOPMENTS AND GOVERNMENT POLICY


Beginning in the mid 1950's the business cycle in Sweden, as well as internationally, assumed a more "normal" character as compared with the immediate postwar problems of reconstruction and reconversion and the extraordinary disturbances caused by the War. The pattern of business fluctuations that emerged after 1954 was heavily
influenced by new institutional and structural conditions, but it also exhibited many of the essential features of the business cycle experienced in Sweden during the pre-1914 and interwar periods. Most significantly, the business cycle was, in contrast to the immediate post-war period, once again marked by changes in the volume of unemployment. As has been generally characteristic of cyclical developments in Sweden, foreign trade was more exposed to cyclical pressures than were production and trade domestically.

During the period 1954-62 Sweden experienced all phases of the normal business cycle. There was a well developed boom with marked inflationary tendencies from 1955 to the autumn of 1957, this being followed by a recession with forces operating in a depressive manner during 1958 and early 1959. And finally, there was a powerful upswing from the middle of 1959 that gave rise to a new inflationary boom in 1960-62. These fluctuations were relatively moderate in real terms.

Cyclical Expansion and Inflation, 1955-1957

Excess demand and shortage of labor and capital were the dominant features of economic developments in Sweden during the years 1955-57. The \textit{ex post} changes in the principal components of aggregate demand during this period are illustrated in Figure 21. Although a condition of excess demand persisted from late in 1954 to mid-1957, there was considerable variation in the immediate source and intensity

Current Prices

1. Private Consumption

2-3. Public Consumption

4. Private Investment

5-6. Public Investment

7. Inventory

8. Exports

9. Imports

10. Gross National Product

Fixed Prices, 1954=100

1. Private Consumption

2-3. Public Consumption

4. Private Investment

5-6. Public Investment

7. Inventory

8. Exports

9. Imports

10. Gross National Product

Source: "The Swedish Economy," Konjunkturinstitutet, February, 1961, p. 120.

FIGURE 21

ANNUAL CHANGES IN CURRENT AND FIXED PRICES OF THE PRINCIPAL COMPONENTS OF AGGREGATE DEMAND, 1952-1959

MILLIONS OF KRONOR
of inflationary pressure from year to year. Using the data in Figure 21 and the business cycle indicators presented in Figure 22, we will attempt to trace the course of the inflationary process and identify the principal causal factors in the price increases that occurred during this period.

In 1954 the recovery from the post-Korean slump accelerated and the growing pressure of demand found its expression in the labor market, where the proportion of reported job vacancies being filled dropped sharply during the year, and in the balance of payments. The volume of imports rose by 14.5 percent and the balance of payments surplus of 64 million kronor achieved in 1953 was converted into a deficit of 32 million kronor in 1954. When the rising demand, especially for private investment and exports, which increased in volume by 9.3 and 10 percent respectively, showed signs of imposing serious strains on the economy, the government tightened its credit and construction permit policies in October, 1954. Prices did not show any immediate tendency to rise. The GNP deflator was unchanged and the consumers' price index increased by only one percent in 1954. However, the intensity of demand and the high level of profits induced the labor unions to make very heavy demands for wage increases in the negotiations for 1955.

There was a continued rapid expansion of private consumption, exports, and a sharp increase in the rate of inventory accumulation in 1955. The volume of total gross investment, on the other hand, only increased by 0.7 percent as compared with 7.3 percent in the previous year. Output in 1955 was pressed to the limit of capacity and the
1, 2, 3. Seasonally adjusted volume index, 1949=100
4. Seasonally adjusted volume index, 1935=100
5. Percentage of union members, seasonally adjusted
6. Percentage of vacancies filled, seasonally adjusted
7. Index, 1937=100 8. Index, 1949=100 9. Index, 1949=100


FIGURE 22
BUSINESS CYCLE INDICATORS, 1950-1958
expansion of total production fell from 5.1 percent in 1954 to 3.8 percent in 1955.

The pressure of demand became acute in the early months of 1955. In January the Finance Minister, when presenting the budget, gave a severe warning that the scope for wage increases was limited and threatened to introduce restrictive measures if the increases exceeded 3 percent. When the collective agreements completed in the spring of 1955 resulted in a 4.3 percent contractual increase in wages, the Social Democrat leaders in the Riksdag proposed a program of compulsory savings designed to reduce consumers' demand by 2 percent. However, the proposal aroused such strong political opposition that it had to be abandoned.

When it proved impossible to ease the strained economic situation by means of a direct reduction in the purchasing power of the consumer, the government was forced to employ other measures. Thus, there was a general tightening of the government's economic policy during the spring and summer of 1955. In addition to a more restrictive monetary policy, which involved an increase of interest rates, the investment tax was reintroduced, the system of voluntary investment reserves for the counter-cyclical management of business

\[2\text{Proposition, 1955:1, p. 15.}\]

The compulsory savings were to be affected by a 10 percent addition to the personal income tax repayable in 1958. It was believed that by this means 1,300 million kronor could be withdrawn from the economy in the course of 18 months. See, "Förslaget om obligatoriskt sparande," Ekonomisk Revy, April, 1954, pp. 201-05.
The slowing in the rate of expansion of the volume of domestic expenditures that began late in 1955 continued in 1956 and the GNP rose by 3.4 percent as compared with 3.8 percent in the previous year. The moderation that occurred in the rate of expansion of domestic expenditures was, however, offset to a large degree by a sharp rise in exports, which was particularly large in the last quarter of the year. The increase in the volume of exports in 1956 accounted for 52 percent of the increase in total final expenditures. The heavy pressure of the demand for exports along with the rise in import prices associated with the Suez crisis were the main factors in the inflationary pressures experienced in Sweden in 1956.
The number of job vacancies declined and unemployment rose somewhat in 1956. However, the booming export market prevented the shortage of labor, especially skilled labor, from being significantly eased. The combined result of contractual increases and wage drift was an 8.6 percent increase in industrial wages and the GNP deflator rose by 4.8 percent. The restrictive measures undertaken by the government in 1956 were fairly moderate and mainly confined to monetary policy. The increases in the volume of consumption and investment expenditures by the government sector, which amounted to 4.8 and 3.2 percent respectively, were very much greater in 1956 than in the preceding year.

The peak of the cyclical expansion was reached in 1957. Fixed capital formation in the private sector of the economy remained virtually unchanged showing an increase of only 0.3 percent for the year as a whole. However, the rate of inventory accumulation rose sharply and the slack in private domestic expenditures was absorbed by a rise in public investment and exports of 8 and 6.1 percent respectively. Conditions in the capital goods and export markets remained tight, but for the economy as a whole the gradual easing of the overall pressure of demand that had begun in 1955 continued in 1957. During the second half of the year aggregate demand ceased to be excessive.

The weakening of business conditions in the United States from mid-1957 induced a reduction in production and employment in Sweden during the fourth quarter of the year. The increase in real GNP in 1957 was thus no greater than in 1956. Despite of the ending of the boom in 1957 and the decrease of import and export prices that began
during the first half of the year, the GNP deflator registered an increase of 4 percent and wages rose by 6 percent. The fear that the continued rise in prices would serve as the foundation for another round of the wage-price spiral was one important motive for the tightening of monetary policy and the substantial increase in the level of interest rates that occurred in mid-1957.

Considering the period of cyclical expansion as a whole, the level of wages rose on the average by approximately 8 percent per year and consumers' prices by 4 percent per year. The increase in consumers' prices was not closely correlated with the behavior of export and import prices or wholesale prices. The rise in consumers' prices, which was greater for services than for goods, tended to lag in the periods in which the intensity of excess demand was greatest. Similarly in the case of wages, the increases were not confined to the relatively short periods of excess demand, but even continued during the period of slackening in the overall pressure of demand for goods.

In order to understand the inflationary process that occurred in Sweden during the period of cyclical expansion 1954-57, it is necessary to employ the type of disaggregative approach suggested by Bent Hansen and distinguish between the conditions in the commodity and factor markets. Unlike the first postwar years when the principal source of inflationary pressure was the generally excess domestic demand in the commodity market or a rapid rise in external

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prices as during the Korean War, the inflation in Sweden during the period 1954-58 was mainly the result of increases in costs caused by excess demand in the factor market.

A wage-price spiral was an essential part of the inflationary process in 1955-57. Coming as it did after a reasonable period of price stability, the total increase in wages of 8.2 percent in 1955 exceeded both the short- and long-run growth potential of the economy, and prices rose. Despite efforts by the government and the central organizations in the labor market to stop the inflationary spiral before it gathered momentum and despite the easing of the pressure of demand in the second half of 1955 and early 1956, the increase in earnings in 1956 was in excess of 8 percent. More wage-price movement followed so that after the initial price rise of 6 percent in 1955 there was a further increase of 11 percent before the end of 1958.

A group of OEEC economists use the term "earnings-wage spiral" to describe the condition that resulted from the distinctive institutional features of the wage determination process in Sweden. It was the rapid and uneven rate of wage drift that was the main force driving up the level of wages, especially in the years 1956-58. Under the system of nationwide bargaining that was introduced in 1956 the central agreements were used to level out the distortions in the structure of wages arising from the wage drift. Collective bargaining thus became the means by which increases already obtained by some workers were

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generalized throughout the economy. The OEEC study of wage determination in Sweden found that

The rate of increase in earnings will be at least equal to the highest rate of wage drift and will be determined more by the highest level of demand than by the average level of demand.  

Aside from the period from mid-1954 to mid-1955 when the domestic demand for fixed capital was clearly excessive, it was the demand for exports, the volume of which increased on the average by 10 percent per year, that was the principal source of the excess demand for labor. In fact, after a very sharp increase from 1952 to 1954 gross investment as a percentage of GNP was stabilized at the relatively high level of approximately 30 percent in 1955-57. It is noteworthy that although private investment increased in each year, in 1955-57 investment in manufacturing industry remained virtually unchanged.

In summarizing the developments in Sweden during the period of cyclical expansion it would appear that the investment boom in 1954-55 triggered a wage-price spiral that was subsequently sustained by a rapid increase in exports which by way of the wage drift pushed up the level of wages and prices.

Government Policy, 1955-1957

Economic developments in the years 1955-57 posed an especially difficult problem for Swedish policy makers. As our review of the period indicates, the rising volume of exports was a primary source of

6 Ibid., p. 412.
disturbance. The prevention of inflation under the conditions that prevailed in these years would have required either an adjustment of the foreign exchange rate or a reduction in domestic expenditures sufficient to compensate for the increase in foreign demand. The unsatisfactory nature of the earlier Swedish experience with foreign exchange rate policy and the fact that freedom of action in this area was now limited by international monetary agreements eliminated one alternative line of policy. A reduction in the volume of domestic expenditures, on the other hand, was complicated by political problems that made it difficult to reduce government spending or use fiscal policy to restrict private spending, especially for consumption purposes. This meant that restrictive policy would have to rely mainly on monetary policy and be directed primarily toward private investment. Heavy emphasis on this type of policy conflicted with the stable low interest rate doctrine and posed a threat to the rate of economic growth.

Given the imperfections of the market mechanism, restrictions on domestic expenditures sufficient to compensate for rising external demand and prevent inflation would probably have generated a considerable volume of unemployment. Swedish policy makers during this period were very much concerned with the conflict of the goals of full employment and stable prices. In practice the goal of stabilizing prices appears to have been modified to the extent that the authorities

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were willing to accept inflation in Sweden provided it did not proceed at a rate faster than abroad and cause a balance-of-payments problem.

The pursuit of a vigorous anti-inflationary stabilization policy was also complicated by the new long-term plan that was adopted in 1956. The final report of the Long-Term Planning Commission concluded that a rapid increase in government investment expenditures and a great increase in the construction of housing during the period 1956-60 was socially desirable and politically inevitable. It was recognized, however, that the requirements for continued economic growth were such that industrial investment could not be drastically reduced. After allowance for the necessary expansion of high priority expenditures, the Commission found that, even with its most favorable estimate of the potential growth of GNP, the increase in private consumption could not be permitted to exceed 9 percent during the years 1956-60 if inflation were to be avoided. Considerable difficulty was anticipated in restricting consumption to this relatively slow rate of expansion. The government had through its social welfare program committed itself to considerable increases in the personal incomes of pensioners, large families, and other needy groups. The situation was further complicated by a projected increase in population that would substantially reduce the increase in per capita consumption permitted by the long-term plan. In view of these problems the Planning Commission

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8*Balanserad expansion, 1950 års långtidsutredningens betänkande, SOU 1956:33.*
recommended that stringent measures be taken to control the growth of private consumption.

Fiscal policy, at least in theory, offers a particularly powerful means of achieving the goals of the government's economic policy in 1954-57. The need for a restrictive policy was recognized by the Finance Minister, who called for tight budgets in each of the annual budget messages delivered during the period of cyclical expansion. However, great difficulty was experienced in the ex ante formulation and ex post execution of a restrictive fiscal policy. The government's commitment to its social welfare program and the guidelines of the new long-term plan hampered any serious attempt to restrict the rate of growth of expenditures, and the problem of finding economically and politically feasible sources of new revenue remained unsolved. Substantial cash deficits were incurred each year during 1954-57. The deficit was progressively reduced from 1,280 million kronor in 1954 to 895 and 630 million kronor in 1955 and 1956 respectively. However, the deficit rose sharply to 1,620 million kronor in 1957.

Fiscal policy in 1955-57 was, from an anti-inflationary point of view, very weak. The difficulty was realized by the Finance Minister who in January, 1955 when formulating the budget proposals for 1955/56 recognized the danger of inflation, but said that "the restrictive monetary policy must, in this regard play a decisive

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9Bent Hansen, Finanspolitikens ekonomiska teori, Penningvärdeundersökningen, Del II, SOU 1955:25, Chaps. XVII and XVIII.
role.\textsuperscript{10} The question arises, however, as to whether under the existing circumstances monetary policy could perform its assigned role without the strong support of fiscal policy. Some policy actions, such as the investment tax, the voluntary investment reserves, and the increase in corporate taxes, were in fact taken in an effort to ease the task of monetary policy. However, extensive studies of the economic effects of the government's budget indicate that the overall effect of the various discretionary measures of fiscal policy undertaken during the years of cyclical expansion was expansive.\textsuperscript{11} It was only the strength of the built-in stabilizers that prevented the government's budget from adding to the problem of inflation.

The deterioration of fiscal policy as a tool of economic stabilization was fully realized by the government authorities and in 1957 the situation became critical when it became clear that, unless the deadlock on taxation could be broken, the low stable interest rate doctrine would have to be completely abandoned and economic growth sacrificed for the purpose of stabilizing the economy. Just as the Riksdag was brought to the point of seriously considering the introduction of a general sales tax in 1957, the relaxation of inflationary pressures induced by external developments made it possible to avoid this

\textsuperscript{10}Proposition, 1955:1, p. 9.

\textsuperscript{11}The first important study was made by Assar Lindbäck, \textit{Statsbudgetens verkningar på konjunkturutvecklingen}, SOU 1956:48. The work was subsequently carried on by the Konjunkturinstitutet. See, \textit{Meddelanden från Konjunkturinstitutet}, Series A, Nos. 29, 30, 32 and "Konjunkturläget November, 1960."
difficult political decision. A fundamental strengthening of fiscal policy was thus postponed until another serious fiscal crisis in 1960 made it unavoidable.

III. FINANCIAL DEVELOPMENTS AND MONETARY POLICY

The monetary policy pursued during the years 1955-57 marks the denouement of the Swedish efforts to reconcile stable interest rates and monetary restraint. The policy pursued during the period under consideration was especially vigorous and involved a large number of rather complicated measures. Before attempting to assess the effect of the Riksbank's actions on aggregate expenditures, we will review the immediate motivation and the chronological sequence of the various monetary measures that were undertaken. Because of the importance of the period, the following discussion will be in somewhat greater detail than our earlier treatment.

The Restrictive Credit Policy of 1955

The Riksbank's goal of a "greatly increased restriction" on the supply of money and credit in 1955 was first revealed in the negotiations with the commercial banks at the beginning of the year. The authorities at this point apparently had considerable confidence in the effectiveness of voluntary cooperation as a means of achieving the

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12 *Bankouetskottets memorial*, No. 1, 1956, p. 3.
desired restraint. According to the Riksbank's "recommendation" the banks would continue in 1955 to observe the required liquidity ratios that had been established in the agreement of 1952. As Figure 23 shows, commercial banks' liquidity had declined substantially in 1954, especially in the last quarter as a result of the shock loan, and as of the beginning of 1955 a considerable number of banks had deficient reserve positions. Consequently, the continuation of the required reserve ratio and its strict observance by the commercial banks implied a significant tightening of the supply of credit.

The Riksbank's recommendation of greater restraint in the granting of new loans was further strengthened by dropping the special consideration that had previously been given to housing credits. In notifying its members of the results of the discussions with the Riksbank, the Swedish Banking Association stated that no exception for any particular type of credit was to be made by the banks in their efforts to tighten the conditions for the granting of new loans, reducing the outstanding volume of credit, and increasing liquidity.\textsuperscript{13} This action may be partly explained by the fact that the government had taken steps late in 1954 to restrict the granting of construction permits so that a decline in the demand for construction credits was anticipated in 1955.

One of the most important factors in the Riksbank's decision at the beginning of 1955 not to take any more drastic action, such as an

\textsuperscript{13}Svenska Bankföreningens cirkulär, January 18, 1955.
FIGURE 23

COMMERCIAL BANKS' LIQUID ASSETS AND LIQUIDITY RATIOS, 1951-1958
SEASONALLY ADJUSTED

increase in the level of interest rates in order to tighten monetary policy, was the fact that the investment tax was to be reimposed from February 1. The theory underlying the policy of this period was the "modified quantity theory of money" which, as Lundberg points out, came to dominate the official thinking about monetary policy in Sweden from early in the 1950's. In this view the volume of commercial bank credit is the critical element in the operation of monetary policy. Throughout the period 1955-57 the attention of the monetary authorities was very narrowly focused on the volume of bank credit. The direct effect of the interest rate on savings and investment was heavily discounted and only the influence of interest rates on the supply of credit was considered significant. The principal aim of this credit control was the regulation of private investment activity in the industrial sector of the economy. Thus, to the extent that bank credit could be restricted independent of interest rate changes and a tax would have more direct effect on investment decisions, including even those made by self-financing firms, an increase in interest rates early in 1955 appeared as both unnecessary and inferior to the investment tax.

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Developments during the first quarter of 1955 indicated, however, that the monetary policy introduced at the beginning of the year would not be sufficient to cope with the growing severity of the inflationary problem. The Riksbank's recommendations to the commercial banks did not appear to be having any significant effect on bank credit. Although the rate was reduced as compared to the same period in 1954 when credit expanded by 580 million kronor, the commercial bank loans and advances increased by 380 million kronor in January-April, 1955. As Figure 23 shows, the credit expansion was accompanied by a sharp reduction in the banks' liquidity ratio. An even more serious development, however, was the failure of the Social Democrat Government to secure agreement in the Riksdag for its proposal concerning a program of compulsory savings. Thus, when the compulsory savings scheme failed, the attention of Swedish policy makers was turned of necessity to investment in the private sector. A survey of investment intentions in the autumn of 1954 showed that industrial firms planned on increasing their investment in fixed capital by 19 percent in 1955. It appeared that immediate and decisive measures would have to be taken if substantial price increases were to be avoided.

In April of 1955 new restrictive monetary measures were undertaken. On the 18th of the month the Riksbank announced an increase of the official discount rate by 1 percent, i.e., from 2 3/4 to 3 3/4

percent. The intended restrictive effect of the increase in the discount rate was reinforced with the issue of a 24 years, $4\frac{3}{4}$-percent interest government bond by the National Debt Office. On the first and only day of this offering 434 million kronor was subscribed with approximately 48 percent of the sales going to the private, non-financial sector of the economy. The Riksbank, after negotiations with the capital market institutions, announced that the new interest rates to be fixed on the high priority first mortgage and local government authorities' loans would be $4.6$ percent for redeemable and $4\frac{3}{4}$ for unredeemable loans; this amounted to an increase of $1\frac{1}{2}$ percent. Other interest rates rose accordingly (see Figure 15, page 213). Thus the immediate effect of the new measure was a general increase in the level of interest rates and a reduction in the liquidity of the commercial banks.

In his explanation of the actions taken in April, 1955, the new President of the Riksbank, Per Åsbrink, said that although it was recognized that a significant tightening of the supply of credit could not be achieved without an increase in the level of interest rates, a rise in the interest rate alone could not be relied upon to produce the desired results.\(^8\) The Riksbank had lost confidence in the voluntary cooperation of the banking system. Thus, the rise in the discount

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Asbrink, who was appointed at the beginning of 1955, replaced Mats Lemne, the author of the shock loan policy of 1954, who resigned after his policy was very severely criticized in the Riksdag.
rate was immediately followed up with an announcement by the Board of the Riksbank that unless the commercial banks by July 31st had attained the reserve ratio stipulated in the Riksbank's recommendation for 1955, the reserve requirement law of 1949 would be put into effect. As amended in 1952, this law would permit the authorities to set reserve ratios up to a maximum of 50 percent. The average ratio in the 1955 recommendation was 30 percent.

An attempt was made to support the Riksbank's restrictive policy with fiscal measures. New legislation was introduced in the spring of 1955 concerning the depreciation allowance and inventory valuation practice to be used in the computation of business tax liability. The new regulations, which were similar to those embodied in the investment levy of 1951, set relatively narrow limits on the permissible allowances and valuations, permanently abolishing the complete freedom that firms had formerly enjoyed in this regard. These changes were intended, in part, to reduce the ability of firms to finance investment internally. In addition to their potential direct effect on the volume of investment, the new regulations, by making business firms more dependent upon external finance, tended to increase the effectiveness of monetary policy.

Another action by the Riksdag in mid-1955 that had important implications for monetary policy was the increase in the tax on

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business profits. According to the Tax Bill the national tax rate for limited liability companies was to be raised from 40 to 45 percent in 1955 and to 50 percent in 1956. When the taxes and profits of the local authorities are taken into account this meant that the total tax rate on corporate profits was to rise from 47.5 in 1955 to 57.5 in 1956. The increase in taxes, which was intended as a counter-cyclical measure and not for purposes of government revenue, was termed "temporary" although it did in fact remain in effect until 1959. In a rather novel action the Riksdag voted to "sterilize" the proceeds of the tax increase on a blocked account at the Riksbank. It was this aspect of the tax change that had special significance for monetary policy since it indirectly influenced the government's borrowing requirements.

The monetary measures taken in April, 1955 had a decisive effect on the supply of credit. Both with regard to the severity of the conditions applied by the commercial banks in their rationing of credit and the rapidity with which the volume of credit was reduced, the degree of credit restraint obtained in 1955 was much greater than at any previous time in the postwar period, including the spring of 1952. From the end of April to the end of July, 1955 bank loans and advances were

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reduced by 388 million kronor, i.e., by 3.3 percent, during a period in which credit would normally show a seasonal expansion. It is significant that 120 million kronor of the total decrease in credit was accounted for by housing credits.

The low level of the commercial bank liquidity ratio continued to exert a restrictive pressure on the supply of bank credit until mid-year. During the first half of 1955 the government's finances showed their usual seasonal pattern and the National Debt Office recorded a net cash surplus of 559 million kronor—200 million kronor greater than in the same period of the previous year. In addition the government's borrowing in the capital market, especially the 4\(\frac{1}{2}\)-percent issue made in connection with the April increase in interest rates, resulted in considerable funding of outstanding debt and a reduction in the government's debt held by the Riksbank. Additional factors influencing the commercial banks' liquid assets in a negative direction were the outflow of foreign exchange and the increase in the public's holdings of cash. The total reduction in the banks' liquid assets was, as Table XVI indicates, 651 million kronor. The effect of this reduction on the banks' liquidity ratio was in part offset by a reduction in deposits caused by the restrictions placed on loans and advances. It was only after mid-year, and especially in July, when the government's operations resulted in a substantial deficit that the commercial banks' liquid assets rose sharply and the average liquidity was brought up to the required level. Although a number of banks still had deficit
TABLE XVI

THE MONEY MARKET, 1955-1957

MILLIONS OF KRONOR

<table>
<thead>
<tr>
<th></th>
<th>1955 I</th>
<th>1955 II</th>
<th>1956 I</th>
<th>1956 II</th>
<th>1957 I</th>
<th>1957 II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors influencing commercial bank liquidity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange reserves</td>
<td>191</td>
<td>229</td>
<td>-278</td>
<td>493</td>
<td>-163</td>
<td>236</td>
</tr>
<tr>
<td>Central govt. surplus of total expenditure over current income</td>
<td>-559</td>
<td>+1,454</td>
<td>-840</td>
<td>+1,470</td>
<td>-567</td>
<td>+2,187</td>
</tr>
<tr>
<td>Govt. borrowing outside the Riksbank and the commercial banks (-)</td>
<td>-283</td>
<td>-144</td>
<td>237</td>
<td>-447</td>
<td>-15</td>
<td>-540</td>
</tr>
<tr>
<td>Certain transactions of the Riksbank</td>
<td>+211</td>
<td>-302</td>
<td>-99</td>
<td>64</td>
<td>+84</td>
<td>-188</td>
</tr>
<tr>
<td>Notes outstanding (-)</td>
<td>+166</td>
<td>-364</td>
<td>190</td>
<td>-454</td>
<td>+122</td>
<td>-343</td>
</tr>
<tr>
<td>Swedish bonds held by commercial banks, except Swedish govt. bonds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swedish govt. bonds</td>
<td>+5</td>
<td>+144</td>
<td>+163</td>
<td>+33</td>
<td>+25</td>
<td>+352</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-651</td>
<td>+1,017</td>
<td>-627</td>
<td>+1,031</td>
<td>-514</td>
<td>+1,704</td>
</tr>
</tbody>
</table>

| Commercial banks |        |         |        |         |        |         |
| Cash | +3      | +31     | -20    | +35     | -15    | +36     |
| Deposits with the Riksbank less loans from the Riksbank | -286    | +597    | -491   | +314    | -118   | -65     |
| Govt. bonds and Treasury Bills | -375    | +165    | -181   | +354    | -224   | +1,039  |
| Swedish bonds other than central govt. bonds | +5      | +144    | +163   | +33     | +25    | +352    |
| Foreign exchange | +2      | +80     | -98    | +295    | -182   | +342    |
| **Total** | -651    | +1,017  | -627   | +1,031  | -514   | +1,704  |

liquidity positions at the end of July, the Riksbank did not impose the 1949 reserve law.

There was one serious problem—that of real estate financing—associated with the new program of credit restraint. This was not in fact a new problem. Already in the second half of 1954 difficulty had been experienced in shifting short-term commercial bank construction credits on completed projects to long-term mortgage financing in the capital market. However, the situation in 1955, which has been termed the "great construction credit freeze," was critical. 22 Because of the restrictive aim of monetary policy, government borrowing in the capital market had been given first priority and was used as a substitute for open market operations by the Riksbank. The greater part of the supply of long-term funds was absorbed in this way and in mid-1955 new mortgage money was extremely scarce. The commercial bank real estate credits in 1953-54 had increased by 225 and 575 million kronor respectively and were at an abnormally high level at the beginning of 1955. Construction credits outstanding on completed projects rose from 1/3 to 1/2 of the existing volume of the banks' real estate credits. The banks' new lending for this purpose fell off sharply during the first quarter of 1955 and after April the outstanding volume of real estate credits was reduced considerably.

Although construction starts during the first half of 1955 had been reduced by the limitations imposed on the granting of permits,

it was feared that, since "... developments appear to indicate that restrictions will hit credit for housing construction harder than other types of credit," funds would not be available for the construction called for in the government's plans for the second half of the year.

In July-August, 1955 the Riksbank took up the question of housing finance in a series of special conferences with the representatives of the banking system. These discussions resulted in an undertaking by the commercial banks to supply the short-term financing for the 25,000 dwelling units planned for the second half of the year provided the Riksbank would insure that short-term credits would be shifted to long-term financing at their normal rate. The increase in the commercial bank lending for housing purposes was not to occur at the expense of the credit restraint program and there was to be no easing of the banks' liquidity requirements.

The Riksbank experienced considerable difficulty in attempting to carry out its solution to the real estate financing problem while at the same time maintaining a generally restrictive credit policy. Through the exercise of its powers to regulate the issue of bonds in the capital market the Riksbank was able to completely exclude private business borrowers in order to make room for the bonds of the various mortgage institutions who are the main source of long-term real estate

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24 Housing starts in the second half of the year are especially important in terms of the government's efforts to minimize the heavy seasonal unemployment in the construction trades.
financing. From May, 1955 to the end of the year the City Mortgage Fund was given permission to issue 4½-percent bonds amounting to 420 million kronor—more than in any previous year in the postwar period. The funds thus secured were used to take over commercial bank credits. A portion of the real estate bonds found their way into the commercial banks' portfolio, where, according to the rules, they were considered part of required reserves. The situation in the capital market was complicated, however, by the fact that the seasonal change in the government's financial operations in the second half of 1955 resulted in a cash deficit of 1,454 million kronor and the National Debt Office's borrowing requirements were especially heavy. Even with a very substantial increase in interest rates it is doubtful that the long-term credit requirements of the real estate and government sectors could have been satisfied without substantial new money creation. In view of the critical importance attached to wage negotiations for 1956 and the strong upward pressure on rental rates caused by the previous increase in interest rates and rising construction costs, a new rise in the level of interest rates appeared as especially undesirable.

The greater part of the government's credit requirements in the second half of 1955 were satisfied by borrowing in the Riksbank. Of the 1,399 million kronor of Treasury Bills that were issued, the Riksbank accounted for 1,244 million kronor. When the financing in the second half of the year is taken into account only 58 percent of the government's borrowing in 1955, as compared with 87 percent in 1954, was accomplished outside of the Riksbank, commercial banks, and the
postal banking system. As Table XVI shows, the commercial banks' holdings of liquid assets rose by 1,017 million kronor in the second half of 1955. As a result of their rapidly growing liquidity and declining deposits, the commercial banks' required reserve ratio from August, 1955 ceased to be a factor restricting the supply of bank credit.

Developments during the last four months of 1955 required further actions on the part of the Riksbank in order to maintain the degree of restraint that had already been obtained. The commercial bank loans and advances for non-real estate purposes increased by 25 million kronor in August. Although it involved only a relatively small sum, the increased lending in August was especially disquieting to the monetary authorities in view of the existing liquidity conditions of the banks and the fact that August is a month in which there is usually a substantial seasonal decline in bank credit. The Riksbank immediately responded to what it thought could be the first sign of renewed credit expansion with a strong provisionary restrictive measure. For the first time in the postwar period a direct regulation of bank lending was employed. In September the Board of the Riksbank directed the commercial banks to reduce the volume of non-real estate loans and advances by 1 percent as compared to the volume outstanding.

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25 Beginning in 1952 the National Debt Office relied very heavily on the postal banking system as a source of temporary short-term financing of the government's cash requirements.

26 Asbrink, op. cit., p. 394.
at the end of July, 1955. At the same time the Finance Minister recommended to the Riksdag that the investment tax be retained in 1956.

A partial explanation for the Riksbank's action in September, 1955 is that the increase in commercial bank liquidity that made the expansion of credit possible was thought to be essentially seasonal in character. Since liquidity was expected to decline again after the beginning of the year, open market operations seemed unnecessary and undesirable. The existing tight conditions in the capital market made it very likely that restrictive open market operations would result in a substantial increase in the level of interest rates that would, from the government's point of view, be unjustified in the long run.

Thus, it was not thought that the direct limitation on bank credit would be required for any long period of time. Judging from the actions taken in September, the increase in interest rates in April, 1955 cannot be considered a return to full flexibility of interest rates.

The government also took a further action in the second half of 1955 that was supposed to have important implications for monetary policy. The existing legislation on investment reserves was reformulated in a manner designed to improve its operation as a counter-cyclical regulator of private investment activity.

The system of investment reserves in Sweden has a relatively

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long history dating from 1938. In essence the reserves provide a means whereby companies may set aside a portion of their profits for future investment and deduct the funds so allocated from taxable profits. The basic aim of the system is to encourage the accumulation of funds during prosperous times and their utilization for fixed capital investment during recessions. The funds are registered with the Labor Market Board which has the authority to decide when and how the reserves are to be used. However, prior to 1955 the very complicated provisions of the law and the strict limitations imposed on the use of the funds discouraged the use of the reserve system and only 247 million kronor had been so allocated.

The main changes in the investment reserve system undertaken in 1955 were an increase from 20 to 40 percent in the amount that could be allocated to the reserves from profits before taxes and a new provision concerning the sterilization of a portion of the funds. Formerly the investment reserves were simply earmarked on the books of the company and actually tended to increase the liquidity of the firm during prosperous times when allocations were supposed to be made. This feature of the reserves obviously worked counter to the aims of an anti-inflationary monetary policy.

According to the new regulations to qualify for tax exemption 40 percent of the allocation to reserves would have to be deposited in

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28 For a detailed discussion of the historical background of the investment reserves and the changes proposed in 1955, see Förslag till ändrad företagsbeskattning, SOU 1954:19, Chap. V.
a blocked account at the Riksbank. For every krona utilized from the fund the company would withdraw a corresponding amount from the blocked account. When the reserve is used with the permission of the Labor Market Board, the company is allowed to make an extra investment deduction from taxable profits up to 10 percent of the utilized funds. No permission was to be required for withdrawals amounting to 30 percent of the funds that had been deposited for a period of five years.\(^{29}\) The new provisions proved to be attractive and allocations to the reserve amounted to 167, 125, and 215 million kronor in the tax years 1955-57 respectively.

The commercial banks quickly responded to the Riksbank's September directive to reduce their outstanding non-real estate credits. During October bank advances fell by no less than 359 million kronor. Not only were credits reduced to 1 percent below the July level as ordered by the Riksbank, but by a total of 2½ percent. There was also a rise in deposits in October so that at the end of the month all banks had achieved the required liquidity ratio. No further significant changes occurred in bank credit and as of the end of December the total reduction in bank credit for 1955 as a whole amounted to 330 million kronor or 3 percent. Reckoned from the peak reached in April to the end of the year the decline was 6 percent.

Conditions in Sweden began to improve somewhat as the pressure

\(^{29}\)For a further discussion of the reserve system and its operation after 1955, see Curt Canarp, "Investment Funds," Skandinaviska Banken, Quarterly Review, 1963:2, pp. 33-40.
of excess demand eased late in 1955 and there was some indication of a
decline in the propensity to invest for 1956. However, the Riksbank in
its year-end discussions with the representatives of the financial sys-
tem stated that the latent inflationary potential of the economy was
still sufficiently strong that there could be no easing of the restric-
tive credit policy.\(^30\) The Riksbank recommended that the financial
institutions continue to observe all existing regulations in 1956.
Only one new element was added when the Riksbank secured the cooper-
ation of the retail dealers associations in the automobile, cycle, fur-
niture, radio, and piano industries in an attempt to restrict consum-
ers' credit on these products by raising down payment requirements and
shortening repayment periods. This marks the first time that this
type of credit was made subject to any kind of control.

The Direct Control of Credit, 1956

The monetary policy pursued in 1956 followed the basic guide
lines laid down in 1955. Severe, but selective, credit restraint
remained the immediate goal of Riksbank operations. For both political
and technical reasons the direct control of the volume of bank credit
was retained and in fact became the principal means of monetary policy
during the greater part of 1956. In this regard the policy pursued in
Sweden differs markedly from that of other nations such as the United
States, Great Britain, and Western Germany where increased reliance

\(^{30}\) Bankoutskottets memorial, No. 1, 1956, pp. 6-7.
was being placed on interest rate changes and the regulation of bank
liquidity as the main weapons of anti-inflationary policy. It was only
late in 1956, after the Suez crisis posed the threat of a serious exter-
nal disturbance and the problem of housing finance again became criti-
cal, that any change in the level of interest rates was undertaken in
Sweden. The Swedish interest rate policy of this period was essen-
tially that of an adjustable peg rather than full flexibility. Because
of the relative fixity of interest rates and the heavy demand for
credit associated with the continuing inflationary process and the
government's budgetary deficits, the Riksbank was forced to continue
its policy of credit rationing, especially in the capital market.

At the beginning of 1956 it appeared as though there might be
a shift in emphasis from monetary to fiscal policy as the principal
means of combating inflation. In a very stern message to the Riksdag
in January, 1956 the Finance Minister, Gunnar Sträng, announced that
under existing conditions the least that was needed was a balancing
of the total budget in the fiscal year 1956/57.\footnote{Statsverksproposition, 1956.} This would ease
the pressure on the tight monetary policy which Sträng opposed on
grounds that investment would be hurt in the long run. The budget
proposal for 1956/57 called for a total surplus of 500 million kronor.
At the same time there was an optimistic forecast of a reduction in
the total deficit on the 1955/56 budget as a result of favorable
developments expected during the first half of 1956.
As in the previous year government finance was a critical factor in the operation of monetary policy in 1956. The restrictive monetary effect of fiscal policy was not as severe as expected. The seasonal surplus on the government's budget during the first half of 1956 was considerably less than the amount that had been forecast. This was mainly the result of a reduction in the government's cash inflow due to the large number of commercial enterprises that decided not to pay their interim tax and elected instead to pay it at the beginning of the next year with 5 percent interest. Despite this development the government's cash surplus was still larger in the first half of 1956 than in the first half of 1955, but, as Table XVI shows, long-term borrowing was less. Because of an increase in housing construction, which amounted to 7 percent in 1956 and the consequent increase in the demand for mortgage credit, the government was not able to make any large issues of long-term bonds which would have permitted the funding of the short-term debt held by the Riksbank and commercial banks. As Table XVI shows, the reduction in the commercial banks' holdings of liquid assets in the first half of 1956 was less than in the corresponding period in 1955. Difficulty in marketing long-term government debt without a substantial increase in interest rates continued during the second half of 1956 and as a result only 12 percent of the total 885 million kronor increase of the national debt in 1956 could be

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placed in the market outside the Riksbank, commercial banks, and the postal savings system.

The high level of commercial bank liquidity—the liquidity ratio for the system stood at 36.9 percent in January, 1956—and its relatively slow rate of decline during the first half of the year was a decisive factor in the Riksbank's decision to undertake new restrictive measures in April, 1956. The large wage increases granted in the spring and the continued high level of investment activity were also important contributing factors. Bank credit showed a small, essentially seasonal, increase in March which the Riksbank judged to imply a risk for a renewal of inflationary credit expansion.\textsuperscript{33} Once again the Riksbank resorted to direct credit controls and on April 19 the commercial banks were ordered to reduce their credits for purposes other than housing construction to 5 percent below the level of July 31, 1955, i.e., the so-called "credit ceiling" was lowered from 99 to 95 percent. This implied a reduction of 450-500 million kronor in the volume of commercial bank credit outstanding.

The commercial banks expressed their willingness to obey the Riksbank's new directive provided similar restrictions were imposed on the savings banks and agricultural credit associations. The Riksbank concluded agreements with these other institutions early in May. The savings banks committed themselves to a reduction in new lending, i.e., the gross increase in loans, for purposes other than housing

\textsuperscript{33}Bankoutskottets memorial, No. 1, 1957, p. 3.
construction in May-August to 30 percent of the average figure for such lending in 1953-54. The agricultural credit associations, on the other hand, agreed to freeze their net loan figure at the level outstanding as of the end of March, 1956.

By the end of August the various credit institutions had in general complied with the Riksbank's directives. The commercial banks' loans and advances outstanding for non-housing purposes in August, 1956 were 600 million kronor less than in July, 1955. Housing credits, on the other hand, had increased by 300 million kronor. On the grounds of what it considered to be the continued seriousness of the danger of inflation, the Board of the Riksbank insisted that the credit ceiling remain in force and bank credits for non-housing purposes be held at their reduced level until further notice. As it turned out it was not until mid-1957 that the restriction was lifted.

In the case of the savings banks and the agricultural credit associations the new restrictions were also to remain in force, but early in September, 1956 the agreements were amended in order to give them a more appropriate long-term formulation. The savings banks agreed that for a period of six months they would limit their lending for purposes other than housing construction to not more than 50 percent of their incoming loan repayments. The agricultural credit associations agreed that for a six-month period they would apply at least 50 percent of incoming deposits to improving their liquidity position.

In November the Riksbank expressed its concern over the possible
inflationary consequences of the Suez crisis and the continued difficulty in marketing long-term government debt by raising the official discount rate by \( \frac{3}{4} \) percent to the level of 4 percent, i.e., the highest level since June, 1932. At the same time the National Debt Office on the recommendation of the Riksbank issued a 24-year 4 3/4-percent government bond. In connection with the general upward movement of the level of interest rates that resulted from these actions, the Riksbank raised the pegged basic mortgage rate to 4.85-5 percent. (See Figure 15, page 213.)

The Riksbank's interest rate policy helped to relieve temporarily the pressure that was being built up in the capital market as a result of the retention of the credit ceiling during the autumn months when normally there would be a strong seasonal increase in the demand for credit. However, the action did not prevent a continued rise in commercial bank liquidity. Even after the increase in interest rates the demand for bonds was weak and the sales of the government's new 4 3/4-percent bond only amounted to 200 million kronor by the end of the year. Consequently, the National Debt Office was forced to sell Treasury Bills to the Riksbank and commercial banks in order to cover the government's heavy year-end cash requirements. This development was particularly unfavorable in view of the supposed temporary nature of the credit ceiling. Without the credit ceiling reserve requirements would have to be relied upon to regulate the supply of credit. The commercial banks' liquidity ratio, which stood at 38 percent at the end of 1956, was well above the required level.
Considering the year 1956 as a whole, commercial bank credit to the private sector of the economy rose by 102 million kronor. This was the net result of a 269 million kronor decrease in non-housing credits and a 371 million kronor increase in housing credits. However, the banks' holdings of government securities rose by 337 million kronor and deposits increased by a total of 481 million kronor.

**The new interest rate policy, 1957.** A major turning point in the postwar development of Swedish monetary policy occurred in mid-1957 when the Riksbank in a surprise action raised the official discount rate by 1 percent from 4 to 5 percent and induced an equivalent rise in the general level of interest rates. It was this action that marked the final and complete abandonment of the policy of stable low interest rates.

At the same time as the discount rate was raised certain changes were made in the existing credit restrictions. As far as the commercial banks were concerned the credit ceiling was abolished, but the Riksbank directed the banks to observe the greatest possible degree of restraint in granting credit for non-real estate purposes. The liquidity reserve requirements were tightened up somewhat when the Riksbank announced that the existing quotas were to be considered minimum requirements which would have to be observed even with regard to short-term seasonal changes in the demand for bank credit. The restrictions applicable to the savings banks and the agricultural credit associations were eased. The savings banks were allowed to use 75 percent of
incoming repayments for granting new credits for other purposes than housing construction as compared with 50 percent which had been previously allowed. The agricultural credit societies were called upon to withhold 25 percent of the increase in their deposit liabilities as liquid assets as opposed to the 50 percent requirement formerly applied.

The change in interest rates in July, 1957 brought them up to a near-record level. Only during a few periods of extreme crisis, such as the inflation of 1919-20 and the exchange crisis in the autumn of 1931, had commercial bank interest rates and bond yields equaled or exceeded those established in mid-1957. However, economic developments in the first half of 1957 did not involve any crisis. In fact, there were even signs that the inflationary boom was moderating. This suggests that the motivation for the Riksbank's actions goes deeper than just a response to an immediate economic problem and involves a fundamental shift in the formulation of monetary policy.

The Riksbank authorities at the time of the action and in the course of the extensive controversy that followed gave a number of reasons for the measures taken in July, 1957. In these discussions it was heavily emphasized that financial developments during the first half of 1957 had been such that, in the view of the Riksbank, new policy measures were needed just to maintain the existing degree of

\[34\] For a summary, see Bankoutskottets memorial. No. 1, 1958, pp. 1-4.
credit restraint. According to the Riksbank the increase of interest rates was essentially a question of preventing an easing rather than causing a further tightening of monetary conditions.

The restrictive policy pursued by the Riksbank in 1956 had had a substantial initial effect on business investment activity by means of the credit ceiling on the volume of commercial bank credit to the private non-real estate sector of the economy. However, certain signs of a weakening of this effect had already begun to appear before the end of the year. The restrictions on bank credits caused a sharp increase in other types of business finance and the growth of a so-called "gray market" for credit outside the banking system. The Riksbank through its control of bond issues refused business firms the use of this means of access to the capital market. Inter-firm lending, foreign commercial credit, and the stock market were the principal sources of industrial finance in late 1956 and the first part of 1957. Not only did these alternative sources of supply tend to offset the effect of the Riksbank's credit restrictions, but they also caused the actual cost of funds for many borrowers to be greater than the current market rates of interest. Thus, there arose around the turn of the year a strong expectation of a general rise in the level of interest rates in the organized credit market.


36 It is estimated that firms paid 8-9 percent interest on funds secured outside the banking system. See, Arthur Montgomery, "Ränte- höjningen," Ekonomisk Revy, December, 1956, p. 524.
The demand for securities, especially government bonds, in the capital market was very weak and long-term interest rates showed an upward trend in the early months of 1957. In the course of its attempt to stabilize interest rates in the capital market and maintain the supply of real estate credit, the Riksbank was forced to make net purchases of 100 million kronor of bonds, especially those of the mortgage institutions. A repetition of the real estate finance crisis of the summer of 1955 appeared imminent. The Riksbank claimed that an increase in the level of interest rates was necessary if inflationary methods of finance were to be avoided in solving the problem of housing credit.

According to the Riksbank it was the development of government finance that was the critical factor in the decision to raise the level of interest rates. There was a rapid deterioration in 1957 of fiscal policy as a means of combating inflation. At the beginning of the year it became apparent that the 500 million kronor surplus on the government's total cash budget planned for the fiscal year 1956/57 would not be achieved. In January, 1957 it was estimated that even if the budget showed the surplus that was expected during the remaining part of the fiscal year, the final outcome of the budget would be a 225 million kronor cash deficit. A further pessimistic note was struck when the Finance Minister in the budget message said that while every effort would be made to balance the total budget in the fiscal year 1957/58, it was doubtful that this could be accomplished. The budget enacted in the spring of 1957 estimated the 1957/58 deficit at 809 million kronor.
From the point of view of the Riksbank authorities the development of government finance was extremely undesirable. The longer the credit ceiling was kept in force the clearer it became that its general effectiveness was being diminished. In addition, it was feared that any intensification of the direct control of the level of bank credit would have a serious distorting effect on the economy. The credit ceiling had originally been intended as only a temporary measure. It was extended and prolonged because of the weakness of fiscal policy. In the light of the fiscal developments in 1957 it threatened to become a permanent feature of monetary policy. As Lundberg and Senneby have pointed out, the serious disadvantage of the credit ceiling is that there are no rational guide lines for its continuous use.

It is especially noteworthy that in defending its action in July, 1957 the Riksbank for the first time in the postwar period cited foreign financial developments as a reason for a change in Swedish monetary policy. This, as the Konjunkturinstitutet pointed out, was a result of the greater liberalization of trade and the consequent increased activity in short-term international capital transactions in the 1950's, which meant that Sweden


... lost a part of the autonomy in the interest rate and credit policy areas that had existed during and immediately after the Second World War. Concern for the foreign exchange reserves now make it necessary for interest rate and credit policy to be adjusted to the credit market situation in our principal trading partners, especially Great Britain.\textsuperscript{39}

In the early summer of 1957 the Riksbank began to observe signs of foreign exchange difficulty in Western Europe which in the autumn were to lead to the devaluation of the French franc and heavy speculation against pound sterling. The Swedish krona at this time was de facto convertible which made it more sensitive to the possibility of speculative attack than in the early postwar years. The increase in the Swedish discount rate anticipated by only two months the rise in the British bank rate.

Thus, the rise in the discount rate can be considered the key element in the Riksbank's effort to solve the threefold problem confronting it in the summer of 1957. A general increase in the level of interest rates induced by the Riksbank's actions was expected to prevent a crisis in real estate finance, permit the continuation of a policy of credit restraint without the use of a credit ceiling, and provide the means of offsetting the inflationary financial effect of the government's fiscal policy. It is significant that the Riksbank authorities were not especially concerned with the direct effect of interest rate policy on savings and investment. The main emphasis was placed instead on the need for changes in the general level of interest

rates in the pursuit of a technically efficient policy of monetary restraint.

One immediate consequence of the Riksbank's action in July, 1957 was a great debate of the questions of monetary policy. The fact that the Riksbank, contrary to previous practice, did not consult with or even notify the government of its intentions to raise the level of interest rates brought the perennial issue of the proper position and objectives of the Riksbank to a head. Thus, both the action itself and the manner in which it was accomplished were topics of great concern. Lindahl, who was the chief advocate of the Riksbank's point of view, claimed that as a matter of principle the Riksbank should be entirely independent of the government and only held accountable ex post to the Riksdag. Furthermore, he proposed that a constitutional amendment be adopted stating the responsibility of the Riksbank to use all the means at its command to maintain the value of money. The critics of the Riksbank, including the Prime Minister and the Banking

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40 Just the previous year the question of the Riksbank's position vis-a-vis the government had received considerable attention in connection with the final report of the Royal Commission studying the problem of the Riksbank's right of note issue. See, *Om Riksbankens sedelutgivningsrätt och därmed sammanhängande penningpolitiska frågor*, SOU 1955:43.


The various points of view in the debate of the Riksbank's position are well reported in the discussion that followed the presentation of Lindahl's paper at the annual meeting of the Swedish Banking Association.
Committee, claimed that the equilibrium of the total economy was the proper goal of Riksbank policy and that there would have to be very close cooperation between the central bank and the government if this goal were to be achieved in a rational manner. The Chairman of the Board of the Riksbank resigned in protest to the government's attitude and, although there was no formal resolution of the issue, the net effect of the discussions was an understanding similar to the Federal Reserve-Treasury Accord of 1951 in the United States. Consequently, it became possible for the Riksbank, after its action in the summer of 1957, to take a more independent position in the future. This, of course, was a prerequisite for the ending of the policy of stable low interest rates.

Although the debate of monetary policy was centered on the fact that the Riksbank failed to consult with the government prior to changing the discount rate, the criticism of the Riksbank in this regard implied that had there been consultation interest rates would not have been changed. The argument was thus broadened to include the question of the need for and advisability of a change in interest rates. The Banking Committee, for example, took the position that

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42 Gårdlund claims that the Riksbank had intended to raise interest rates sharply in the autumn of 1956 but that after consultation with the government it was forced to limit the increase in the discount rate to only 4 percent. Torsten Gårdlund, "Debatten om Riksbankens ställning," Svensk Sparbankstidskrift, 1957:7, p. 291.
there was no worsening of the economic situation in the summer of 1957 which necessitated any immediate restrictive action. The Committee, therefore, is not convinced that the increase in the level of interest rates was unavoidable under the prevailing conditions.\textsuperscript{43}

It became clear in the course of the debate that those critics siding with the Banking Committee did not take into account foreign exchange developments abroad or consider the developments of fiscal policy a threat to the stability of the economy.\textsuperscript{44} However, the Finance Minister, on just these grounds, had been emphatic in his statement of the need for new restrictive measures when he presented the revised budget proposals to the Riksdag in the spring of 1957.\textsuperscript{45}

In general, the Social Democrat Government, which could not for political reasons openly advocate high interest rates, directed its criticism mainly toward the failure of the Riksbank to consult with it concerning the change in policy. There was no attempt to have the Riksbank's policy reversed and the Banking Committee's directive concerning future policy simply stated that it was extremely desirable that the level of interest rates not be any higher than that necessary to support the required tightening of credit. It appeared that there was to be no return to either low or stable interest rates.

The effectiveness of the Riksbank's interest rate policy as a means of restraining inflationary expansion was not seriously tested

\textsuperscript{43} Bankoutskottets utlåtande, No. 6, 1958, p. 3.

\textsuperscript{44} Arthur Montgomery, "Räntehöjningen inför Riksdagen," Ekonomisk Revy, April, 1958, pp. 282-83.

\textsuperscript{45} Proposition, 1957:158.
in 1957. Exogenous factors caused a sharp change in economic and financial conditions in the second half of 1957. The recession in the United States and the foreign exchange difficulties in Europe had a dampening effect on economic activity in Sweden through decreased export sales in important sectors of production, falling prices, and deteriorated profit expectations. Also, there was some postponement of private investment expenditures due to the government's announcement at mid-year that the investment tax would be removed from January 1, 1958.\footnote{46} There was a considerable easing of financial conditions, especially in the money and credit markets, as supply increased and the demand for credit, at least from the business sector, declined.

According to the Riksbank,

The trend on the bond market during the period immediately after the raising of bank rates showed that this measure had produced the intended effect. A series of new bonded loans were placed; and a substantial amount of capital funds passed from the short-term to the long-term market.\footnote{47}

Although the supply of long-term funds from capital market institutions and the public improved after the increase in interest rates, it was still not sufficient to meet the potential demand; the capital shortage moderated but did not disappear. With the exception of several small public utility loans, no private bond issues were permitted in 1957.

\footnote{46}{This action did not mark an easing of the government's policy. Rather, the investment tax was removed to compensate businesses for the new "energy tax" on the use of coal, petroleum, electricity, and other fuels enacted in June, 1957. The ultimate aim of the action was to shift some of the burden of restrictive policy to the consumers' sector.}

\footnote{47}{Riksbanks Årsbok, 1957, p. 48.}
In order to prevent too great a pressure from being placed on long-term interest rates the Riksbank permitted the maturity of certain mortgage institution bonds to be reduced from the normal 12-21 years to 5 years. This made them attractive investments for the commercial banks, who purchased 300 of the 450 million kronor of mortgage bonds issued in the second half of 1957.

The increase in the government's credit requirements in the second half of 1957 were so great—i.e., 2,100 million kronor—that only a small portion could be satisfied in the tight capital market without endangering housing finance. Even considering the year 1957 as a whole, only 33 percent of the government's total borrowing of 1,670 million kronor occurred outside the commercial banks and Riksbank, while 50 percent of the funds were secured, mainly against short-term debt, in the commercial banks.

Despite the increase in interest rates and stagnation of economic activity, the expansion of credit and the money supply continued at a rapid rate in 1957. The total of commercial bank credit increased by 1,219 million kronor, mainly as a result of the government's borrowing in the second half of 1957. Loans and advances to the private sector as a whole increased by 132 million kronor, while credits to private industry actually declined by 140 million kronor or 1.5 percent during 1957. Corresponding to the increase in total credits, commercial bank deposits rose by 1,056 million kronor in 1957 with all of the increase being recorded in the second half of the year. The fact that the greater part of the expansion of commercial bank credit occurred in
connection with the increase of the banks' holdings of government securities and mortgage bonds meant that rather than decreasing, the banks' liquidity position improved substantially in 1957. (See Figure 23, page 324.) This development is quite similar to that which occurred in 1953 and which during the subsequent boom proved a serious obstacle to an effective stabilization policy. The Riksbank did not attempt to stop the continued expansion of credit since there ceased to be any immediate threat of inflation in the second half of the year and the authorities felt that the expansion was an essential part of a "normalizing" of the credit market through shifting building credits to the capital market and eliminating the "gray market" that had developed in 1956 and early 1957.

The Effects of Monetary Policy

The first question in the study of the effects of monetary policy in 1955-57 is that of the influence of the Riksbank's interest rate and credit policy on industrial investment activity toward which it was directed. Since it was mainly by means of a direct control—the credit ceiling—that the Riksbank influenced the supply of commercial bank credit to the private non-real estate sector of the economy, it is hardly necessary to question the effectiveness of the authorities' control of this type of credit. From the middle of July, 1955—the base point for the credit ceiling—until its removal in 1957 the direct control of the commercial bank credits to the so-called non-priority sector of the economy brought about a reduction of approximately 500
million kronor in this type of loans and advances. However, it is difficult to isolate and explain the magnitude of the effect of the reduction of the supply of commercial bank credit on private investment activity since in this regard the observed changes also depend upon such things as a shift in the composition of the society's savings and the development of alternative sources of funds. In addition, there were a large number of measures—an increase in interest rates, the investment tax, increased business taxes, the investment reserves—undertaken which influenced the demand for credit and thereby affected the degree of credit rationing associated with the restrictions on the supply of credit.

Despite the analytic difficulties involved, two separate attempts were made to isolate and measure by means of questionnaire enquiries the effects of the Riksbank's policy on industrial investment in 1955 and 1956. The first study was made in the summer of 1955 shortly after the 1 percent increase in the official discount rate.  

The second study was made in the autumn of 1956 and covered the developments in both 1955 and 1956. In these two studies involving 2,200 and 1,100 industrial firms respectively, the companies were asked

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49. The second study was conducted by Krister Wickman as a staff project for the Royal Commission investigating the problems of stabilization policy. A survey of the results of Wickman's enquiry was published by the Konjunkturinstitutet in "Konjunkturläget hösten 1957," Meddelanden från Konjunkturinstitutet, Series A:30, 1957, pp. 67-72.
how much larger their investment expenditures would have been in the absence of the various restrictive measures introduced early in 1955.\(^{50}\)

The responses to the two questionnaires can be summarized as follows:\(^{51}\)

<table>
<thead>
<tr>
<th>Restrictions Due to</th>
<th>Percentage Restriction of Investment in 1955</th>
<th>Percentage Restriction of Investment in 1955-56</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A According to 1955 Study</td>
<td>B According to 1956 Study</td>
</tr>
<tr>
<td>Investment tax</td>
<td>5.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Interest rate increase</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Credit restrictions</td>
<td>3.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Unclassified</td>
<td>3.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>14.0</td>
<td>14.3</td>
</tr>
</tbody>
</table>

In addition to indicating that the Riksbank's actions were decisive in restricting industrial investment, two other especially noteworthy findings of the 1955 and 1956 surveys, illustrated in the data cited above, are: first, the inverse shifts in the magnitude of the effects of the investment tax and monetary measures as the time horizon is extended and second, the relative ineffectiveness of the change in interest rates. The first finding is especially interesting in the light of the strong preference American writers, especially

\(^{50}\)The responses to the Swedish questionnaire study, which ran as high as 65 percent, were much better than those obtained in similar studies carried on for the Radcliffe Commission in Great Britain in 1955 and 1957.

Alvin Hansen, have shown for the investment tax over the more orthodox types of restrictive monetary policy involving changes in interest rates. At first glance it would seem that there is no difference in principle between an investment tax and an increase of interest rates. There are, however, a number of significant differences. One of the most important differences is that the effect of this type of tax depends upon it being considered temporary by investors. With continued use, its effect is sharply reduced. The principal advantage of the investment tax is that it influences new investment only and leaves capital values unchanged. The investment tax also permits a more discriminatory control of investment than interest rate changes, but in view of its temporary effects and the capital shortage of the period the tax was not an adequate substitute for changes in interest rates under the conditions prevailing in Sweden during the years 1955-57.

The very modest effect of the interest rate change indicated by the 1955 and 1956 surveys can be explained in a number of ways. First, there is a very strong probability that the strength of the interest rate effect is substantially underestimated in the attempt to separate


54Sandberg, op. cit., p. 128.
it from the effect of credit restriction. As we have seen in our review of monetary policy, the increase in interest rates was at least until the introduction of the credit ceiling an essential element in the credit restraint that was attained. A second and more significant explanation can be found in the fact that the 1 percent rise in the level of interest rates which is in question here did not establish an equilibrium or "natural" rate of interest. Even after the rates were increased the Riksbank was forced to resort to credit rationing and even to permit a continued rapid expansion of the money supply. Until the increase in 1957 the interest rate remained at a level which in a Wicksellian sense was too low. The persistence of the shortage of savings or capital-market problem is the principal evidence of this. Thus, the findings of the surveys cannot support a general conclusion concerning the ineffectiveness of interest rate changes. Rather the evidence would seem to suggest that interest rate policy was managed in an ineffective manner.

The conclusions reached by the 1955 and 1956 surveys of business responses to the various measures of restrictive policy are in close agreement with what is known from other sources concerning industrial investment plans. From the autumn of 1954 to the autumn of 1956 there was a sharp reduction in the reported plans for industrial

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construction, while planned expenditure on machinery and equipment showed only a slight decline. According to a third and much less detailed study of the effects of monetary policy in which the Labor Market Board asked all industrial firms employing over 50 workers if their investment plans had been influenced by the increase in interest rates in 1957, 5 percent reported that their plans for 1957 were influenced while 16 percent reported their plans for 1958 influenced by the Riksbank's action.\(^57\) Judging from the figures for realized investment the pursuit of the policy goals of checking business investment in 1955-57 was actually so effective that despite high profits and rapid expansion the volume of industrial investment remained practically constant at its 1954 level.

Despite the success of the restrictions placed on the non-priority credits of the commercial banks and the important contribution this made in the control of industrial investment, the Riksbank cannot be said to have succeeded in its aim of pursuing a monetary policy sufficiently tight to make a substantial contribution to the prevention of inflation. As Table XVII shows, the expansion of the public's money supply was significantly slowed only in 1955. In addition to the 17 percent increase in the total money supply from 1954 to 1957, there was a 6 percent increase in the velocity of circulation. As Table XVII indicates, it was mainly the actions of the government

TABLE XVII

ANNUAL ADDITIONS TO THE PUBLIC'S MONEY SUPPLY, 1953-1959
MILLIONS OF KRONOR

<table>
<thead>
<tr>
<th>Year</th>
<th>Additions From Government Sector</th>
<th>Riksbank</th>
<th>Credit Institutions</th>
<th>Total Additions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953</td>
<td>571</td>
<td>124</td>
<td>1,625</td>
<td>2,320</td>
</tr>
<tr>
<td>1954</td>
<td>-120</td>
<td>-362</td>
<td>1,874</td>
<td>1,392</td>
</tr>
<tr>
<td>1955</td>
<td>404</td>
<td>-134</td>
<td>871</td>
<td>1,141</td>
</tr>
<tr>
<td>1956</td>
<td>767</td>
<td>-145</td>
<td>1,374</td>
<td>1,996</td>
</tr>
<tr>
<td>1957</td>
<td>1,072</td>
<td>-192</td>
<td>1,652</td>
<td>2,532</td>
</tr>
<tr>
<td>1958</td>
<td>1,179</td>
<td>-97</td>
<td>2,113</td>
<td>3,195</td>
</tr>
<tr>
<td>1959</td>
<td>2,100</td>
<td>-100</td>
<td>2,200</td>
<td>4,200</td>
</tr>
</tbody>
</table>

sector that offset the Riksbank's efforts to restrain monetary expansion. Given the authorities' reluctance to use interest rate policy in a flexible manner, the government was forced to rely on the commercial banks and the Riksbank to finance its deficit. As indicated in our review of economic developments, given the growth of foreign trade, it was the expansion of government expenditures and/or the failure to restrict consumption that was the principal source of excess demand.

IV. SUMMARY

The revival of flexible interest rate policy came in two steps. The first step began with the shock loan of 1954 and ended with the rise in the discount rate in the spring of 1955. The second and final step came with the sharp increase in the discount rate in mid-1957. However, during the period between these two actions there was, due to pressure from the political authorities, a retreat from flexible interest rate policy and the Riksbank employed a system of directives and recommendations in such a manner as to permit the exercise of a direct control of the volume of commercial bank credit and the demand for funds in the capital market independent of changes in the level of interest rates. The monetary policy pursued during the greater part of the period of cyclical expansion and inflation reflects the fact

58 The government sector's additions to the money supply are calculated as the sector's expenditure surplus less increased debt to the private non-banking sector of the economy.
that the Riksbank sought not only to achieve a certain stabilization of the economy as a whole, but also to assist fiscal and social policy by bringing about a particular distribution of credit between the different sectors of the economy and by giving priority to certain fields of investment.

The desired combination of anti-inflationary monetary restraint, planned allocation of credit, and relatively stable interest rates proved impossible to attain under existing institutional and economic conditions. This failure was mainly due to the expansive financial effects of the fiscal policy that was pursued. During the greater part of the period the goal of general monetary restraint was abandoned in favor of the control of the allocation of credit and the stabilization of interest rates. The Riksbank was able to achieve a partial control of the volume of credit only at the cost of a disorganization of the financial system. The system of controls, rationing, and priorities operated through a strengthening of the imperfections of the credit market. The allocation of financial resources by the market mechanism was largely replaced by administrative decisions for which there were no rational guide lines.

The developments during the period 1955-57 illustrate the extreme difficulty encountered in an attempt to pursue an efficient anti-inflationary monetary policy without the support of interest rate or fiscal policy. Inflation in 1955-57 was certainly, as Gårdlund
claims, essentially a political rather than a technical question. The problem was not one of knowing what had to be done but rather how to reach agreement on the measures that were known to be technically correct: government economy, increased consumers' taxes, restrictions on credit, and sensible wage demands. Basically it was a lack of agreement between the government's plans for the utilization of the society's resources and the behavior of the private sector of the economy that was the source of the inflationary pressure and capital market problem confronting the monetary authorities. A resolution of the political problem was a prerequisite for an efficient economic policy, but as the developments of the period indicate, agreement could be reached only in the context of a crisis situation.

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The increase in the level of interest rates in mid-1957 marked the end of the postwar policy of stable low interest rates in Sweden. However, the return to a flexible interest rate policy did not in and of itself provide a solution to the problems that had been plaguing the monetary authorities in the postwar years. The authorities were well aware of the fact that given the goals and means of the government's economic and social policy there simply could not be a return to the classical type of monetary policy that had been pursued during the interwar years nor was this the intention. The experience gained during earlier periods, such as 1955-57 for example, clearly indicated that under typical conditions with respect to fiscal policy and the liquidity of the banking system and the public, any attempt to employ interest rate policy as the sole means of monetary control and the principal means of combating inflation was likely to result in changes in the level of interest rates so large and abrupt as to be both economically and politically unacceptable.

A major revision of the structure and functioning of the Swedish financial system as well as a substantial improvement in the coordination of monetary, fiscal, and debt management policies was required if
the Riksbank's interest rate policy was to be made a rational and effective part of the nation's economic stabilization policy during periods of inflation. The recession in 1958-59 postponed any immediate actions along these lines and it was only in 1960 when a serious threat of inflation again arose that the required changes were made. The changes in the operation of the financial system that can be observed in the early 1960's and especially the institutional changes that occurred at this time are important in so far as they foreshadow the course that Swedish monetary policy will probably follow in the current decade.

In the present chapter we will review the economic and financial developments in 1958-59 that served as the immediate background for the sharp break in policy in 1960. The main elements in the monetary policy of 1960-61 will then be surveyed in order to provide a contrast to the policy pursued in earlier years which aids in the attempt to evaluate critically the postwar policy of stable low interest rates.

II. STABILIZATION POLICY AND THE RECESSION OF 1958-1959

Economic Developments

Changing international economic conditions were the dominant factors influencing Swedish economic developments in 1958-59. The disturbance to the more or less balanced domestic economic situation that had been established by the beginning of 1958 clearly reflects the rather well synchronized international fluctuation in business activity which was manifested in the distinct recession that came into
being during 1957-59 in the majority of Western non-communist economies. The relative timing and magnitude of the cyclical changes in Sweden as compared with world developments is illustrated in Figure 24.

The shock of the downturn in international economic activity was transmitted to the Swedish economy through a reduction in both the prices and the volume of exports. After having risen steadily from 1954 through 1957 the value of Swedish exports declined by 263 million kronor or 2.4 percent in the course of 1958. The falling foreign demand sharply curtailed production and employment in the Swedish timber, pulp, and iron-ore industries. The downturn in international economic conditions was also the critical factor in the change in the volume of inventory investment from an increase of 1,027 million kronor in 1957 to a reduction of 102 million kronor in 1958.

The external shock in 1958 was not of a very large order of magnitude and the Swedish economy continued to exhibit the low degree of cyclical sensitivity that has characterized its operation historically. The recession, although the most serious encountered in the postwar period, was relatively mild and short-lived. Due to an improvement in the terms of trade and an inflow of capital, foreign exchange reserves actually showed a small increase in 1958 despite the deterioration of export markets. A limited reduction in reserves did occur in the early months of 1959, but in general Sweden did not suffer any serious foreign exchange difficulties during the recession. There was no cumulative contraction or threat of a serious depression in the domestic economy, only a slowing in the rate of economic expansion.
The arrow on the left shows the quarter in which the downturn began. The left-hand bar shows how far production fell below the previous peak, and when the low point occurred. The right-hand bar shows how far production had recovered by the end of 1959.


FIGURE 24

RECESSION AND RECOVERY IN WESTERN EUROPE AND THE UNITED STATES QUARTERLY PERCENTAGE CHANGES IN PRODUCTION, 1957-1959
The stagnation was mainly confined to 1958 when the real GNP increased by only one percent as compared with the average rate of growth of four percent in the years 1952-57. Industrial production on the average in 1958 did not rise above the level that had been attained in 1957, and it was only in the second half of 1959 that industrial production again showed a rapid rate of increase. However, the general expansion of production during the second half of 1959 was so great that an increase of five percent could be registered for the real GNP for the year as a whole.

The fact that the depressive impulse stemming from the reduction in the foreign demand for Swedish goods and the very sharp reversal of business investment in inventories did not cause a substantial reduction in production in 1958 was due to their being counterbalanced to a considerable extent by extensive increases in private investment in fixed capital, increased private consumption, and a rise in government expenditures. The recovery and rapid growth of the Swedish economy in 1959 was based on the same set of expansive factors, but especially on increased consumption and government expenditures. In addition, exports again began to expand from early in 1959. In a number of important branches of industry the increase in exports became the dominating economic stimulant in 1959. The reduction of inventory investment continued in 1959 and amounted to 307 million kronor for the year as a whole. However, it was mainly the inventories of the export industries that were reduced as foreign trade recovered.

The recession of 1958-59 was very clearly expressed in Swedish
unemployment statistics. The number of unemployed workers eligible for unemployment insurance in 1958 was 40 percent greater than in 1957. However, this was largely the result of an increase in the work force rather than a substantial reduction of employment.\(^1\) Despite the sharp relative increase, the average level of unemployment in 1958 did not exceed two percent of the total labor force. Unemployment reached its peak figure in January, 1959 when there were 73,000 unemployed workers—a postwar record. Efforts to combat unemployment were seriously complicated by the highly uneven incidence of the recession. However, as a result of external developments and the counter-cyclical policy adopted by the government, the level of unemployment was sharply reduced during the summer of 1959. By late in 1959 shortages of labor were being reported in certain areas of economic activity and the pressure of demands for wage increases in 1960 rose very substantially.

One important effect of the recession was a temporary break in the steady upward movement that characterized the behavior of consumers' prices in Sweden during the postwar period. There was, however, as Figure 25 shows, no question of a weakening of these prices. A major element in the behavior of consumers' prices in 1958-59 was the steady and substantial decline in the level of Swedish import prices which from early in 1957 to the summer of 1959 amounted to 19 percent. The fact that consumers' prices remained stable despite the significant

\(^1\)Bertil Olsson, "Employment Policy During the Recession," Skandinaviska Banken, Quarterly Review, April, 1959, pp. 54-56.
FIGURE 25

SWEDISH PRICE INDEXES, 1957-1962
INDEX 1949=100

reduction in the price of the imported goods that make up approximately twenty percent of Swedish supplies, suggests that there were substantial increases in domestic prices even during the recession. This situation greatly increased the likelihood that the level of prices in Sweden would move up rapidly as soon as the international economy again showed an upward trend.

The behavior of investment is one of the most distinctive features of the 1958-59 recession in Sweden. The record in this area is almost unique; only Western Germany showed a similar but less pronounced tendency. The volume of gross investment—exclusive of inventory—in Sweden after having increased by 2.7 percent in the last year of the 1955-57 boom, rose by 5.7 and 7.3 percent in 1958 and 1959 respectively. Especially in 1958 it was private investment that was the main expansive element, showing an increase of 7.4 percent as compared with a 3.5 percent increase in the volume of public investment. Within the private sector it was principally housing construction and industrial investment in machinery and equipment that accounted for the increase. As Figure 26 shows, the rate of expansion of industrial investment, after having stagnated during 1955-57, rose sharply in 1958-59. This reversal of the usual cyclical pattern of industrial investment can largely be ascribed to the vigorous counter-cyclical policy that was pursued by the government.

FIGURE 26

THE VOLUME OF GROSS INVESTMENTS BY INDUSTRY, 1950-1962
INDEX 1954=100, 1959 PRICES, LOGARITHMIC SCALE

Counter-Cyclical Stabilization Policy

The development of investment during the recession was heavily influenced by two of the newer means of Swedish economic policy which served as partial substitutes for the traditional means of monetary policy. The first of these measures involved the decision made late in 1957, before the recession actually began, to remove the 12 percent investment tax as from the beginning of 1958. The remaining in force of the investment tax for three consecutive years had resulted in a substantial backlog of investment projects. Given the government's general attitude toward industrial investment as expressed in the various long-term plans and the fact that the investment tax had been in effect in five of the seven years from 1950 to 1958, it was generally expected that this would only be a temporary respite for business investment.\(^3\) There was, therefore, an acceleration of business investment plans as well as a release of pent-up demand in 1958 as a result of the abolition of the investment tax.

A second measure in the government's policy toward investment during the recession involved the use of the investment reserve funds.\(^4\)


The recession of 1958-59 marks the first occasion in which the investment funds were ever used on a large scale to stimulate economic activity and promote employment. In May of 1958 the Labor Market Board announced that firms would be allowed to draw on the reserves for approved investment projects. After the change in the law in 1955 the incentive for firms to use the reserve funds for writing off approved investment projects derived from the fact that, in addition to freeing some of the funds deposited on blocked account at the Riksbank and thereby improving their liquidity, a company was entitled to make a deduction from its taxable profits for the year equal to ten percent of the utilized funds.

The investment projects that were allowed by the Labor Market Board as the basis for withdrawal of reserve funds were mainly such as could be effected in a relatively short period of time—the maximum being as a rule two years. However, the period assigned for the actual utilization of the funds was rather loosely defined. When the signs of a strong recovery in the economy became unmistakable in the second half of 1959, the Labor Market Board announced in September that no further applications for the use of funds would be accepted. During the period May, 1958-September, 1959 permission was granted to use approximately one billion kronor of the investment reserve funds. Of this total circa one quarter were funds on deposit at the Riksbank.

Since the great bulk of the applications to use the investment reserve funds involved construction projects, reasonably accurate estimates can be made of the effect of the policy measure on investment
and employment.\footnote{It is true, of course, as Lundberg claims, that one cannot say that these investment projects were only carried out because of the release of the reserve funds. Erik Lundberg, "How Successful Has Swedish Stabilization Been?" Skandinaviska Banken, \textit{Quarterly Review}, April, 1960, p. 46.} As Figure 27 shows, it is estimated that construction projects financed with investment reserve funds supplied employment for 5,000 workers in February, 1959 and for 7,000 workers in February, 1960. Figure 27 also illustrates the considerable time lag that existed in the operation of this policy measure. Furthermore, it is known that a significant portion of the funds released from the blocked accounts at the Riksbank was not paid out until 1960. Thus, the main impact of the freeing of the investment reserves seems to have come in 1960 when the principal economic problem was one of excess demand and inflation. Olsson contends that the policy was instituted and terminated approximately six months too late.\footnote{Olsson, \textit{op. cit.}, p. 59.}

The policy pursued in 1958-59 involved a large number of detailed selective measures in addition to the removal of the investment tax, the release of the investment reserve funds, and emergency public works' projects. Special emphasis, for example, was placed on the use of the means of labor market policy aiming at highly localized solutions to the problem of unemployment. Through the use of the well developed system of labor exchanges, an extensive program of retraining for the unemployed, subsidies for the relocation of workers and their families, and the allocation of government procurement...
A = Employed in other construction in industry and trade
B = Employed in construction in industry and trade financed by investment funds
C = Total unemployed building operatives


FIGURE 27

THE EFFECT OF INVESTMENT RESERVE FUNDS ON EMPLOYMENT IN THE CONSTRUCTION INDUSTRY, 1958-1960
THOUSANDS OF CONSTRUCTION WORKERS
contracts, an effort was made to cope with the uneven incidence of the recession.\(^7\) It is estimated that the various policy measures taken by the government resulted in employment for 6,000 workers in the summer of 1958 and in the winter of 1958/59 the figure was 36,000 workers.\(^8\)

The stabilization policy pursued during the 1958-59 recession is especially significant in the study of the postwar development of economic policy in Sweden. The measures taken to combat unemployment involved a number of important innovations. Moreover, the manner in which the new and traditional means of policy were combined indicated that a substantial change had occurred in Swedish thinking about stabilization policy. During the immediate postwar period and as late as the post-Korean slump it was the broad general working means of monetary and fiscal policy that were relied upon to stimulate and maintain the level of demand and employment. Highly selective means were, on the other hand, used to deal with any condition of excess demand and inflation. In 1958-59, however, it was mainly the detailed and selective measures that were utilized to combat unemployment, while great caution and restraint were used with respect to the introduction of any expansive measures of monetary and fiscal policy.

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\(^8\) *Mål och medel i stabiliseringspolitiken*, SOU 1961:42, p. 430.
Finally, in the late autumn of 1959 and early 1960 when action became necessary, the general working means of both monetary and fiscal policy were employed to cope with the growing problem of inflation—a true milestone in the development of Swedish economic policy.

The reluctance of the authorities in 1958 and 1959 to introduce any major measures of a generally expansive type or even to relax substantially existing economic policy in this respect, stems from a recognition of the strong latent inflationary pressures prevailing in the Swedish economy as well as the imminent danger of a serious foreign exchange problem as a result of an overzealous employment policy. In any event, it is doubtful that major changes were in fact necessary in view of the monetary and fiscal policy that was already in effect at the beginning of the recession.

Fiscal policy. In the case of fiscal policy in particular little further action was needed to support the economy. The fiscal policy pursued in Sweden in the 1950's with its rapid secular rate of expansion of government expenditures and lagging rate of growth of government revenues was well designed to maintain the level of employment. The main issues raised in the formulation of fiscal policy during the recession did not relate to the question of making the policy more expansive but rather to when and how it should be made less expansive. The fiscal policy of the period can be viewed as essentially the result of the decision to postpone any serious attempt to
make the government budget less expansive until the threat of excess demand and inflation made the change absolutely necessary.

When the budget proposals for the fiscal year 1958/59 were presented to the Riksdag in January, 1958, the prospects for the maintenance of a well balanced condition in the economy without any radical change of fiscal policy in an expansive direction were judged to be very good.\(^9\) In his discussion of fiscal policy the Finance Minister's main concern was with the question of whether or not the budget currently in effect was too expansive. The January estimates forecast that the 1957/58 budget would, as a result of an overestimation of revenue and substantial supplementary appropriations, result in a deficit of approximately 1,600 million kronor rather than the 150 million kronor that had been planned in the voted budget.

The government was especially concerned with the effect of the financing of the 1957/58 deficit on the credit market. It was expected that government finance would require a continuation of the Riksbank's restrictive credit policy with undesirable consequences for private investment and the rate of economic growth. It was also from this point of view that the proposed 1958/59 budget deficit of 1,600 million kronor was judged by the Finance Minister to be "much too weak."\(^{10}\) Substantial increases of indirect taxes were recommended

\(^9\)Statsverksproposition, Bilaga 1, 1958.
\(^{10}\)Ibid.
in order to improve the government's revenue and limit the size of
the 1958/59 deficit.

When economic conditions in the spring and summer of 1958
turned out to be far less favorable than had been expected, all efforts
to tighten fiscal policy were abandoned. In the course of 1958 addi­
tional appropriations amounting to 540 million kronor were added to
the budget for purposes of emergency public works' projects and other
expenditures to combat inflation. The revised estimates at the end of
1958 showed the budget with a total deficit of 2,220 million kronor—
a figure larger than any incurred during the war years. However, the
rapid increase in revenues that occurred as economic recovery set in
and the failure of the authorities to utilize all of the supplementary
appropriations, prevented the final realized deficit from rising above
1,400 million kronor.

According to the budget proposals presented in January, 1959 the
deficit in 1959/60 would amount to 2,800 million kronor. 11 The Finance
Minister warned the Riksdag that there was a very strong possibility
that even this figure would be exceeded and the final deficit would be
somewhat in excess of 3 billion kronor. The rising deficit was not
due to stabilization policy, but rather to the weak development of
government revenue and the continued rise in public expenditures,
especially investment in schools, hospitals, and roads dictated by
social welfare policy. The volume of public investment increased by

11 *Statsverksproposition*, Bilaga 1, 1959.
10 percent in 1959. According to the long-term forecast made by the Royal Commission investigating the question of government spending, a deficit of at least 4,200 million kronor could be expected in the fiscal year 1960/61.\(^\text{12}\) It was this situation that caused the Finance Minister to raise the question of the introduction of a general sales tax even at a time when the volume of unemployment from the 1958-59 recession was reaching its peak. The Swedish financial system appeared to be incapable of financing the projected budget without dire consequences for the value of money. The government was confronted with what the Finance Minister called "a major budget crisis."\(^\text{13}\)

The government's proposal of a general sales tax touched off a bitter political debate. It soon became apparent that despite the fact that the greater part of the deficit for 1959/60 would be incurred in the second half of 1959, the government did not intend to take any immediate action. Late in the spring, even as the Swedish economy showed signs of a recovery and a substantial expansion of the international economy was forecast for 1959-60, the government announced that due to the continued relatively high level of unemployment it did not feel that ". . . the contribution of the public sector to the solution of this problem could be reduced until employment had been stabilized at a high level."\(^\text{14}\) Action on the sales tax was thus

\(^{12}\) Besparingar inom statsverksamhet, SOU 1959:28.  

\(^{13}\) Proposition, 1959:162, p. 70.  

\(^{14}\) Proposition, 1959:150, p. 10.
postponed until late in the autumn when the prospects for large wage increases and a rapid expansion of the international economy greatly increased the possibility of an inflationary development in 1960. The 4-percent sales tax that went into effect January 1, 1960 was expected to produce 1,500 million kronor of revenue on an annual basis and reduce the 1959/60 deficit to 1,718 million kronor. It is of the utmost importance from the point of view of the monetary policy of the period that a deficit of 2,607 million kronor was actually incurred in the second half of 1959 before the tax went into effect.

The National Debt Office's estimates of the cash deficit and the government's borrowing requirements in the fiscal years under discussion are illustrated in Figure 28. When these data are converted to a calendar year basis, as is done in part B of Figure 28, the very heavy concentration of government borrowing in 1959 becomes apparent. The outstanding national debt increased by 2,677 million kronor in 1958-59, with 71 percent of the increase occurring in 1959. The greater part of the increase in debt took the form of short-term bonds and Treasury Bills. The government's fiscal and debt management policies were a decisive factor in the monetary developments that occurred during the recession.

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15 The cash discrepancy between cash deficit and borrowing requirements is mainly due to changes in the government's deposit on the blocked account at the Riksbank.
FIGURE 28

THE OUTCOME OF THE GOVERNMENT'S CASH BUDGET AND BORROWING REQUIREMENTS, FISCAL AND CALENDAR YEARS, 1953-1961

MILLIONS OF KRONOR

Source: Riksgäldskontorets årsbok, 1961, pp. 53-54.
Monetary policy. The monetary authorities took a very cautious position in 1958. Early in the year the Riksbank stated that,

... some relaxation of the previously strong restrictive credit policy is justified, but in view of the risks of new tendencies to inflation and of deterioration in the balance of payments, the change of course ought not be carried too far.16

The results of the Riksbank's policy in terms of the development of commercial bank deposits, advances, and holdings of liquid assets is illustrated in Figure 29. A substantial increase in bank credit—advances to the private sector of the economy increased by 8 percent in 1958 as compared with only 2 percent in 1957—was tolerated in order to supply funds for the expansion of housing construction and industrial investment as well as to ease the problem of financing the government's budget deficit. The expansion of the commercial banks' total credits in 1958 caused deposits to increase by 12 percent or 1,724 million kronor. In absolute figures the annual increase was the largest ever recorded up to this time, but in relative terms the increases in 1951 and 1953 were greater.

Little positive action was necessary on the part of the Riksbank to bring about the expansion of credit in 1958. A certain easing of the bank credit market had occurred already in the second half of 1957 after the breaking of the housing finance deadlock and the removal of the credit ceiling. From mid-1957 the only factors limiting the

16 Riksbanks årsbok, 1958, p. 49.
Figure 29

Commercial banks' deposits, advances, and holdings of liquid assets, 1955-1962
Billions of kronor

ability of the banks to extend credit were the moral suasion exercised by the Riksbank and the size of the banks' reserves of liquid assets. However, as of the end of 1957 the commercial banks' average liquidity ratio stood at 37.6 percent, a figure well above the required minimum.

The Riksbank did, however, take a positive action in the spring of 1958 when in May it reduced the official discount rate from 5 to 4.5 percent and there was a downward adjustment in the entire structure of interest rates with the commercial banks' lending rates falling proportionately. The principal aim of this action seems to have been to increase the differential between short- and long-term interest rates in such a way as to stimulate the supply of funds in the long-term market which remained tight as bank credit eased.

The debt management policy pursued in both 1958 and 1959 reflects the fact that the capital market problem, although it took a different form, was practically as severe during the recession of 1958-59 as during the inflation of 1955-57. The demand for long-term credit consistently exceeded supply at existing rates of interest. The Riksbank continued to apply a strict control of bond issues and as of mid-1959 the total value of the non-priority applications awaiting Riksbank approval to issue securities is estimated at approximately 2,500 million kronor. The figure was thought to have been in the

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order of 1,500-2,000 million kronor in 1957.\textsuperscript{18} Even with the rationing of the available supply, the government was forced to satisfy its financial requirements in the commercial banks and the Riksbank in order to avoid a sharp increase in the level of long-term interest rates and problems in the financing of housing construction. It was this policy rather than open market operations by the Riksbank that caused a rapid increase in commercial bank liquidity and the money supply in 1958-59. Thus, it can be said that while the problem of the shortage of savings was met in 1955-57 by a combination of price inflation and credit and capital market controls, it was "solved" in 1958-59 by means of a combination of credit and liquidity inflation plus some remaining credit controls.\textsuperscript{19}

The rapid expansion of money and credit in 1958 was rather alarming to the monetary authorities, and the Riksbank's policy at the beginning of 1959 was said to be

\ldots to avoid over-restrictive measures which would make the situation difficult for industries still in an unstable state, and also to avoid checking any increase of activity which appears desirable and capable of realization without risks.\textsuperscript{20}

The moderately restrictive policy inferred in the Riksbank's statement was much too weak to cope with the financial developments in 1959. In

\begin{itemize}
  \item \textsuperscript{19} Lundberg, \textit{op. cit.}, p. 48.
  \item \textsuperscript{20} Riksbanks \textit{årskok}, 1959, p. 43.
\end{itemize}
addition to the expansive effect of the government's deficit, the improvement in foreign trade caused an inflow of foreign exchange so that there was a disruption of the usual seasonal pattern, and developments during the first half of 1959 were such that at mid-year the commercial bank liquidity had not been reduced from its position at the beginning of the year. The capital market problem prevented the Riksbank from using open market operations to neutralize the inflow of foreign exchange. Given its favorable liquidity position the commercial banking system increased its advances to the private sector of the economy by 921 million kronor during the first half of 1959.

In May of 1959 the Riksbank warned the commercial banks that measures designed to limit any further increase of private credits might be adopted. Shortly thereafter the Riksbank recommended a simultaneous reform and increase of the required liquidity ratios which had been in force since 1952. According to the Riksbank's proposal the division of banks into groups for liquidity purposes would be reduced from 4 to 3 and the minimum ratios raised to 40, 30, and 20 respectively. The banks accepted the Riksbank's recommendation; but they were also informed that if the raising of the liquidity ratio did not prove sufficient, the Riksbank might find itself obliged to adopt further measures.21

The effect of the increased liquidity requirements on the position of the commercial banking system as a whole is illustrated in

21 Ibid., p. 44.
Figure 30. Although the increased requirements did substantially reduce the margin of excess reserves, they did not, except in the case of a few banks, cause any sharp curtailment in the granting of credit. Nevertheless, bank advances to the private sector of the economy slowed to 512 million kronor in the second half of 1959. Only 96 million kronor of this increase occurred in the last quarter of the year. The measures taken by the Riksbank in 1959 which, in addition to the increase in reserve requirements and recommendations of voluntary credit restraint, also included a small upward adjustment in the interest rate on government bonds, a shortening of the maturity of the bonds of the City Mortgage Fund, and an increase in the Treasury Bill rate by 0.2 percent, resulted in a reallocation of commercial bank credit rather than an overall restriction. In the second half of 1959 the banks bought heavily of the new issue of government and mortgage institutions bonds. This had the advantage of aiding in the financing of the extremely large budget deficit and preventing any problem for housing finance. However, the policy was also a major contributing factor in the approximately 3 billion kronor or 20 percent increase in commercial bank deposits that occurred in 1959. This is an alltime record annual rate of expansion of bank deposits. Although the Riksbank again warned the banks about credit expansion in the autumn of 1959, no further restrictive actions were taken until January, 1960.

The main effect of the monetary and fiscal policy pursued in 1958-59 was the very rapid increase in the total money supply, which is illustrated in Figure 31. When the increase in the money supply is
Actual liquidity ratio
Required liquidity ratio


FIGURE 30

ACTUAL AND REQUIRED LIQUIDITY RATIOS OF THE COMMERCIAL BANKS, 1957-1962
FIGURE 31

THE MONEY SUPPLY IN THE PRIVATE NON-BANKING SECTOR
OF THE ECONOMY, SEASONALLY ADJUSTED, 1958-1962
BILLIONS OF KRONOR

considered in relation to the development of the value of production during the period, there was a substantial improvement in the real liquidity of the private sector of the economy. (See Figure 9, page 184.) Furthermore, the size and method of financing the government's budget deficit as well as other liquidity increasing measures, such as the release of the investment reserve funds and the repayment of a portion of the price equalization levy collected in 1951-52, resulted in a very heavy concentration of the increase in liquidity in the hands of business firms. Business liquidity was also enhanced by the favorable development of profits and liquidation of inventories in 1959. A careful study of the development of business finance indicates that the industrial sector's ability to finance internally its investment activity rose sharply during the period 1958-59. It is significant that bank advances to the rapidly advancing industrial sector increased by only 0.9 percent in 1959. At the beginning of 1960 industrial investment was largely independent of the supply of bank credit.

The problem of excess liquidity confronting the Riksbank in 1960, when it was decided that a seriously restrictive monetary policy would be necessary if inflation was to be avoided, was in many ways similar to that encountered at the end of the war in 1945. In 1960, however, the policy pursued was radically different from that of the immediate postwar years.

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III. RIGOROUS ANTI-INFLATIONARY MONETARY POLICY, 1960-1961

The distinguishing feature of the anti-inflationary policy pursued in Sweden during the period of rapid economic expansion in 1960-61 was the heavy emphasis placed on monetary policy and especially on the orthodox means of monetary control, such as changes in the discount rate and other short-term interest rates, open market operations, and changes in reserve requirements. The monetary policy in 1960-61 was, more than at any previous time in the postwar period, directed toward the control of the liquidity of the banking system and the public at large. In addition to the change in the character of monetary policy, the years 1960-61 were marked by a complete reversal of the credit conditions that had generally prevailed during the 1950's. The fact that the long-term credit market eased at the same time as the short-term market was severely tightened, implies that a solution was found for the chronic capital shortage without resort to the direct control of earlier years. The change in monetary policy and financial conditions in 1960-61 was made possible and assisted in a decisive manner by the new line of fiscal and debt management policy that was adopted at the beginning of the period.

The restrictive economic policy that was introduced in January, 1960 was essentially preventive in character. Full employment was attained late in 1959, but prices did not show any immediate tendency to rise nor was any increase expected in the early part of 1960. However, the Konjunkturinstitutet forecasted a significant inflationary
gap for 1960 as a whole if actions were not taken to limit the public
or the private sector's ambitious expenditure plans. The authori-
ties were particularly troubled over the possibility that a continued
rapid expansion of private investment, especially industrial invest-
ment, plus an expected rise in the demand for exports, would cause a
severe shortage of labor in the capital good industry with wage-drift
and cost-push consequences.

The eagerness of Swedish policy makers to introduce anti-
inflationary measures in 1960 can in part be explained by the experi-
ence gained during the 1950's. Unlike their position in the immediate
postwar years, the authorities were now inflation conscious. As early
as in January, 1959 the Finance Minister had warned of the possibility
of inflation when the international economy recovered and exports
began to rise again. This danger was intensified by the success of
the Swedish stabilization policy in causing an expansion of domestic
economic activity during the international slump. The situation was
further complicated when the upswing of the international economy in
1959-60 took the form of a so-called "Mengenkonjunktur," i.e., an
expansion of production without appreciable price increases. Under
these circumstances the failure to prevent domestic forces from driving
up prices would have an immediate effect on the balance of payments,

23"Konjunkturläget hösten 1959," Meddelanden från Konjunktur-

24Statsverksproposition, Bilaga 1, 1959.
which, in view of the weak development of Swedish foreign exchange reserves during the 1950's, would be extremely undesirable.

The possibilities for an effective anti-inflationary monetary policy using orthodox means of control was severely limited by the expansion of liquidity that resulted from the fiscal and debt management policies pursued in 1958-59. This had been demonstrated during the latter half of 1959 when the first steps in a tightening of monetary policy were undertaken. The expansion of commercial bank loans and advances had slowed somewhat in 1959, but the growth of the banking system's and the public's liquidity had continued unabated as the government was forced by the tight situation in the capital market and its unwillingness to raise interest rates to finance the large budget deficit in the commercial banks.

The new restrictive measures introduced by the Riksbank in mid-January, 1960 would appear, against the background of financial developments in the late 1950's, to be very modest and have little chance of decisively influencing economic conditions. The main actions taken in January were an increase of reserve requirements and the discount rate. On January 15th the required liquidity reserve requirements for all banks were raised by 3 percent over the level established in May, 1959.25 As Figure 30 shows, the new reserve requirements were still considerably less, on the average, than those actually being held by

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25 The reserve requirements were temporarily raised by 5 percent during the period January-February when bank liquidity reached a seasonal peak. See, Bankoutskottets memorial, No. 1, 1961, p. 3.
the banks. Although the increased reserve requirements did not put any immediate pressure on the supply of bank credit, they were, in view of the substantial seasonal decline in bank liquidity that normally occurs during the first half of the year, potentially very restrictive.

The increase in reserve requirements was supported by an increase of the official discount rate from 4 1/2 to 5 percent. As Figure 32 shows, there was a general adjustment upward of the level of interest rates following the rise in the discount rate. Through the capital loss that it imposed on the banks, the increase in the discount rate tended to "freeze in" the banks' excess reserves of liquid assets. It is noteworthy in terms of subsequent developments that the Riksbank requested the commercial banks to limit the increase in their deposit rates to 4 percent in order to widen the difference between the rate on deposits and long-term bonds and thereby attract funds to the capital market. The Riksbank also increased the priority credit ratios of the insurance companies and other financial institutions and requested that they apply a more flexible policy in setting the interest rates on their non-priority lending.

Taken altogether, the Riksbank's actions in January, 1960, even if they did place relatively narrow limits on a further expansion of the banks' loans and advances to the private sector of the economy, did not do much to solve the problem posed by the excessively high level of liquidity that had been built up during the preceding recession. Given the high level of business liquidity and degree of internal
Government bonds, 2 years to maturity
Government bonds, 15 years to maturity
Official discount rate
Treasury Bills, 6 months to maturity


FIGURE 32
THE DEVELOPMENT OF INTEREST RATES, 1958-1962
financing, a rapid expansion of private investment activity could not have been prevented with the means employed by the Riksbank. On the other hand, even the direct control of credit as used in 1955-57 would not have been effective under the existing conditions.

The main source of the pressure that was exerted on the liquidity position of the banks and the public in 1960-61 was fiscal and debt management policy. The adoption of the 4-percent general sales tax, in addition to its effect on real liquidity through an induced rise in the level of prices, had a decisive effect on the government’s revenue position. Mainly as a result of the new tax, but also due in part to a reduction of expenditures on the capital budget, the government’s cash deficit on the total budget fell from 1,921 to 1,079 million kronor in 1959 and 1960 respectively. Although a deficit had originally been forecast for the 1960/61 budget, the revenue from the sales tax and the effect of rising incomes on the tax base caused the outcome for the fiscal year to be a surplus of 381 million kronor; the first since the fiscal year 1951/52. The cash surplus on the budget in the calendar year 1961 amounted to 368 million kronor and the trend continued in 1962 when the surplus was 600 million kronor. As a result of the budget developments the government’s borrowing requirements

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were rapidly reduced from 1959 to 1960, and in 1961 the national debt outstanding was reduced by 2 percent.

The reduction in the government's demand for credit in 1960-61 was a major step in the solution to the capital market problem and the improvement of the effectiveness of monetary policy. Although the developments in these two years do not conclusively demonstrate that the Swedish government has finally solved its fiscal problems, the breaking of the political deadlock on the question of the nature of new taxation at least increases the likelihood that revenues will be better adjusted to expenditures in the future.27 Independent of this long-range question, the improvement of the government's budget balance in 1960-61 both directly, through its restrictive effect on the growth of liquidity, and indirectly, through an easing of the limitations on other means of monetary control, made a substantial contribution to anti-inflationary policy.

Debt management policy in 1960-61—for the first time in the postwar period—demonstrated its great potential as a means of anti-inflationary monetary control. This was largely made possible by what appears to have been a whole-hearted acceptance of the policy of flexible interest rates and a realization that the level of interest rates appropriate to economic conditions in Sweden during the 1960's would from a historical point of view be relatively high.

27 Although it was undertaken mainly as a part of a reform of direct taxes, the increase in the sales tax to 6 percent from the beginning of 1962 indicates a willingness to use the new tax weapon.
The aim of debt management policy, which for the greater part of the 1960-61 period served as a substitute for open market operations by the Riksbank, was to draw off funds from the short-term credit market by way of a reduction in commercial bank deposits. To achieve this goal an effort was made to secure a much greater funding of the public debt and a broadening of the scope of both the short- and long-term debt markets so a greater portion of the debt could be placed outside the financial system. A dramatic action was taken in March, 1960 when the National Debt Office employed a tactic similar to that of the shock loans in the 1950's and announced the issue of a 15-year government bond with an interest rate of $5\frac{1}{2}$ percent—the highest rate on a government security in 39 years. The terms of the issue were so attractive that for the first time in six years non-bank investors were attracted to government securities. Approximately 25 percent of the 1,074 million kronor subscribed to the new issue—the largest amount ever raised by a single bond issue in Sweden—came from non-bank investors. No attempt was made to limit the impact of the bond issue on interest rates.

Following the long-term issue in March, the Debt Office devoted its attention in the remainder of 1960 and greater part of 1961 to the development of what was, for Sweden at least, an entirely new form of government borrowing directed toward business firms. Bonds with very short maturities of 1\frac{1}{2}-2 years and Treasury Bills with maturities as long as 335 days were designed to coincide with corporate tax payment dates in 1961 and 1962. Approximately 150 million kronor of these
securities were sold to business firms in 1960. This marks the first step in the development of a short-term open money market in Sweden. These short-term securities were also an important part of the selective interest rate policy that was followed in 1960-61. The Riksbank's official discount rate remained unchanged from January, 1960 until April, 1962 when it was reduced to signal an easing of monetary policy to meet an impending recession. The Debt Office's issues of short-term securities were used during the interim to put pressure on the market and without disturbing long-term rates cause the successive rises in short-term rates that are illustrated in Figure 32.

In addition to the restrictive measures of fiscal and debt management policies, a third major blow was delivered to the liquidity of the banks and the public in 1960-61 by means of the investment reserve funds. In an effort to develop the investment funds into a better tool of anti-inflationary policy, the government offered special tax benefits during 1960 and 1961 if the entire allocation rather than the normal 46 percent were deposited on a blocked account at the Riksbank. The usual limits on the size of allocations were temporarily suspended. After approximately 18 months, depending on the time of deposit, 54 percent of the allocation was to be repaid while the remainder would be released in the usual manner when the Labor Market Board found it suitable from a business cycle point of view. The tax benefits on these special allocations to the investment funds were equivalent to an annual interest rate of about 10 percent during the period of the full cash deposit. The terms proved to be so
attractive that over 1 billion kronor were deposited at the Riksbank in 1960-61 with the bulk of the allocations being made in mid-1960 when they served to offset the effect of the seasonal deficit on the government's budget.

The actions taken in 1960-61 were, as Figure 31 shows, sufficiently strong to arrest the rapid increase in the money supply that had been under way since 1957. After having increased by 11 percent in 1959, the expansion in 1960 amounted to only 1 percent. This sharp reduction in the rate of growth of the money supply, while at the same time the GNP in current prices rose by 9 and 8 percent in 1960 and 1961 respectively, resulted in a significant decrease in real liquidity. The Konjunkturinstitutet's estimates of the effect of the decline in real liquidity on various sectors of the economy, which are illustrated in Figure 33, indicate that the reduction was most heavily concentrated in the business sector where the decrease amounted to 35-40 percent from 1959 to 1962.28

The commercial banks were subject to a very powerful credit squeeze in 1960-61. In order to provide a broader perspective and a basis for contrasting the main characteristics of banking developments in these years with those that occurred in the preceding decade, an index of the annual average level of commercial bank deposits, advances, and liquidity ratios will be employed. The changes in this


FIGURE 33
REAL LIQUIDITY BY SECTORS, 1958-1964
INDEX 1960=100
index from 1950 through 1961 are illustrated in Figure 34. As these data show, there were in the course of the 1950's three periods of two-year duration--1950-51, 1953-54, and 1958-59--in which bank deposits increased very rapidly. The factors accounting for the expansion in each of these periods differ significantly.

In the first period of expansion--1950-51--the increase of deposits by 24 percent was associated with the rapid inflow of foreign exchange that resulted from the explosive rise in exports during the Korean War boom and a virtually unrestricted increase in the banks' loans and credits to the private sector of the economy. The second period of expansion began in 1953 when for the first time in the postwar period the banks became heavily engaged in financing the government's budget. During the recovery from the post-Korean slump in 1954, bank lending to the private sector again expanded rapidly. The relative increase of deposits in the two-year period 1953-54 was 22 percent. The most rapid increase in the average level of deposits was experienced in the expansion period at the end of the decade in 1958-59 when the increase amounted to 28 percent. In the 1958-59 period the expansion was due to both a rise in lending to the private sector and an increase in the banks' holdings of government debt.

Considering the changes that occurred during the 1950's as a whole, it appears that the average level of commercial bank deposits was doubled, the banks' holdings of government securities were almost quintupled, and the average level of advances to the private sector increased by 45 percent. As a result of these trends during the decade
FIGURE 34

ANNUAL AVERAGE LEVEL OF COMMERCIAL BANK DEPOSITS, ADVANCES, AND LIQUIDITY RATIO, 1950-1961
INDEX 1950=100
bank liquidity, the main component of which is government securities, improved by 80 percent. It is against the background of these expansive tendencies and the highly liquid position of the banks that was built up by the end of the decade that we will consider the changes that occurred in 1960-61.

The percentage changes in the average level of bank deposits and advances in the years 1958-61 were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Deposits</th>
<th>Advances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>+9.6</td>
<td>+4.5</td>
</tr>
<tr>
<td>1959</td>
<td>+16.9</td>
<td>+10.0</td>
</tr>
<tr>
<td>1960</td>
<td>+6.8</td>
<td>+10.6</td>
</tr>
<tr>
<td>1961</td>
<td>-1.0</td>
<td>+5.8</td>
</tr>
</tbody>
</table>

The outstanding feature of these changes is the slowing of the rate of growth followed by a decline in the level of deposits in 1961—the first such reduction in the postwar period. The development of deposits reflects the general liquidity absorbing measures adopted by the government from the beginning of 1960. The magnitude of the effect of these measures on the deposits and liquid assets of the commercial banks is illustrated in Table XVIII. Because of their initially highly liquid position, the banks were able to continue to expand credit despite the drain on deposits, but only at the expense of a reduction in their holdings of government securities. The average liquidity ratio fell from 45.3 percent in 1959 to 37.9 percent in 1961. The decline in the banks' liquidity ratio and the increased reserve requirements in January, 1960 caused the banks to be in deficient reserve
TABLE XVIII

THE MONEY MARKET, 1959-1961
MILLIONS OF KRONOR

<table>
<thead>
<tr>
<th></th>
<th>1959</th>
<th></th>
<th>1960</th>
<th></th>
<th>1961</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>I</td>
<td>II</td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td><strong>Factors influencing commercial bank liquidity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange reserves</td>
<td>+43</td>
<td>13</td>
<td>+415</td>
<td>256</td>
<td>+567</td>
<td>335</td>
</tr>
<tr>
<td>Central govt. surplus of total expenditure over current income</td>
<td>-686</td>
<td>+2,607</td>
<td>-1,023</td>
<td>+2,102</td>
<td>-2,360</td>
<td>+1,997</td>
</tr>
<tr>
<td>Net sales of govt. bonds outside commercial banks (-)</td>
<td>+402</td>
<td>-1,293</td>
<td>+284</td>
<td>-872</td>
<td>+456</td>
<td>-575</td>
</tr>
<tr>
<td>Investment reserve funds (-)</td>
<td>-32</td>
<td>-8</td>
<td>-115</td>
<td>-746</td>
<td>-294</td>
<td>+214</td>
</tr>
<tr>
<td>Notes outstanding (-)</td>
<td>+383</td>
<td>-545</td>
<td>+225</td>
<td>-573</td>
<td>+254</td>
<td>-541</td>
</tr>
<tr>
<td>Swedish bonds held by commercial banks</td>
<td>+124</td>
<td>+347</td>
<td>+51</td>
<td>+18</td>
<td>+1</td>
<td>+150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>+234</td>
<td>+1,121</td>
<td>-993</td>
<td>+184</td>
<td>-1,352</td>
<td>+1,520</td>
</tr>
</tbody>
</table>

| **Commercial banks** |      |   |      |   |      |   |
| Cash | -220 | +92 | -324 | +667 | -712 | +708|
| Treasury Bills | -569 | -24 | -183 | -264 | -60 | +555|
| Swedish bonds | +1,103 | +637 | +121 | -398 | +379 | +67|
| Foreign exchange | +80 | +416 | -609 | +180 | -231 | +250|
| **Total** | +234 | +1,121 | -993 | +184 | -1,352 | +1,520|

Source: "The Swedish Economy," Konjunkturinstitutet, selected years.
position during the greater part of 1960 and 1961 (see Figure 30, page 392). This was the immediate source of the restraint placed on the expansion of bank credit in 1960-61. According to a seasonally adjusted monthly series, the commercial banks' non-housing credits to the private sector of the economy stagnated from the third quarter of 1960 and did not show any tendency to increase until the last quarter of 1961. Thus, the increase of bank credit that did occur after the introduction of the government's anti-inflationary monetary policy was mainly for housing purposes which continued to be given a high priority position. In the course of 1961, however, even this form of commercial bank credit was reduced.

The developments in 1960-61, when the effect of general working means of control on bank liquidity were successfully used to restrict commercial bank credit, can be contrasted with the monetary policy pursued in the mid-1950's. In both 1954 and 1960 an increase in long-term interest rates that permitted the sale of government securities in the market outside the banks was used to influence liquidity and the supply of credit. In 1960-61, however, the effect of this action was greater and more sustained. Because of the weakness of the fiscal policy in 1954-55 and the unwillingness to permit the extremely large

29 The reduction of reserve requirements in 1961 was not intended to ease credit, but rather was undertaken in recognition of the effectiveness of the measures used to reduce the banks' holdings of liquid assets. Bankoutskottets memorial, No. 1, 1962, p. 4.

increase of interest rates that would have been necessary to satisfy the government's credit requirements in the long-term market, the control of bank liquidity was abandoned in 1955. Government debt was placed in the commercial banks and a system of direct controls was applied to the bank credit and capital markets in order to regulate the volume and allocation of credit. Continued government deficits and their effect on bank liquidity tended to perpetuate the system of direct controls. In 1960-61, on the other hand, the government's budget position was strengthened and borrowing requirements were reduced so that pressure on bank liquidity could be maintained without further increases in long-term interest rates. This contrast between the policy in the two periods serves to indicate that it was the change in fiscal policy, not just a different outlook on interest rate policy, that was critical to the success of the type of policy pursued in 1960-61.

The problem of housing finance, which had seriously hampered earlier attempts to pursue a restrictive credit policy, was not encountered in 1960-61. The equilibrium of the capital market was seriously disrupted during the 1950's when the supply of capital in the long-term market was restricted by controls on issuing activity and interest rates, and the demand for long-term credits rose sharply as housing construction was expanded rapidly under the impetus of the government's social policy. This situation prevented the placement of government debt in the long-term market and forced the commercial banks to permit construction credits to grow and to be used as a form of quasi
long-term credit. Three factors—the acceptance of a higher interest rate, reduced government borrowing requirements, and an increase in the supply of long-term credit due to institutional changes in the financial system—permitted the funding of the government's debt and tightening of short-term credit without incurring a capital market problem in 1960-61. The commercial banks' non-housing credits ceased to expand in 1960, but it was not until construction credits, which had built up rapidly in 1960, were shifted in 1961 to long-term finance in the capital market that the banks' total loans and advances showed a decline.

One development in 1960-61 that promises to have important long-term implications for the pursuit of monetary policy in Sweden was the increase in the supply of long-term credit that resulted from the initial operations of the National Pension Fund. This institution, which has the form of a quasi-public agency, was created in connection with the compulsory old-age pension scheme adopted by the Riksdag in 1959.31 The Fund's operation is not accounted for on the government's budget and its investment policy is independently managed within rather broad guide lines which even permit business loans.

In 1961 the Pension Fund increased its housing credits by 430 million kronor, thereby bringing its investment in this area up to 50 percent of its total assets of 1,190 million kronor. This action

greatly assisted in the shifting of commercial bank construction
credits without disturbing the existing level of interest rates.
However, it is in the late 1960's that the Fund is expected to play a
major role in the Swedish financial system. It is forecast that by
1970 the Fund will have assets of approximately 25 billion kronor.
This may be compared with an outstanding national debt of approxi-
mately 22 billion kronor or the annual net long- and short-term lend-
ing of 4-5 billion kronor. The increase in the assets administered
by the Fund will not necessarily be equal to a net addition to loan-
able funds because of the pension system's effect on the propensity
to save and the public's holdings of other forms of financial sav-
ings.32 However, it will in any event provide a powerful means of
directing the allocation of funds in the capital market. It was
mainly on the grounds of the potential power of the Pension Fund that
one Swedish authority recently concluded that,

... the Swedish credit market is on the threshold of a new
situation that will demand different measures—from both the
credit institutions and the government—as compared with
those which these bodies tried to learn to use during the
1950's.33

Although orthodox and general working means of control were
emphasized in the pursuit of monetary policy in 1960-61, significant
elements of the control system built up in the 1950's were retained.

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32 Erik Lundberg, "Can the Pension Fund Rescue Savings?" Skandi-
naviska Banken, Quarterly Review. April, 1958, pp. 39-46.

33 Bo Karlström, "Structural Changes on the Swedish Credit Mar-
The Riksbank’s control of bond issues was continued although, after the general easing of the capital market in 1961, permission for private bond issues was granted on a greater scale than at any time in the 1950’s. By the end of 1962 the waiting list of prospective borrowers was virtually eliminated. The priority investment quotas for capital market institutions were raised in 1960 and kept in force throughout the period. However, given the fiscal and interest rate policies that were pursued, these regulations did not play an important role.

The final report of a Royal Commission appointed to study the credit market indicates that the authorities have no intention of completely abandoning the regulatory techniques that had been developed. As a result of the Commission’s recommendations the laws concerning monetary controls were thoroughly revised and expanded in 1962. The new legislation, which took the form of emergency laws that can be applied when required, included three major types of control: liquidity quotas and cash reserves, priority investment quotas, and the regulation of bond issues and interest rates. The most noteworthy changes were in the liquidity quotas, which were extended to certain other financial institutions and made flexible at the discretion of the Riksbank, and the priority investment quotas which

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34 Banklikviditet och kreditprioritering, SOU 1960:16.
were legally formalized for the first time. The nature of this legislation was heavily influenced by the fact that the Commission making the recommendations was appointed in 1957 and charged with the study of the credit market problem existing at that time. The usefulness of the new legislation will thus depend to a great extent on a reappearance of this problem.

Aside from its immediate effects the monetary policy pursued had more far-reaching consequences. As a result of changes brought about during this period the possibility was created for a much more effective monetary policy in the future. During the 1950's the large deficits on the government's budget and their short-term financing gave rise to a profit inflation which enhanced the ability to self-financing investment in the private sector. The government's expenditure surplus was transformed into an income surplus for the business sector and at the same time the government's borrowing in the commercial banks and the Riksbank created a high level of liquidity in the banking and business sectors. The high and rising level of self-financing and liquidity substantially reduced the business sector's credit requirements and gave it a certain immunity to attack by monetary measures. This situation even blunted the powers of the direct

35 For a more detailed discussion, see "New Emergency Laws for the Credit Market," Svenska Handelsbanken, Index, 1962:4-5, p. 4.

36 For an excellent criticism of the Commission's findings, see Lars Hansson, "Några kommentarer till 'Banklikviditet och kreditprioritering'," Ekonomisk Tidskrift, September, 1960, pp. 214-26.
controls of credit that were employed in the mid-1950's. The monetary policy pursued in 1960-61 drastically reduced business liquidity and, as Figure 35 shows, the ability to self-finance was also sharply cut. With business much more dependent on credit than formerly, it should now be possible to produce larger effects with smaller means.

Swedish economic policy was quite successful in 1960-61. Despite the very rapid rate of expansion—real GNP rose by 4 percent in 1960 and by 6 percent in 1961—which constantly threatened to overstrain available resources, no serious inflation developed. After allowance is made for the introduction of the general sales tax in 1960, consumers' prices rose at an average rate of 2 percent per year. The balance of payments developed in a favorable manner and in 1961 there was a significant inflow of foreign exchange. The peak of the cyclical expansion was reached late in 1961. The slump in economic activity on the Continent threatened via its effect on Swedish export industries to cause a recession in 1962. Business investment plans, responding in part to a certain leveling off in consumers' demand, showed that a reduction in investment was planned for 1962. A mild recession—or more properly a substantial slowing of the previous rate of expansion—did in fact develop during the first half of 1962. It is noteworthy that monetary policy responded very rapidly to the

37 For a discussion of the profit squeeze that caused the reduction in the ability to self-finance, see Jaak Järv and Erik Lundberg, op. cit.
$S$ = Gross savings  
$I$ = Gross investments in plant and equipment  
$I + L$ = Gross investments in plant, equipment, and inventory  
$I + L - S$ = positive: investment surplus  
$I - S$ = negative: savings surplus

NOTE: The left-hand scale indicates gross investments, gross savings and financial saving as a percentage of total investments in 1955. The right-hand scale is in millions of kronor.


FIGURE 35

GROSS INVESTMENTS, GROSS SAVINGS AND FINANCIAL SAVINGS IN MINING AND MANUFACTURING MILIONS OF KRONOR. INDEX: GROSS INVESTMENT IN PLANT, EQUIPMENT, AND INVENTORY 1955=100
change in economic conditions and there were successive reductions in the discount rate early in 1962.

IV. CONCLUSIONS

The brevity and mildness of the inflation in 1960-61 cannot be attributed solely to monetary policy. However, it does appear that monetary policy made a much greater contribution to combating inflation than at any previous time in the postwar period. The policy pursued did not, as had been the case earlier, add to the burden of other means of stabilization policy nor cause serious distortions in the operation of the economic system. It is noteworthy in the light of the arguments offered at the end of the war that the policy pursued in 1960-61, which was certainly the most rigorous in the postwar period, did not seriously impair the goals of social welfare policy.
CHAPTER IX

SUMMARY AND CONCLUSIONS

In general Swedish economic policy in the postwar period 1945-6 offers an interesting and instructive example of the kind of political and economic difficulties that may be encountered in the "high pressure" type of economy that has at times been advocated in the United States as a means of dealing with the problems of full employment, economic growth, and social imbalance.¹ In particular the Swedish experience in the field of monetary policy illustrates the difficulties that are associated with the stable low interest rate doctrine that is usually an essential element in high pressure or welfare state economics.

The main conclusion that can be drawn from our study of the record of postwar monetary policy in Sweden is that the policy of stable low interest rates, both the uncompromising policy pursued in the 1945-50 period and the modified version that was adopted in the 1950's, seriously handicapped the pursuit of a technically and economically efficient anti-inflationary monetary policy. The weakness of monetary policy was an important factor contributing to the rapid and continuous deterioration in the value of money experienced in

Sweden. While in theory it is possible to pursue an active countercyclical monetary policy without flexible interest rates, the Swedish experiments with this type of policy indicate that immense practical problems and undesirable side effects are encountered in reality. There is little evidence, on the other hand, that a policy of flexible interest rates would have in and of itself been sufficient to have permitted monetary policy to cope successfully with the problem of inflation within the context of the nature and goals of the general economic policy being pursued in Sweden.

The Swedish approach to economic policy is properly referred to as the middle way. It does not rely on an unfettered free market system nor on complete centralized planning to achieve its aims. In the postwar period the government's social welfare and full employment goals were pursued mainly with the aid of the broad general working means of monetary and fiscal policy whose task it was to stimulate rapid expansion. Stabilization policy relied upon an improvisation of regulatory measures directed toward particular areas of the economy and certain manifestations of disequilibrium. Except during periods of reduced output due to external shocks, the main task of stabilization policy was to prevent too rapid a rate of expansion and channeling activity into areas of high social priority.

In the immediate postwar years 1945-50 the regulations that were applied were both partial and tardy. Strong direct controls permitted the authorities to repress inflation and severely limit overt price increases, but they did not prevent the continued growth of excess
demand and liquidity. The pressure on anti-inflationary controls and the distortions associated with their use during this period were intensified by the manner in which the other means of economic policy, especially monetary policy, were employed.

Monetary policy throughout the immediate postwar period was designed primarily as a support for the government's housing program and income redistribution plans, and secondarily to assure that monetary factors would in no way interfere with the maintenance of full employment. The uncompromising low interest rate policy associated with these goals acted as a stimulant to all types of investment at a time when curtailment was in fact necessary. Given the means at its command and the structure of the Swedish financial system, the Riksbank was forced to engage in excessively large open market operations in order to maintain stable low interest rates and compensate for the loss of foreign exchange reserves that resulted from excess domestic demand.

The Riksbank's policy in 1945-50 involved a fundamental inconsistency. Although it was directed toward a solution of the housing shortage, interest rate policy through its side effects on the supply of money and credit was instrumental in forcing the government to restrict housing construction as a means of easing inflationary pressures.

Even though it was only correctly applied in the context of a fully regulated economy, Swedish policy makers continued throughout a substantial portion of the postwar period to rationalize the
pursuit of a stable low interest rate policy with the theory developed by Ohlin and Myrdal during the war years. The principal shortcoming of this theory was its concentration on the direct effect of the height of interest rates on savings and investment. The failure to assign importance to the relation between interest rates and the supply of money and credit was largely the result of the theory's having been based on the experience gained during the depression years of the 1930's. There can be little question that the theory of monetary policy employed during the greater part of the postwar period was irrelevant.

The retention of the stable low interest rate policy despite changed economic conditions and problems was mainly political in motivation. The political authorities remained convinced that any increase of interest rates sufficiently large to halt credit expansion would precipitate a decline in economic activity, especially in the construction industry, increase unemployment, and force a retreat from the ambitious social welfare program to which the government was committed. Low interest rates, on the other hand, were thought to be essential to the cheap abundant housing that the government wished to provide. The majority party—the Social Democrats—stubbornly adhered to the doctrine of stable low interest rates as an article of political faith. Because of the assumed identity between stable low interest rates and the goal of full employment which had become the essence of Swedish socialism, interest rate policy even became a key issue in several election campaigns. With this strong political
commitment it is not surprising that the stable low interest rate policy was not quickly abandoned when its undesirable effects were demonstrated shortly after the end of the war.

After the foreign exchange crisis in 1947 there was a growing recognition and acceptance of the need for the volume of money and credit to be controlled in a counter-cyclical manner. It was at this time that the dilemma of how to restrict credit without disturbing interest rates first made its appearance. An early attempt was made to solve this technical problem by means of voluntary credit restraint. However, even in the Swedish financial system which is well adapted to this type of control, the experience in 1947-48 and subsequent periods demonstrated that, unless the liquidity of the banking system is tightly controlled, voluntary arrangements tend to lose their force when there is a sharp rise in the demand for credit.

The experience during the first phase in the postwar development of Swedish monetary policy would seem to indicate that the social and economic advantages which were expected to result from the stabilization of the level of interest rates can easily be replaced by heavier disadvantages associated with the risks for a worsening of the value of money that such a policy produces when it prevents a positive control of the quantity of money and credit.

What is perhaps the most interesting phase in the postwar development of Swedish monetary policy began in 1950 when there was a basic reformulation of the government's economic policy. Direct controls were abandoned and the principal responsibility for maintaining
economic stability was shifted to fiscal policy. At the same time, however, the government's budget became the main instrument of social welfare policy. The government's commitment to an increase in social services supplied by the state and its ambitious program for economic growth resulted in an increase in government expenditures which raised the budget share of the GNP from 29 percent in 1949 to 32 percent in 1959. It proved to be politically impossible to increase taxes sufficiently to offset the increased expenditures. There was a secular deterioration of the budget in the 1950's as a means of combating inflation and in the later years the budget itself was a source of inflationary pressures. It was mainly the failure of fiscal policy to fulfill its task as a means of anti-inflationary policy that caused the responsibility for this part of stabilization policy to be placed almost exclusively on monetary policy.

The aim of the Riksbank's policy during the greater part of the past decade was to maintain tight monetary conditions without raising interest rates, especially long-term rates. Despite the introduction of such radical measures as control of bond issues, agreements with banks concerning the level of interest rates and preferences for certain types of loans and borrowers, and placement rules for various financial institutions, the Riksbank failed to achieve either of its goals. Taken as a whole the decade of the 50's was in fact a period of rising interest rates and rapid expansion of the money supply while the price level rose at an annual rate of almost 5 percent. The rise in the level of interest rates took the form of a jump from one fixed
level to another. The changes as rule were poorly timed and too small to have any significant effect on expenditures. The fact that credit rationing was imposed continuously during the decade—-even during the recession of 1958-59—suggests that although the level of interest rates was raised, it remained too low from the point of view of equilibrium in the credit market.

The difficulty of restricting bank credit without permitting interest rate increases proved insurmountable even during the years 1955-57 when the Riksbank resorted to a direct control of commercial bank credit to the private sector of the economy. The restrictive effect of the credit ceiling on private expenditures was rapidly dissipated by the activation of idle balances and the growth of a "gray market" for credit outside the banking system. The high rates of interest in the gray market attracted funds and discouraged supply in the long-term capital market, thereby putting pressure on the interest rates the Riksbank was committed to stabilize. In order to avoid interest rate increases and problems for housing finance, government borrowing was shifted to the commercial banks. The ultimate effect of the credit ceiling was an increase in both the quantity and the circuit velocity of money.

The financing of the government's large budget deficits and the institutional structure of the financial system were the two main obstacles to the success of the Riksbank's efforts to simultaneously maintain tight monetary conditions and stable interest rates. The Swedish financial system is not very highly developed and lacks a
short-term open money market. This tends to make the structure of interest rates very rigid and the spread between short- and long-term rates extremely narrow as compared with conditions in Great Britain or the United States. The existing structure of the financial system made it impossible to use the discount rate or open market operations to influence the supply of bank credit without having an immediate and substantial effect on the politically sensitive long-term interest rates. The introduction of required reserves of liquid assets served, so long as the government's borrowing requirements exceeded the absorption capacity of the capital market at existing interest rates, only to reallocate rather than restrict the total volume of commercial bank credit.

One of the serious shortcomings of Swedish policy making in the field of monetary affairs was the scant attention that was given until very recent times to changes in the institutional structure of the financial system as a means of improving the operation of monetary policy. Instead of new techniques of control, more emphasis should have been placed on modifications of the structure of the financial system which would have permitted a greater degree of control to be exercised through existing orthodox means even under the changed circumstances that resulted from postwar economic developments and new policy goals.

In many ways the monetary policy of the 1950's represents a continuation and transformation of the combined regulatory and inflationary policies of the earlier postwar years. During the immediate
postwar period direct controls were used in an attempt to check excess demand in the commodity and labor markets at the same time that the other elements of economic policy were expansive in character. In the 1950's, on the other hand, an attempt was made to solve the problem of excess demand for credit and capital (shortage of savings) with a combination of credit inflation and control. In neither case did the controls solve the underlying economic problem.

The capital market problems of the 1950's and the inflationary pressures that they reflected had their ultimate origin in the political dilemma confronting the government in attempting to reconcile its highly ambitious but conflicting goals. The essential problem was that of finding the means, in the context of a fully employed economy, of rapidly expanding the public sector without impairing the rate of economic growth or the value of money. With the priority system that was in effect in the financial system the ultimate responsibility for monetary restraint rested with the government's fiscal decisions. The unwillingness to cut expenditures and the inability to find politically and economically feasible sources of tax revenue meant that monetary policy had the task of restricting business investment sufficiently to compensate for the expansion of the government sector and/or foreign demand. Not only did this concentration of restrictive policy on private investment activity present a serious threat to the rate of economic growth but it required—so long as the stable low interest rate doctrine was retained—the application of credit rationing which increased and intensified the imperfections of the
credit and capital markets as a means of allocating resources in an economically efficient manner.

A permanent low interest rate policy of the type pursued in Sweden tends to encourage a greater volume of public investment than would be motivated on the basis of social preference because there is no indicator of the real cost of the investment. The needs of housing policy were one of the most frequently cited arguments for low interest rates. The aim of the government's loan and subsidy program was cheap, abundant housing. Yet it is most likely that the policy resulted in a reduction of social utility. Although the nation's housing standard was improved, this was only at the cost of other things that consumers would have chosen had rental rates reflected the full cost of housing. The low rental rates also had the effect of accentuating and perpetuating the postwar housing shortage. Even if the government's goals are not purely economic, this does not exclude the necessity of basing public investment decisions on yield calculations when there is a choice between different production methods and investment alternatives. Postwar interest rate policy tended to distort these calculations seriously.

Swedish economic policy is well known for its scientific formulation, willingness to experiment, and the diligence with which its ambitious goals are pursued. However, the results of an international comparison of the performance of the Swedish economy in the 1950's, which are summarized in Figures 36 and 37, indicate that with respect to economic growth and the rate of inflation, Sweden was only about
Annual rate of growth in real GNP

Annual percentage increase in price level


FIGURE 36

INFLATION AND ECONOMIC GROWTH IN SELECTED COUNTRIES, 1950-1960
Annual rate of growth in real GNP

* Average of the absolute deviations of the rate of growth in each year from average annual rate of growth of real GNP.

average in the results that were obtained. The general economic stability of the Swedish economy was somewhat above average but well behind the leaders in this regard.

No definitive answer can be given to the question of why, despite Sweden's relatively favorable position with respect to the seriousness of the economic problems encountered in the postwar period and the attention given to economic policy, the nation's performance record is so modest. Our study suggests, however, that political and ideological factors mainly impeded the operation of a rationally conceived and theoretically sound economic policy. This was especially true in the field of monetary policy where the political prejudice against interest rate changes limited the contribution that the central bank could make to the achievement of the nation's policy goals.

Judging from the developments in the early 1960's Sweden may be entering a new era in the history of her economic policy. In the 1930's there was a breakthrough in fiscal policy which was followed in the 1940's by a period characterized by the use of direct controls. The 1950's were the decade of experiments with credit regulations. The 1960's give promise of being the decade that will be remembered for the achievement of a high degree of coordination of monetary and fiscal policy.
### TABLE XIX

**BALANCE OF RESOURCES, 1938/39 AND 1946-1960**  
**CURRENT PRICES, MILLIONS OF KRONOR**

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<th>Year</th>
<th>SUPPLY:</th>
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<th>USE:</th>
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<tr>
<td></td>
<td>Gross National Product at Market Prices</td>
<td>Imports of Goods cif</td>
<td>in Inventories</td>
<td>Decrease</td>
<td>Gross Private Domestic Import</td>
<td>Gross Public Domestic Exports fob, in Inventories</td>
<td>Increase</td>
<td>Private Domestic Services</td>
<td>Public Domestic Consumption</td>
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<td>2,260</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
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<td>-</td>
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<td>70</td>
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<td>8,990</td>
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<td>1,380</td>
<td>36,960</td>
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### TABLE XX

**BALANCE OF RESOURCES, 1946-1960**

**1954 PRICES, MILLIONS OF KRONOR**

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*Source: Mål och medel i stabiliseringspolitiken. SOU 1961:42, p. 349.*
### TABLE XXI

**Balance of Resources Accounts as a Percentage of Gross National Product**

1938/39 and 1946-1960, Current Prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Private Domestic Investment</th>
<th>Gross Public Domestic Investment</th>
<th>Changes in Inventories</th>
<th>Current Balance of Payments net</th>
<th>Private Consumption</th>
<th>Public Consumption</th>
<th>Total</th>
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TABLE XXII

ANNUAL CHANGES IN THE VOLUME OF CERTAIN NATIONAL PRODUCT ACCOUNTS, 1947-1960

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<th>Consumption</th>
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<td>Public</td>
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<td>+ 15.0</td>
<td>+ 3.9</td>
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<td>+ 9.4</td>
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<td>+ 4.3</td>
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<th>Fishing</th>
<th>Manufacturing</th>
<th>Distribution of Goods, Total</th>
<th>Trade and Communications</th>
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<th>Housing</th>
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## TABLE XXIV

**INVESTMENT IN MACHINERY AND BUSINESS EQUIPMENT**
*(EXCLUSIVE OF REPAIRS AND MAINTENANCE)*

**1946-1960, 1954 PRICES**

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*Source: Mål och medel i stabiliseringspolitiken, SOU 1961:42, p. 351.*
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<tr>
<th>Year</th>
<th>Imports cif</th>
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<th>Trade Balance net</th>
<th>Shipping Receipts net</th>
<th>Other Services</th>
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<th>Total Gold and Foreign Exchange Reserves</th>
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<th>Expenditures on the Current Budget</th>
<th>Surplus (+) Deficit (-) on the Current Budget</th>
<th>Expenditures on the Total Budget</th>
<th>Surplus (+) Deficit (-) on the Total Budget</th>
<th>Increase (+) Decrease (-) in the National Debt</th>
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TABLE XXVIII

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Source: Mål och medel i stabiliseringspolitiken, SOU 1961:42, p. 94.
### TABLE XXIX

THE MONEY SUPPLY AND ITS COMPOSITION, 1939 AND 1945-1960

MILLIONS OF KRONOR

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<th>Year</th>
<th>Demand Deposits</th>
<th>Currency in Circulation</th>
<th>Public's Supply of Means of Payment</th>
<th>Savings Deposits</th>
<th>Time Deposits and Time Deposits</th>
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<td>Total</td>
<td>Total</td>
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Source: Riksbanks årsbok, selected years.
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<th>Other Cash Assets</th>
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<th>Security Portfolio</th>
<th>Total Liquid Assets</th>
<th>Demand Deposits</th>
<th>Total Loans &amp; Advances</th>
<th>Liquidity Ratio</th>
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<td>150</td>
<td>525</td>
<td>675</td>
<td>463</td>
<td>5,558</td>
<td>6,696</td>
<td>2,290</td>
<td>18,524</td>
<td>14,091</td>
</tr>
</tbody>
</table>

Source: Riksbanks årsbok, selected years.
### Table XXXI

**RIKS BANK TRANSACTIONS AND CHANGES IN THE MONEY BASE, 1946-1952**

**MILLIONS OF KRONOR**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold and foreign exchange</td>
<td>-873</td>
<td>-1,185</td>
<td>-119</td>
<td>+585</td>
<td>-36</td>
<td>+1,224</td>
<td>-74</td>
</tr>
<tr>
<td>Govt. authorities deposits</td>
<td>+125</td>
<td>+75</td>
<td>-48</td>
<td>+212</td>
<td>-44</td>
<td>-17</td>
<td>+79</td>
</tr>
<tr>
<td>Security portfolio</td>
<td>+1,110</td>
<td>+1,202</td>
<td>+571</td>
<td>-133</td>
<td>+259</td>
<td>-622</td>
<td>+419</td>
</tr>
<tr>
<td>thereof: Treasury Bills</td>
<td>+760</td>
<td>+245</td>
<td>-15</td>
<td>+482</td>
<td>+542</td>
<td>-706</td>
<td>+319</td>
</tr>
<tr>
<td>Govt. bonds</td>
<td>+342</td>
<td>+616</td>
<td>+210</td>
<td>-513</td>
<td>-114</td>
<td>+75</td>
<td>-29</td>
</tr>
<tr>
<td>Other Swedish securities</td>
<td>+8</td>
<td>+342</td>
<td>+372</td>
<td>-102</td>
<td>-168</td>
<td>+9</td>
<td>+129</td>
</tr>
<tr>
<td>Loans and advances to financial institutions and private sector</td>
<td>+140</td>
<td>-46</td>
<td>+29</td>
<td>-17</td>
<td>+71</td>
<td>+38</td>
<td>+74</td>
</tr>
<tr>
<td>Long-term deposits</td>
<td>+71</td>
<td>+161</td>
<td>-122</td>
<td>-95</td>
<td>-134</td>
<td>+105</td>
<td>+129</td>
</tr>
<tr>
<td>Other transactions</td>
<td>-473</td>
<td>-76</td>
<td>+68</td>
<td>-375</td>
<td>+61</td>
<td>+55</td>
<td>-104</td>
</tr>
<tr>
<td>Total effect</td>
<td>+100</td>
<td>+131</td>
<td>+379</td>
<td>+177</td>
<td>+177</td>
<td>+787</td>
<td>+523</td>
</tr>
<tr>
<td>Currency in circulation</td>
<td>+96</td>
<td>+18</td>
<td>+218</td>
<td>+174</td>
<td>+226</td>
<td>+577</td>
<td>+487</td>
</tr>
<tr>
<td>Commercial bank deposits</td>
<td>+4</td>
<td>+113</td>
<td>+161</td>
<td>+3</td>
<td>-49</td>
<td>+210</td>
<td>+36</td>
</tr>
<tr>
<td>Total change in money base</td>
<td>+100</td>
<td>+131</td>
<td>+379</td>
<td>+177</td>
<td>+177</td>
<td>+787</td>
<td>+523</td>
</tr>
</tbody>
</table>

**Source:** Riksbanks årsbok, selected years.
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold and foreign exchange</td>
<td>+ 317</td>
<td>- 147</td>
<td>- 44</td>
<td>+ 18</td>
<td>- 88</td>
<td>+ 85</td>
<td>- 279</td>
<td>+ 269</td>
</tr>
<tr>
<td>Govt. authorities deposits</td>
<td>+ 86</td>
<td>+ 74</td>
<td>- 32</td>
<td>+ 61</td>
<td>- 13</td>
<td>+ 115</td>
<td>+ 12</td>
<td>+ 28</td>
</tr>
<tr>
<td>Security portfolio</td>
<td>- 1,475</td>
<td>+ 343</td>
<td>+ 870</td>
<td>+ 650</td>
<td>+ 880</td>
<td>- 290</td>
<td>+ 275</td>
<td>+ 1,135</td>
</tr>
<tr>
<td>thereof: Treasury Bills</td>
<td>- 1,475</td>
<td>+ 343</td>
<td>+ 870</td>
<td>+ 650</td>
<td>+ 880</td>
<td>- 290</td>
<td>+ 275</td>
<td>+ 1,135</td>
</tr>
<tr>
<td>Govt. bonds</td>
<td>+ 1,086</td>
<td>+ 137</td>
<td>- 107</td>
<td>- 208</td>
<td>- 201</td>
<td>- 191</td>
<td>+ 88</td>
<td>+ 80</td>
</tr>
<tr>
<td>Other Swedish securities</td>
<td>- 65</td>
<td>+ 1</td>
<td>- 6</td>
<td>- 77</td>
<td>- 18</td>
<td>- 24</td>
<td>- 14</td>
<td>+ 55</td>
</tr>
<tr>
<td>Loans and advances to financial institutions and private sector</td>
<td>+ 36</td>
<td>- 259</td>
<td>- 73</td>
<td>- 4</td>
<td>+ 68</td>
<td>+ 5</td>
<td>+ 147</td>
<td>- 178</td>
</tr>
<tr>
<td>Long-term deposits</td>
<td>- 22</td>
<td>+ 110</td>
<td>- 112</td>
<td>- 309</td>
<td>- 525</td>
<td>+ 684</td>
<td>- 27</td>
<td>- 768</td>
</tr>
<tr>
<td>Other transactions</td>
<td>- 83</td>
<td>- 37</td>
<td>+ 5</td>
<td>- 31</td>
<td>+ 35</td>
<td>- 137</td>
<td>- 20</td>
<td>- 154</td>
</tr>
<tr>
<td>Total effect</td>
<td>- 120</td>
<td>+ 222</td>
<td>+ 500</td>
<td>+ 102</td>
<td>+ 137</td>
<td>+ 247</td>
<td>+ 181</td>
<td>+ 309</td>
</tr>
<tr>
<td>Currency in circulation</td>
<td>+ 258</td>
<td>+ 252</td>
<td>+ 232</td>
<td>+ 279</td>
<td>+ 242</td>
<td>+ 219</td>
<td>+ 207</td>
<td>+ 293</td>
</tr>
<tr>
<td>Commercial bank deposits</td>
<td>- 378</td>
<td>- 30</td>
<td>+ 268</td>
<td>- 177</td>
<td>- 105</td>
<td>+ 28</td>
<td>- 26</td>
<td>+ 16</td>
</tr>
<tr>
<td>Total change in money base</td>
<td>- 120</td>
<td>+ 222</td>
<td>+ 500</td>
<td>+ 102</td>
<td>+ 137</td>
<td>+ 247</td>
<td>+ 181</td>
<td>+ 309</td>
</tr>
</tbody>
</table>

Source: Riksbanks årsbok, selected years.


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E. UNPUBLISHED MATERIALS


F. NEWSPAPERS


I, Reuben G. Miller, was born in Philadelphia, Pennsylvania, March 28, 1930. I received my secondary-school education in the public schools of Philadelphia, and my undergraduate training at Lasalle College, which granted me the Bachelor of Arts degree in 1952. From the Montana State University I received the Master of Arts degree in 1956. While in residence there, during the academic year 1952/53, I served as an Assistant in the Department of Economics. The University of Stockholm, Stockholm, Sweden, granted me a Diploma in 1954. While in residence there, I held a fellowship from the American-Scandinavian Foundation. In September, 1954, I was admitted to the Graduate School and appointed Assistant in the Economics Department at The Ohio State University. During the academic years 1955/56 and 1956/57 I held an appointment as an Assistant Instructor at The Ohio State University. In September, 1957, I accepted a position as Acting Assistant Professor at Oberlin College. During the academic year 1958/59 I attended the University of Stockholm under the sponsorship of the Social Science Research Council who had granted me a Research Training Fellowship. In September, 1959, I was appointed Instructor in Economics at the University of Massachusetts, Amherst. During the autumn semester of the academic year 1960/61 I held an appointment as Visiting Lecturer at Connecticut College. In August, 1965, I
received a grant from the United States Government to serve as Fulbright-Hayes Lecturer in Economics at the National Taiwan University, Taipei, Taiwan, Republic of China.

I currently hold an appointment as Assistant Professor in Economics at the University of Massachusetts, Boston, and as Visiting Lecturer at Smith College.