Monetary Policy in Postwar Years

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AFTER A DECADE or so of comparative disuse, a number of countries have, in recent years, turned increasingly to an active use of monetary policy. There is nothing monotheistic about this revival. It is generally appreciated that monetary techniques can be fully effective only in combination with proper budgetary and other policies.

Monetary policy itself is being revived in a form somewhat different from the one familiar in prewar days. In addition to the simple classical techniques of discount rate changes and open market operations, central banks have added a variety of new and complex weapons to their armory. The underlying economic situation has changed in many countries, and now that the usefulness of monetary policy in general is widely recognized, the chief point of interest about its recent revival is the manner in which it is being adapted to the present needs of different countries. Granted the need for its active use, the question that becomes important is the choice of the proper techniques for the purpose.

In this analysis of monetary policy during the years since World War II, attention will first be directed to the factors that led to the comparative neglect of monetary policy during the forties and to the forces responsible for its revival in recent years. Then a brief general survey of the different monetary techniques and their comparative usefulness will be given.[1]

In the later sections of the paper, the monetary techniques employed in the postwar years by six countries—the United States, the United Kingdom, Belgium, France, Germany, and the Netherlands—will be surveyed. A rather broad span of years is chosen so as to provide a proper perspective for recent developments. The emphasis throughout is on the techniques used, and on the different ways in which different countries have tackled similar problems. Needless to say, circumstances differ sufficiently in these six countries to warrant development along different lines; and attention is given to these differences.

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The Changing Emphasis on Monetary Policy

The depressed condition of the thirties had established low interest rates everywhere; and during World War II, rates were reduced still further in most countries. The gigantic task of war finance had made direct controls and heavy taxes absolutely necessary, and it was felt that, under these circumstances, little more could be gained by monetary incentives or restraints. But the de-emphasis on monetary policy persisted for a few years even after the end of the war. Most countries had inherited abundant surplus money from the war. If monetary policy is successful mainly in checking the growth of new money, it cannot be of much use so long as people have large amounts of surplus old money. Concern about the cost of the public debt, a desire to maintain low housing costs, and concern about a possible postwar recession added to the bias toward cheap money. Even when the dreaded depression failed to appear, it was felt that the need for rapid recovery after the destruction and dislocation caused by the war required easy money conditions.

In addition to these considerations, there were certain ideological and theoretical factors that led to the abeyance of monetary policy. "The euthanasia of the rentier" by keeping interest rates low had come to be a popular theme. At the same time, it was thought unjust to raise interest rates on government securities and thus inflict capital losses on people who had been persuaded to buy government bonds by promises of future rewards. On the theoretical plane, the ideas of the thirties had cast doubts on the ability of interest rate changes to influence significantly either savings or investment. Even insofar as monetary policy affects investment, it was felt that this influence is general in character, i.e., not selective enough. Monetary policy can bring about some contraction or expansion of effective demand in general. But most countries had emerged from the war with structural distortions which required expansion in certain directions even when contraction in other directions was called for. In shaping demand in particular sectors, monetary policy was not deemed discriminating enough.

The renewed emphasis on monetary policy in recent years is partly the result of a change in circumstances; but it is also the product of a reassessment of the importance of monetary policy and of the adaptation of monetary policy itself to different needs and circumstances. For a variety of reasons, the wartime latent inflation has disappeared in most countries; and experience has shown that monetary policy itself has a part to play in removing or absorbing surplus money. This is even truer when latent inflation takes the form of excessive liquid assets in the community. Moreover, the fears of a recession have proved largely

unreal, and most countries have crossed the hump of economic recovery. Government budgets have swollen in response to the rise in prices, with the result that the cost of the public debt does not loom so large in the total fiscal picture as it did a few years ago. Also, after a point, all economic policies begin to show diminishing returns, so that policies hitherto neglected become relatively more useful. This had happened to monetary policy in relation to fiscal policy or direct controls in several countries, and the proper blend of economic policy has required a little more use of monetary policy. The ideological fervor for egalitarianism has also abated from its postwar peak.

On the theoretical side, it is now recognized that, whatever its limitations in a period of depressed demand, monetary policy can be quite effective in curtailing demand. It does not consist of merely varying interest rates or the cost of credit; it can directly influence the supply or availability of credit. Changes in interest rates may be required as adjuncts to other types of monetary control even if they are not of sufficient importance in themselves. Nor does monetary policy have to resign itself to measures of a generally restrictive character. The availability and terms of credit can be regulated selectively. In this respect, World War II has actually added a new dimension to monetary policy. In the general environment of direct controls, monetary policy itself became imbued with direct and selective overtones; and in the postwar years, this type of technique has been further refined.

The final impetus came with the Korean war, although even before then monetary policy was by no means totally in abeyance. The revival of inflationary pressures after the outbreak of that war, and the prospect of an end to American assistance, made it urgent for most Western European countries to curtail demand at home. As long as economic recovery at home was rapid and large-scale U. S. assistance was forthcoming, it was easy to overlook the direct connection between external imbalance and the internal supply of money, but this connection was underlined by the inflationary boom after the war began.

Techniques of Monetary Policy

It is not easy to delimit precisely the area in which monetary policy operates. Broadly speaking, the task of monetary policy is to regulate the amount of money or means of payment offered for goods and services. Leaving aside the use of surplus money and a more active use of existing money (i.e., an increase in the velocity of circulation of money), the growth of effective demand requires additional means of payment. By controlling the supply of new money, monetary policy can check the

growth of effective demand.[2] The growth of such demand can consist of two elements: growth in prices and growth in production. The supreme test of monetary policy lies in its ability to control the supply of money in such a way that the growth in prices is checked without retarding the growth in production.

In technically advanced societies, bank credit forms a large part of the supply of money. The primary task of monetary policy, therefore, is to control the volume of bank credit. Indeed, in a narrow sense, this is the entire task of monetary policy. But apart from obtaining credit from the banks, a society can increase, in a variety of ways, the means of payment at its disposal. At any given time, business and individuals hold certain assets which can be converted into money, e.g., time deposits, savings bank deposits, short-term or long-term government securities, etc. The distribution by the people of their assets between money and other assets depends, among other things, on the current and expected rate of interest on the other assets, and on the current and expected prices of the securities, goods, and services bought against money. If monetary policy includes the determination of the rate of interest on various more or less liquid assets, it clearly shades off into debt management policy. Apart from this, the supply of money can be increased through the operations of the government budget and the foreign trade transactions of the country. Monetary authorities are not necessarily passive in relation to the government or the agencies responsible for the management of foreign trade. But the area of monetary policy here impinges on fiscal and foreign exchange policy. In the remarks that follow on the techniques of monetary policy, attention will be centered on the control over commercial bank credit. However, the following facets of monetary policy will also be briefly examined: (1) control over idle surplus money; (2) control over a more active use of money; (3) control over a shift from near-money assets to money; (4) control over the creation of money by the government; and (5) control over the creation of money through the foreign sector.

Control over bank credit

The choice of proper techniques for preventing an undue expansion of bank credit depends to a large extent on the general economic conditions in a country, the nature of the banking system, and the traditions that have grown over time. The orthodox weapon is the discount rate of the central bank. Raising the discount rate, however, may not significantly curtail bank credit, for various reasons: The demand for credit

[2] Although monetary policy can influence the process of both an increase and a decrease in effective demand, the emphasis here is on the former because of its greater relevance today.

may be insensitive to its cost, in view of fears about rising prices or shortages; the cost of credit to private borrowers may not increase, if the banks are in a liquid position or are able to secure liquid funds without using the rediscount facilities of the central bank, e.g., by disposing of their holdings of government securities which earn a lower rate than the discount rate. In connection with the elasticity of demand for bank credit, however, it should be remembered that in some countries banks grant medium- and long-term as well as short-term credit, and that in such countries the cost of credit may have a greater restraining significance than in other countries. The expectations about rising prices are in part determined by the confidence of the public in the ability of the authorities to pursue a vigorous monetary policy. And, if the limitation of discount rate policy arises from the possibility of the banks' attaining liquidity by using some of their other assets, it can be offset to some extent by allowing other rates of interest (say, on short-term government securities) to rise.

Even when the demand for credit is not responsive to its cost, there may be some advantage in raising the discount rate. In most countries this would, traditionally, be followed by raising the cost of bank credit irrespective of the need to borrow from the central bank.[3] The higher yield on their loans would enable banks to offer a higher rate on time deposits, and this would have some effect, however small, on the rate at which such near-money assets were converted into money by the public. To the extent that the rationale of a tighter policy toward bank credit lies in the balance of payments position, the favorable effect of a rise in money market rates on capital movements must also be taken into consideration. In any event, the limited effectiveness of higher discount rates does not invalidate their use unless they have some undesired effects. The only such undesired effect that is likely to arise is that, if the interest rate on short-term government securities has to be raised significantly in order to make a higher discount rate effective, it may not be worth the additional cost to the treasury.

Apart from raising directly the cost of credit, monetary policy can curtail the availability of bank credit. The classical technique for this purpose is the open market operations of the central bank. The essence of these operations (in the context of inflation) is to transfer some bank deposits to the central bank by the sale of government securities to banks or the general public. The impact on the liquidity of banks is voluntary or indirect in the sense that it depends on the willingness of the public or the banks to exchange liquid funds for government secu-

[3] If the banks were trying to maximize profits, they would raise the rates on their loans in any case if the demand for bank loans were inelastic. But, in practice, the rates of banks are sluggish and in some countries they are related, by custom, to the discount rate.

rities. But if the interest on government securities has to rise considerably to invoke a sufficient response to such policy, this technique may not be desirable. The central bank may be able to reduce the liquidity of banks without depressing the securities market too much under certain favorable circumstances, e.g., if there is an inflow of foreign capital or a temporary windfall to the community from better terms of trade. In some countries, such as Western Germany, the scope for open market operations is limited by the absence of a sizable amount of government securities in the portfolio of the central bank. Theoretically, this difficulty can be overcome by creating new securities for the purpose; but in practice, when there is a general shortage of capital and the demand for credit is brisk, it is doubtful that this policy would succeed in the absence of some official pressure on the banks to absorb government securities.

The availability of credit can be directly influenced by compulsory reserve requirements, i.e., by transferring bank deposits to the central bank directly and without any cost to the government. This technique requires a fine differentiation in the reserves required for different banks if the banking system lacks uniformity, as is likely in any large country with a decentralized banking structure. Another limitation of this technique arises from the need to take into account the profit position of banks; nonearning assets cannot be imposed ruthlessly on banks, even if they are in a position to raise the cost of their ordinary loans. The chief merit of reserve requirements lies in their comparative simplicity and in the degree of decentralization they imply in deciding which types of credit will be curtailed.

Raising reserve requirements within practicable limits can, however, be somewhat ineffective under certain circumstances. If the banks hold large amounts of government securities, they can monetize them and thus create excess reserves for themselves. In most countries, banks have a traditional regard for distributing their assets in a certain way; they will not allow their holdings of short-term or long-term government securities to fall below a certain proportion of their deposits. In such cases, moderate changes in reserve requirements may be sufficient to prevent any building up of excess reserves through monetization of the public debt. Where such traditions do not exist, or where the actual reserves in government securities are above the traditional level, some additional steps are necessary.

If the banks are trying to circumvent reserve requirements by disposing of their excess holdings of short-term government securities, a higher rate on such securities may be offered as an incentive to hold them. If any reasonable incentive proves insufficient in view of the greater earnings on private loans, some degree of compulsion may be

called for. This may take the form of compulsory reserve requirements expressed in terms of such securities, the funding of such securities into long-term bonds, or the compulsory renewal of old short-term securities as they mature. Whether this result is obtained by legislation or the moral pressure of the monetary authorities would depend, of course, on the country's traditions.

If the banks are trying to create extra reserves by selling off their long-term government securities, the task of the monetary authorities is simpler. Unless the central bank is willing to support the bond market, bond prices must fall if the banks try to sell bonds to nonbank investors, and the banks must suffer a capital loss. This loss would greatly offset the desirability of shifting from government to private loans even if the interest on the latter is significantly higher; the higher interest would be realized on a lower amount, and for many years it would merely be reimbursement for the capital loss. The banks cannot be sure that, during those years, demand for private loans would be sustained, and that they would be able to buy back the bonds in future at the same low price they had realized on them. Even if the banks are prepared to take a capital loss, or if this loss is not great in view of the willingness of nonbank investors to absorb government bonds, the banks would be expanding private loans without any expansion of the money supply, since the purchase of securities from banks by nonbank investors would imply a fall in bank deposits. Thus, if the banks, by trying to sell government bonds, seek to circumvent the attempt to control the availability of bank credit, the central bank need only step out of the market and let bond prices fall. If such a course is deemed undesirable, recourse can be had to still higher reserve requirements or compulsory reserves in government bonds, or restrictions on the negotiability of bonds held by banks, or some direct controls discussed below.

Banks can circumvent the restrictive influence of higher reserve requirements even if they do not have surplus reserves of government securities to dispose of. If the central bank is prepared to offer its rediscount facilities, the banks can increase their ability to lend merely by having greater recourse to the central bank, provided they do not reject such recourse as a matter of tradition. Where conventions about keeping borrowing from the central bank within a certain ratio of banks' total loans are not strong, and as long as required reserves are only a portion of total liabilities, this is clearly possible. In such circumstances, the central bank would be constrained to raise the discount rate to prohibitive heights, or to tighten its rediscount facilities by imposing severe tests regarding the type of paper it would rediscount, or simply by establishing ceilings to the total rediscounts offered to each bank. The central bank can control the availability of bank credit in a direct manner,

by placing a limit on the total credit any bank can give, or on the total credit any customer can obtain. This type of control involves discretion and administrative authority on the part of the central bank; and the degree of intervention implied in the affairs of private banks may not be desirable or politically acceptable everywhere. If the cost structure in the economy were rising, such a policy would call for frequent revisions of quotas. Also, one of the merits of monetary policy in general is its simplicity and freedom from direct interference from authorities. There may be something to be said for direct monetary controls in contrast to direct allocation of materials or direct controls over prices, but both are open to common objections, up to a point.

The techniques of monetary policy discussed so far influence the cost or availability of credit in general. But if, as was suggested earlier, the conditions in an economy are such that expansion in some directions is desirable even as credit in some fields needs to be curtailed, some degree of selectiveness must be introduced in monetary control. To put it differently, if the supreme test of monetary policy lies in its ability to prevent the growth of prices without retarding the growth in production, it may be necessary to control in different ways the supply of money to different sectors of the economy.

In theory, some of the techniques of monetary policy discussed above can be applied in a selective manner. But this is not true of all. Thus, the discount rate can be different for different bills. If the desire is to discourage imports, or imports from certain areas, a penalty discount rate for import bills may be fixed. This can be done indirectly by prescribing different criteria for rediscounts for different bills. How significant such measures are likely to be is another matter; the banks can always rediscount eligible loans in order to enable them to increase other loans, and slight differences in the cost of financing imports may not be very effective. Again, if the availability of credit is controlled by direct means, such as rediscount ceilings or ceilings to total loans by a bank or total loans to a customer, selectiveness can be introduced by making some exceptions. The central bank may even require prior approval for all bank loans or all bank loans in excess of certain amounts. But at this stage, the degree of direct interference and centralization of bureaucratic decisions is increased. Selection presupposes a strait jacket of direct intervention. On the other hand, if simple and indirect techniques, like open market operations or reserve requirements supplemented by necessary changes in government rates of interest, are used, it is not easy to see how these can be used selectively. The only degree of selectiveness possible in such cases is that induced by moral suasion, exhortations, or appeals to the banks' sense of social responsibility. When the banks find that the demand for loans is greater than what they can supply, the

priorities that they would set up may be influenced by the wishes of the central bank. But the banks may have their own private loyalties, and may even insist on their pound of flesh by simply raising the charges on their loans and letting that do the rationing—at least to some extent. If this happens, the government may have to fix legislatively the cost of credit to certain essential links in the economy. Perhaps the best course is to keep deliberate selectiveness to a minimum, and to correct the generally restrictive environment at chosen points by nonmonetary devices—such as subsidies, etc.—or by direct assistance from the central bank. Even the simplest type of monetary technique does not restrict all expenditures in the same proportion. Higher interest rates would curtail some investments more than others, and the banks would ration credit to customers in the light of the soundness of the purpose for which it is sought. If the criteria of the market are not deemed desirable, the instruments of intervention need not be only monetary ones.

There is one type of selective credit control which has a somewhat different rationale from that implied above. If fluctuations in effective demand are centered around certain sensitive areas, and if these areas are particularly susceptible to changes in credit conditions, a decisive influence on aggregate demand may be achieved by controlling credit conditions in a few selected fields, which would minimize the need for introducing changes in credit in general. This is partly the justification for control over housing and durable consumers' goods credit in the United States. In this case a few types of credit may be intensively controlled by prescribing the duration, amount, and cost of such credit, not because such credit is particularly nefarious in itself but because it occupies a key position in the economy. Strictly speaking, this type of selective control is not aimed at bank credit only; it applies to a specific type of credit from all sources—from retailers, banks, mortgage houses, etc. It creates, therefore, a more onerous problem of supervision.

While the foregoing survey of the techniques available for controlling bank credit is by no means exhaustive, an extensive study of all the possible refinements is not necessary in an introductory survey. Therefore, consideration may now be given, briefly, to other aspects of monetary policy.

Latent inflation and velocity of circulation

Control over the supply of new money would lose part of its meaning if the public had accumulated surplus balances of money. Such latent inflation can be eliminated in a variety of ways: by allowing prices to rise, by developing large import surpluses, or by budget surpluses. Alternatively, part of the excess money can be declared worthless, or it

can be rendered inactive by *force majeure* or by offering some incentives until production grows and catches up with the available supply of money. An alternative to canceling part of the money supply is to withdraw money from circulation temporarily by compulsory blocking of loans, or by floating loans to which the public can subscribe voluntarily. The second alternative corresponds to open market operations and has the same limitations.[4] The success of a policy of temporary blocking depends on the ability of the government and the central bank to release old money only as production revives, and to keep the supply of new money to a minimum. Otherwise, the temporary withdrawal of money would merely conceal the real process by which latent inflation is worked off, i.e., by higher prices or import surpluses.

Latent inflation can also take the form of excess liquid assets rather than of surplus money. Insofar as these liquid assets are held by the banking system, they would present difficulties in controlling bank credit, as pointed out above. The liquid assets held by the general public can be dealt with by import surpluses or capital levies, or by allowing prices to rise. Or the public may be induced to hold their liquid assets until there is an increase in real output. The only way that the monetary authorities can control these assets, short of a compulsory scaling down of obligations or a restricting of the negotiability of the assets, is to offer higher rates of interest. Thus, time deposits and savings deposits may be absorbed into long-term government debt. Also, short-term government securities may be funded into long-term debt. The rationale of trying to convert the near-money assets into funded debt is that it reduces the over-all liquidity of these assets. If bond rates are allowed to fluctuate, the bonds cannot be liquidated without a capital loss, and this may be a deterrent to any shift from liquid assets to money. But people have to walk into this trap voluntarily, and it may be that no practicable incentive in the form of higher bond yields would induce them to do so. Ultimately, the question is how far interest rates can influence the public's propensity to spend. Nor is it always possible to brandish the hatchet of capital losses vigorously; the psychology of once-bit-twice-shy would haunt governments which do not all expect to die in the short run. Indeed, many governments have tied their hands in this respect by offering certain amounts of special bonds guaranteed against capital loss to individuals.

Even when the amount of money and of other liquid assets is restored to its "normal" relationship with national income, and even if the supply of new money is controlled as far as practicable, effective demand

[4] In fact, it is more difficult politically for a government to put the proceeds of new loans in cold storage than it is for a central bank to keep idle the funds it raises by open market operations.

can grow if the public starts turning over money more rapidly, or draws on near-money assets. Monetary policy can do little directly to check the increase in the velocity of circulation of money. However, such an increase is likely to take place when confidence in the future value of money is at a low ebb, and is, in fact, often associated with a growth in money supply permitted by weak monetary policy. A vigorous monetary policy may, therefore, keep to a minimum the danger of an activation of the use of money. The problem of countering a shift from near-money assets to money is the same in kind, whether such assets are generally excessive or are temporarily regarded as rather large.

Creation of money through the budget and external trade

New money would be created if the deficit in the government budget were financed by borrowing from the central bank, and to a lesser extent if it were financed by borrowing from other banks. By use of the various devices discussed above, monetary policy can prevent the secondary inflationary impact[5] of such bank-financed deficits. But the task of preventing the primary inflationary impact of such deficits lies outside the field of monetary policy. The central bank may be able to keep its credit to the government within narrow limits, but in the ultimate analysis it cannot exercise sovereign influence over the government budget. Various legal requirements concerning the composition of the central bank's assets may assist in sustaining the fiscal rectitude of the government. But beyond this, the ability of the central bank to limit its credit to the government (or to semigovernment agencies) is a matter of tradition, personalities, and the sense of responsibility on the part of the ultimate repositories of power in the land.

Similar considerations apply to the creation of money through the foreign sector. Any increase in the money supply of a country that has a surplus on current account will depend on how this surplus is financed. If it is financed by private credit extended to foreigners, there need be no creation of money unless the credit comes from the expansion of bank loans rather than from the current savings of the public; but at any rate, there would be a reduction in the liquidity of the banks corresponding to the increase in the money supply. If the export surplus is financed by government grants or credits, or by the accumulation of foreign exchange by the government, the problem becomes essentially a budgetary one. The government may finance the external surplus from normal budgetary sources, i.e., by raising tax revenue or by borrowing the public's genuine savings. This may happen if the government is giving

[5] That is, any expansion of bank credit arising from the improvement in their liquidity.

away the export surplus to foreigners (free grants), or if it is giving credits to foreign governments. It may happen even if the government is accumulating foreign exchange corresponding to the export surplus. But in any event, there would be no net creation of money. However, if the central bank (or the banking system) is obliged to finance the export surplus, there would be a net creation of money. Once again the central bank can counteract the secondary inflationary impact of such an export surplus by normal monetary technique; but the primary inflationary impact can be curtailed only with nonmonetary policies, i.e., by eliminating the export surplus or by finding local currency for it by budgetary devices. Thus, the task here of controlling the amount of money is one of fiscal and foreign exchange policies rather than monetary policy. The central bank can refuse to provide local currency beyond a limit against foreign exchange or against foreign credit balances only by virtue of traditions, etc., in the society. However, in only a few countries are central banks embarrassed in the exercise of their anti-inflationary functions by export surpluses. The more real threat to monetary policy comes from reckless fiscal policies.

MONETARY POLICY IN THE UNITED STATES

U. S. monetary policy since the end of World War II has been conditioned largely by the enormous growth of the federal debt and money supply during the war. In the war years, both the money supply and total liquid assets held by the public increased faster than gross national product (Table 1), and government securities came to occupy a more important position in the total assets of the commercial banks.[6]

While these structural changes tended to inhibit the use of monetary policy in the early postwar years, U. S. monetary policy in the years since the war has, by no means, been one of passive inaction. Some steps were taken in the early part of the period to restore flexibility to short-term interest rates; and both discount rate changes and changes in reserve requirements were used judiciously in 1948. Some experience was also gained during 1949 in the use of monetary policy for counteracting a business recession. In one respect, the war actually added to the weapons of monetary control; the technique of selective credit control developed primarily at that time has been used again in recent years. The removal of price controls soon after the war, the steady growth of production, and the sizable budget surpluses for most of the postwar years have helped to wipe out latent inflation and to correct

[6] At the end of 1945, holdings of U.S. Government securities by the commercial banks amounted to nearly 60 per cent of their deposits, against approximately 30 per cent at the end of 1941.

TABLE 1. MONEY SUPPLY, LIQUID ASSETS, GROSS NATIONAL PRODUCT, AND WHOLESALE PRICES IN THE UNITED STATES

Year	Money Supply[1]	Liquid Assets[2]	Gross National Product[3]	Wholesale Prices[4]	Liquidity Ratios[5] (1939 = 100)	
	←(billion dollars)→			(1939 = 100)	Money supply	Liquid assets
1939	36.2	69.0	91.3	100	100	100
1946	110.0	231.5	211.1	156	135	144
1947	113.6	237.2	233.3	192	129	133
1948	111.6	238.8	259.0	208	117	122
1949	111.2	243.0	257.3	198	116	123
1950	117.7	250.2	282.6	206	108	115
1951	124.5	260.5	329.2	229	99	103

[1] End of year data. Source: International Monetary Fund, *International Financial Statistics*.

[2] Includes currency, bank deposits, savings and loan shares, and U. S. Government securities held by individuals and businesses. Banks, insurance companies, savings and loan associations, nonprofit associations, foreigners, and governmental bodies and agencies are not included. End of year data. Source: Board of Governors of Federal Reserve System, *Federal Reserve Bulletin*, July 1952, p. 757.

[3] Sources: U. S. Department of Commerce, *National Income and Product of the United States, 1929–1950* (Washington, 1951), p. 150, and *Survey of Current Business*.

[4] Based on data from *International Financial Statistics*.

[5] For calculating the liquidity ratios, an average of the money supply (or liquid assets) at the end of the year and at the end of the previous year is used.

some of the structural distortions injected by the war into the financial system. The resurgence of inflationary pressures after the outbreak of the Korean war gave additional impetus to the process of revitalizing monetary policy in the United States. Since the beginning of that war, the policy of supporting the government bond market has also been modified.

Interest rate changes

During World War II, the yield on Treasury bills came to be stabilized at ⅜ per cent, and the yield on government bonds was stabilized at a little under 2½ per cent. The discount rate of the Federal Reserve Banks remained nominally unchanged at 1 per cent throughout the war; but a preferential rate of ½ per cent was introduced for discounting government securities due or callable within one year, and it was this rate which was significant in practice. The first step in the direction of flexible interest rates was taken in 1946 when this preferential discount rate was discontinued. This step, however, had only a nominal significance insofar as banks were in a position to create reserves for themselves by selling securities at or above par to the Federal Reserve Banks instead of obtaining discounts against such securities.

In July 1947, the Federal Reserve Banks discontinued their standing ⅜ per cent buying offer on Treasury bills. The rates on new issues of Treasury bills and Treasury certificates were naturally increased, and additional incentive was given to banks to hold on to their short-term government investments. The spread between short-term and long-term interest rates was considerably narrowed (Table 2), and the rise in short-term government rates was reflected in money market rates.

TABLE 2. INTEREST RATES IN THE UNITED STATES[1]

(In per cent)

Date	Government Bond Yield		Treasury Bill Rate	Computed Rate on Interest-Bearing Federal Securities[2]	Call Money Rate	Bank Rates on Business Loans[3]	Discount Rate[4]
	Long-term	Medium-term					
1939.....	2.41	0.59	.02	2.60	1.00	2.1	1.00
1945.....	2.37	1.17	.38	1.94	1.00	2.2	1.00
1946.....	2.19	1.11	.38	2.00	1.16	2.1	1.00
1947.....	2.25	1.26	.60	2.11	1.38	2.1	1.00
1948.....	2.44	1.52	1.04	2.18	1.55	2.5	1.00
							1.25
							1.50
1949.....	2.31	1.35	1.10	2.24	1.62	2.7	1.50
1950.....	2.32	1.45	1.22	2.20	1.62	2.7	1.50
							1.75
1951.....	2.57	1.94	1.55	2.27	2.14	3.1	1.75
1952 Sep..	2.71	2.30	1.79	2.35	2.63	3.49	1.75

[1] Averages of monthly data. Figures are from International Monetary Fund, *International Financial Statistics*, unless otherwise noted.

[2] Data are for end of fiscal year or end of September 1952. Source: U.S. Treasury Department, *Treasury Bulletin*.

[3] Annual averages of rates charged on short-term loans to businesses by banks in selected cities. The 1952 figure is the average for the third quarter. Source: Board of Governors of Federal Reserve System, *Federal Reserve Bulletin*.

[4] For dates of change, see source.

The cheap money policy was adhered to in one respect, however, until after the outbreak of hostilities in Korea. The government bond market was supported at or above par, and the bond rate was not allowed to rise above 2½ per cent until March 1951. In actual practice, bond prices fluctuated above par for most of the time from December 1945 to June 1950, and it would be a mistake to think that the Federal Reserve Banks' open market operations in support of the bond market led to any steady monetization of the public debt. Except for two periods (1947–48 and the first months of the Korean war), the Federal Reserve Banks were, in fact, able to reduce their portfolio of government securities.

During the first two postwar years, bond prices remained generally above par, and the fear of monetization of bonds in an effort to prevent

a fall in their prices proved unreal; in fact, some steps were taken to prevent prices from rising too much.[7] But in the autumn of 1947, bond prices began to fall, principally because of large-scale liquidation by industrial investors which found more attractive investment opportunities in corporate securities and real estate mortgages. By the end of the year, the Federal Reserve Banks had to intervene with firm buying bids, to prevent prices from falling below par. As a result of this policy, the Banks' holdings of government bonds rose from $1.5 billion to $11 billion in one year (Table 3);[8] but since they were able to dispose of large

TABLE 3. U.S. GOVERNMENT SECURITIES HELD BY FEDERAL RESERVE BANKS

(In millions of U.S. dollars)

Date or Period	Bonds	Bills, Certificates, and Notes	Total
December 30, 1939	1,351	1,133	2,484
December 31, 1945	947	23,315	24,262
December 31, 1946	753	22,597	23,350
December 31, 1947	2,853	19,706	22,559
Daily average for December 1947	1,507	20,398	21,905
December 31, 1948	10,977	12,356	23,333
Daily average for December 1948	11,085	11,917	23,002
December 31, 1949	7,218	11,667	18,885
June 30, 1950	5,618	12,713	18,331
March 28, 1951	6,032	16,574	22,606
March 26, 1952	5,636	16,892	22,528
September 24, 1952	5,236	18,479	23,715

Source: Board of Governors of Federal Reserve System, *Federal Reserve Bulletin.*

amounts of short-term securities, the net increase in their government securities portfolio was only approximately $1 billion. This situation, together with the current inflow of gold, added to the liquid resources of banks, and a variety of monetary measures in other fields had to be undertaken to neutralize the effects of the bond support program. But even during this year, some steps were taken in the direction of higher interest rates; the discount rate was raised in two stages from 1 to 1½ per cent, the first increase in more than a decade.

Toward the end of 1948 and in early 1949, bond prices began to recover and the Federal Reserve Banks were able to sell off part of the bonds acquired in the earlier months. But in view of the current business recession, this resistance to the rise in bond prices was soon felt to be inap-

[7] In the two years, the Treasury sold some bonds from government investment accounts and offered a new long-term nonmarketable bond to institutional investors at 2½ per cent.

[8] Part of this increase, however, was in response to the higher reserve requirements introduced in 1948.

propriate, and in July 1949 the bond rates were allowed to decline freely. Sales of bonds by the Banks were resumed, however, in the first half of 1950, net sales during 1949 and the first half of 1950 amounting to more than $5 billion. Once again, the open market operations tended to prevent the bond rate from falling, and the net impact of the policy was the reverse of the monetization of government bonds.

The resurgence of inflationary pressures in the wake of the Korean war brought the problem of debt monetization to the fore again. To discourage bank lending, the discount rate was raised from 1½ to 1¾ per cent on August 25, 1950. Open market operations were conducted so as to permit some rise in government security rates during the early months of the war. Nevertheless, the Federal Reserve Banks' holdings of government securities increased by approximately $4.3 billion during the nine months ended March 1951. Although the expansionary effect of this purchase of securities was to a large extent offset by a concurrent outflow of gold and an increase in reserve requirements, there was a net increase of $1.1 billion in the reserves available for expansion in the banking system. It was under these circumstances that the accord between the Treasury and the Board of Governors of the Federal Reserve System took place in March 1951, heralding a further step in the direction of higher and more flexible interest rates, including those on government bonds.

The new line of policy envisaged in this accord had three main features. First, in order to induce long-term investors to retain their holdings of government bonds, the Treasury should offer to exchange some of them for a new issue with higher yield. A nonmarketable 2¾ per cent, 29-year bond, redeemable at the holder's option before maturity into a 5-year marketable Treasury note was offered in exchange for the two longest issues of the 2½ per cent restricted bonds (maturing in 1972), and nearly two thirds of such bonds were actually converted into the new issue. Second, the open market operations of the Federal Reserve Banks should be on a limited scale, and an orderly fall in bond prices should be permitted. Third, the Federal Reserve Banks should reduce or discontinue the purchase of short-term securities so as to allow short-term rates to move up with the discount rate, thus inducing banks to borrow from the Federal Reserve Banks for their reserve requirements. The Treasury should naturally undertake its refunding operations at suitably higher rates. It was also agreed that the discount rate should remain unchanged at 1¾ per cent during 1951, except for unforeseen circumstances.

The impact of the policy of permitting an orderly rise in interest rates on the monetization of public debt seems to have been favorable. During the year ended March 1952, the Federal Reserve Banks' holdings of

government securities declined a little, but then increased by nearly $1.2 billion during April-September 1952.

Reserve requirements

Variations in bank reserve requirements, with a view to controlling the availability of bank credit, are a part of U. S. monetary policy, and frequent use has been made of this technique in postwar years. The general framework of legislation within which this power is exercised by the Board of Governors of the Federal Reserve System has remained unchanged since the Banking Act of 1935, with the exception of a brief period in 1948–49. Reserve requirements apply only to member banks which are obliged to keep a certain proportion of their deposits with Federal Reserve Banks. The required reserves are different for time deposits and demand deposits; and for the latter, a further distinction is drawn between three groups of banks—central reserve city banks, reserve city banks, and country banks. The Board of Governors can vary the requirements uniformly for any or each group of banks within limits set by the Banking Act of 1935.[9]

At the end of World War II, reserve requirements were at their legal maximum except for banks in the central reserve cities of New York and Chicago. When, in 1948, the policy of supporting the government bond market threatened to increase uncomfortably the reserves of the banking system, some action had to be taken to impound these additional reserves so as to prevent a multiple expansion of bank credit. Therefore, requirements for central reserve city banks were raised to the legal maximum, and additional authority was obtained by the Board of Governors in August 1948, on a temporary basis, to raise reserve requirements above the maximum previously permissible. The banks, however, could easily meet these requirements simply by unloading additional securities on the market rather than by contracting private loans. But since some sale of securities had been made by the banks to the Federal Reserve Banks before the higher reserve requirements were introduced, the measure put a check to the possible expansion of bank credit, given the policy of supporting the bond market. It is noteworthy that the Board of Governors tried in vain, at the time, to extend its powers over reserve requirements in two directions: it suggested repeatedly that nonmember

[9] Present legal minimum and maximum requirements, respectively, on net demand deposits are as follows: central reserve cities, 13 and 26 per cent; reserve cities, 10 and 20 per cent; country, 7 and 14 per cent. On time deposits at all member banks, the minimum and maximum requirements are 3 and 6 per cent, respectively. Nonmember banks are subject to reserve requirements prescribed by individual states.

banks also should be subject to the reserve requirements and that, in addition to deposits kept at Federal Reserve Banks, member banks should be required to hold prescribed amounts of government securities when occasion should demand it.

In May 1949, reserve requirements were reduced, and they fell further in June when the temporary powers granted in 1948 lapsed. Because of the business recession, they were reduced still further in September 1949. When, after the beginning of the Korean war, reserves of the banking system began to increase alarmingly, as a result of the monetization of the public debt, reserve requirements for all banks outside New York City and Chicago were raised in January–February 1951 to the legal maximum. Requirements for banks in New York and Chicago, while slightly below the maximum, were made higher than those prevailing during most of World War II. This step increased by nearly $2 billion the amount of reserves that member banks must carry with Federal Reserve Banks, and it thereby reduced potential bank credit expansion by about $12 billion.

Selective credit controls

Unlike interest rate changes, open market operations, and reserve requirements, which affect the cost and availability of bank credit in general, selective credit controls seek to influence particular types of credit irrespective of their source. This technique was employed to a minor extent even before World War II. The Securities Exchange Act of 1934 authorized the Board of Governors of the Federal Reserve System to prescribe the maximum amount of credit that can be granted by banks or securities brokers and dealers for the purpose of purchasing or carrying securities registered on national stock exchanges. Such margin requirements were primarily intended to control speculative purchases of securities with the aid of borrowed money, and did not apply, therefore, to ordinary loans for commercial purposes even though such loans may be secured by securities. Extensive use has been made of this technique, both during and since World War II.[10] Prior to the war, the margin requirements were 40 per cent, but they were raised by successive stages to 100 per cent by January 1946. These requirements were reduced to 75 per cent in 1947 and 50 per cent in 1949. In January 1951, the margin requirements were raised once again to 75 per cent as part of the general post-Korea anti-inflationary drive, and they remained unchanged (until February 1953 when they were lowered to 50 per cent) despite the tendency to relax and remove various other types of selective controls.

[10] The administration of margin requirements by the Board of Governors is done under Regulation T applying to brokers and Regulation U applying to banks.

Control over consumer credit was introduced for the first time in 1941 by the exercise of the President's emergency powers. The control was administered under Regulation W of the Board of Governors.

Consumer credit forms an important part of total credit in the U. S. economy, and nearly two thirds of it takes the form of installment credit on durable consumers' goods, like automobiles, refrigerators, etc. During the war, installment credit, charge accounts, and single-payment loans were controlled, thus extending the regulatory powers of the Board of Governors far beyond the banking system. Since this control was exercised by virtue of the emergency powers of the President, it was purely temporary and came to an end in November 1947.

After the outbreak of the Korean war, Regulation W was revived under the specific but temporary authority of the Defense Production Act. But this time, only installment credit was controlled, by prescribing minimum down payments and maximum maturities for listed articles. After various revisions, the Board of Governors dropped this regulation in May 1952, and in June 1952 its authority over the field expired.

Under the authority of the Defense Production Act, the Board of Governors has exercised various other selective controls since the outbreak of the Korean war. In October 1950, Regulation X was promulgated and credit for constructing, purchasing, and financing new homes was brought under control for the first time in U. S. history.[11] After various revisions, this regulation was suspended in September 1952.

Not all selective credit controls are restrictive in character. Regulation V is aimed at facilitating the expansion of output by firms engaged in meeting defense contracts. This regulation, which is at present in operation, provides for guaranteeing bank loans and sets the maximum interest chargeable on such loans. Another type of selective control authorized by the Defense Production Act is exemplified by the Voluntary Credit Restraint Program. Under this scheme, the various financial institutions (including banks and insurance companies) and the Board of Governors cooperated in a program under which they agreed to refrain from extending credit not essential for the national defense effort. Although not binding by law, this program had considerable effect in discouraging the extension of unnecessary credit. The program took shape in March 1951, but it was terminated in May 1952, and the authority to revive it has expired.

It is obvious that although selective credit controls have assumed greater importance in recent years they are still regarded as essentially emergency measures. Apart from margin requirements on stock market

[11] The Federal Housing Administration and the Veterans Administration also issued similar regulations to produce a tightening of housing credit under federal programs.

credit, none of the selective controls has a permanent statutory basis. The Defense Production Act of 1950 is scheduled to expire by the end of June 1953. Whether the Board of Governors should be given a permanent framework of authority within which it can employ such controls in the interest of general credit management is a question on which opinion is still divided. There can be no question that the demand for housing and for durable consumers' goods has an important bearing on business fluctuations in the United States. The experience so far would also indicate that this demand is susceptible to credit controls. Nevertheless, the degree of direct interference involved in the administration of such controls is such that they are not yet regarded as a part of the normal machinery of monetary control. It should also be noted that the selective controls employed so far in the United States are not so comprehensive as in some other countries. The whole area of ordinary business loans for increasing inventories has not yet been brought under any direct credit control, quantitative or qualitative, except on the basis of voluntary cooperation among banks.

Structural changes

Developments in the past few years have tended to widen the scope for a successful application of monetary policy. For one thing, latent inflation has virtually disappeared. Both the money supply and liquid assets held by individuals and businesses have increased moderately during postwar years; but prices have risen faster, and there has been a sizable increase in real production. The relation between gross national product and the money supply has already been restored to its prewar position (see Table 1).

Also, there has been a slight reduction in the total federal debt since the end of the war. If the holdings of the Treasury and of the trust accounts and investment accounts of government corporations and agencies are excluded, the total reduction in the debt from June 1946 to June 1952 amounts to approximately $27 billion (Table 4). A large part of this reduction was brought about during 1946–47 by the use of cash balances accumulated earlier.[12] But in the years since then, budget surpluses have accounted for most of the total debt retired. In relation to gross national product, the federal debt now is *a fortiori* smaller than it was in the early postwar years, but higher than in prewar years.[13] In 1951–52 the cost of the public debt amounted to roughly 1.7 per cent of GNP, against nearly 2.5 per cent in 1945–46 and 1.1 per cent in

[12] The postwar peak of the federal debt was reached in February 1946.

[13] The federal debt was approximately 45 per cent of GNP in 1939, 118 per cent in 1946, and 65 per cent in the third quarter of 1952.

TABLE 4. U.S. GOVERNMENT FINANCE AND THE FEDERAL DEBT, AS OF JUNE 30

(In billions of U.S. dollars)

	1939	1946	1947	1948	1949	1950	1951	1952
Budget deficit (−) or surplus	−2.90	−18.20	6.60	8.87	1.00	−2.21	7.59	.07
Use of cash balances	−.62	10.46	12.73	−1.62	1.46	−2.05	−1.84	.39
Federal debt[1]	41.2	244.0	228.9	219.9	217.7	222.6	216.9	217.2
Held by:								
Federal Reserve Banks	2.6	23.8	21.9	21.4	19.3	18.3	23.0	22.9
Commercial banks	15.3	84.4	70.0	64.6	63.0	65.6	58.4	61.1

[1] The 1939 figures refer only to interest-bearing obligations.

Source: International Monetary Fund, *International Financial Statistics*. See source for description of series.

1938–39. It is interesting to note that the cost of the public debt today is smaller in relation to total government revenue than in prewar days: in 1951–52, the cost accounted for less than 10 per cent of government revenue, compared with a little over 13 per cent in 1945–46 and 15 per cent in 1938–39. But clearly, it would be meaningless to draw any unequivocal conclusion from this fact about the relative burden of the debt on the national exchequer.

The real significance of the reduction in the federal debt lies in the fact that nearly all of it applies to the government securities held by the commercial banks, which have the power of creating a manifold expansion in purchasing power by liquidating their holdings of government securities. Since 1946, the commercial banks have reduced their investment in government securities (Table 4), whereas their loans to business and individuals have expanded with the result that the distribution of their assets is now more in conformity with the prewar pattern than it was at the end of the war. In 1937–39, government investments of commercial banks averaged roughly 60 per cent of their loans to business and individuals; by the end of the war, however, they were nearly three times the amount of loans to business and individuals. In June 1952, these two items were approximately the same. It is never easy to say what distribution of assets is regarded as normal by the banks; but if the prewar situation is taken as a norm, it would seem that the incentive on the part of the banks to shift from government to private loans has been reduced considerably over the past few years.

Summary and prospects

Reserve requirements have been an important instrument of monetary policy in the United States for many years. Increasing reliance has been placed, however (especially since the Treasury-Federal Reserve accord), on open market operations—an instrument that had been neglected during the period of rigidly controlled interest rates. Selective credit controls (except on stock exchange securities) are still not a permanent part of the superstructure of monetary control. However, unlike most other countries, the United States has had no problem of reconstruction or persistent payments difficulties. The simple techniques of monetary policy combined with budgetary surpluses seem to have done their job well in facilitating a steady growth of the economy with a high level of employment, though perhaps with a greater price rise than was intended. But despite the absence of direct controls for most of the postwar years, the increase in prices in the United States has been moderate when compared with the rise in other countries.

In summarizing the prospects for a successful application of monetary

policy in the near future, it may be said that there is no danger of an activation of latent inflation. But inflationary pressures may be released currently in response to the expected budget deficit or a resurgence of private demand. The banks still seem to be in a position to permit an inflationary expansion if their government assets can be realized. The Government cannot have recourse to higher reserve requirements without additional legislation since the requirements at present are virtually the maximum permitted by law. Also, the authority to impose selective credit controls has virtually expired for the present. Under the circumstances, the only way to check an expansion of credit—barring new legislative powers—is to permit a rise in government bond yields in order to deter the monetization of the debt and make the discount rate weapon effective. However, whether or not monetary policy will in fact be called upon to deal with any significant inflationary pressures in the near future is a question which falls outside the scope of this paper.

MONETARY POLICY IN THE UNITED KINGDOM

The growth of the public debt during World War II was not so rapid in the United Kingdom as in the United States. But even before the war, the importance of the debt in the national economy was greater in the United Kingdom, and by the end of the war the sterling debt was roughly three times its prewar size and amounted to more than twice the gross national product.[14] Government securities had become a much larger share of the total assets of commercial banks,[15] and a considerable degree of latent inflation had accumulated. Despite this similarity in the general structural changes initiated by the war, the course of monetary policy in the United Kingdom in the postwar years has been different from that in the United States.

Monetary Policy Prior to November 1951

Interest rate changes

At the end of World War II, the interest rates on short-term government securities in the United Kingdom were around 1 per cent, and those on long-term government securities were around 3 per cent—both somewhat higher than in the United States. Toward the end of 1945 and during 1946, these rates were lowered (Table 5). The first step in Mr. Dalton's drive toward an ultra-cheap-money policy was to reduce the Treasury Bill rate to ½ per cent per annum by making the Bank of

[14] Before the war, the sterling debt was roughly 40 per cent more than GNP.

[15] Before the war, the total investment of commercial banks in government securities was significantly smaller than their loans to business and individuals; but in 1945, government investments were nearly three times private loans.

TABLE 5. INTEREST RATES IN THE UNITED KINGDOM[1]

(In per cent)

Date	Government Bond Yield	Treasury Bill Rate	Call Money Rate
1939	3.72	1.32	1.09
1945	2.92	0.88	0.98
1946	2.60	0.51	0.62
1947	2.76	0.51	0.62
1948	3.21	0.51	0.62
1949	3.30	0.52	0.62
1950	3.54	0.51	0.62
1951	3.78	0.58	0.69
1952 Sep	4.19	2.49	2.25

[1] Annual data are averages of monthly figures.
Source: International Monetary Fund, *International Financial Statistics*.

England's "special buyer" always ready to exchange cash for Treasury Bills or Treasury Bills for cash at the fixed rate of ½ per cent per annum. The pegging of the short-term rate at a lower level naturally tended to reduce the long-term rate; but an attempt was made to push the long-term rate down still further by "open market operations". The essence of these operations was to sell Treasury Bills to the banks from the portfolio of various government agencies, and to buy long-term securities from the public (or the market) with the proceeds of the Treasury Bill sales. As long as the special buyer of the Bank of England was ready to buy Treasury Bills at fixed rates, the banks could always have the extra cash necessary to support any increase in their deposits. But once the long-term rate was reduced to 2½ per cent, and the confidence of the general public in the Government's ability to reduce it further or maintain it at that level was weakened, the natural tendency was to turn in more and more bonds to the Government in search of capital gains, and thus swell bank deposits at an alarming rate. In 1946, bank deposits increased by £800 million, or by more than 17 per cent. At a time when inflationary pressures were rampant, such an expansion of the money supply was clearly disturbing, and early in 1947, the Government had to give up the policy of forcing down the bond rate. Since then, the Government has generally allowed the long-term rate of interest to reflect market forces, with the result that it has risen more or less steadily.

The Treasury Bill rate, however, was still kept pegged at ½ per cent until November 1951. As a consequence, it was the Treasury Bill rate of ½ per cent rather than the Bank Rate of 2 per cent which set the tone of money rates in the market. The discount houses did not have to go to the Bank of England when they needed some liquid funds, but could borrow them from commercial banks against Treasury Bills or at call. The banks could lend money at call at cheap rates as long as they had

enough Treasury Bills in their portfolio. Low money rates also tended to keep the rate on bank advances and discount rates on commercial bills comparatively low through competition among the banks and discount houses. The net effect of the pegging of the Treasury Bill rate and the unpegging of the bond rate was to keep the short-term rates very low and widen the gap between short and long rates, in contrast to the development in the United States.

The operative influence of the Treasury Bill rate depends, of course, on the amount of Treasury Bills in the portfolio of commercial banks. It is customary for the banks in England to maintain against their deposits an 8 to 10 per cent cash reserve and a 30 per cent secondary reserve in cash, money at call, and bills. However, in actual practice, the banks held such a large amount of bills (mainly Treasury Bills) prior to November 1951 that it was possible for them to expand their advances significantly without worrying about their liquidity, and this made the Bank Rate largely ineffective in setting the tone of money rates and the rates on advances.

At the end of the war, the relative position of bank advances was such that the banks had every incentive to expand them (Tables 6 and 7).

TABLE 6. LONDON CLEARING BANKS' ASSETS AS PERCENTAGE OF TOTAL DEPOSITS[1]

Date	"Quick" Assets				"Other" Assets			
	Cash	Money at call	Bills	Total	Treasury deposit receipts	Investments	Advances	Total
1938	10.6	6.6	12.3	29.5	—	28.0	42.9	70.9
1946	10.3	5.9	9.0	25.2	29.3	26.4	17.4	73.1
1948	8.2	8.0	12.6	28.8	21.7	25.0	22.3	69.0
1949	8.3	8.5	15.3	32.1	16.4	25.2	24.1	65.7
1950	8.3	9.1	21.6	39.0	7.1	25.0	26.7	58.8
1951	8.3	9.2	19.9	37.4	4.0	26.4	29.6	60.0
1951 Sep 19	8.2	9.5	20.8	38.5	3.5	25.3	30.6	59.4
Nov 21	8.4	9.1	14.6	32.1	1.7	32.8	31.1	65.6
1952 Sep 17	8.2	8.6	21.1	37.9	—	31.4	28.5	59.9

[1] Annual figures are monthly averages.
Source: Central Statistical Office, *Monthly Digest of Statistics*.

At the same time, the banks' liquidity position was such that they could effect an expansion of advances by monetizing some of their other assets, particularly government bonds and Treasury deposit receipts. In fact, there seems to have been no monetization of the long-term debt by the banks in the postwar years because of the unpegging of the bond rate early in 1947. The Treasury deposit receipts were a special wartime device whereby the banks were obliged to lend money to the Government for a short term on a nonmarketable basis—the TDR's being dis-

countable only at the Bank of England at the ruling Bank Rate. The policy followed with respect to the TDR's was largely responsible for improving the liquidity position of the banks, particularly after 1948. In a sense, the TDR system was analogous to statutory reserves (or forced illiquid assets). But this system was deemed undesirable for peacetime, and the TDR's were gradually replaced by Treasury Bills. At the

TABLE 7. SOME ASSETS OF LONDON CLEARING BANKS[1]

(In millions of pounds sterling)

Date	Bills[2]	Treasury Deposit Receipts	Investments[3]	Advances
1938	280	—	637	976
1946	457	1,492	1,345	888
1947	723	1,308	1,474	1,107
1948	744	1,284	1,479	1,319
1949	914	983	1,505	1,440
1950	1,298	430	1,505	1,603
1951	1,228	247	1,624	1,822
1952 Sep 17	1,231	—	1,921	1,748

[1] Annual figures are monthly averages.
[2] Mainly Treasury Bills.
[3] Mainly government bonds.
Source: Central Statistical Office, *Monthly Digest of Statistics*.

same time, the Government used its budget surplus and the counterpart funds of ERP aid to reduce its short-term indebtedness to the banks. But the combined effect was to increase the Treasury Bills in the portfolio of banks so as to bring the ratio of "quick assets" to deposits above the conventional 30 per cent after the middle of 1949. The stage was thus set for a possible expansion in bank advances and a greater discounting of commercial bills by the discount houses—all geared to the fixed Treasury Bill rate of ½ per cent rather than to the Bank Rate. It is in the light of this situation that the monetary policy introduced in November 1951 should be reviewed.

Qualitative controls

The technique of monetary control that has been relied on largely during the postwar period is qualitative control over bank credit. Control of this kind is in the nature of gentlemen's agreements and consists mainly of instructions sent out to banks from time to time by the Bank of England regarding the priorities to be given to different uses in granting bank advances. These instructions are similar to those given to the Capital Issues Committee. Where the bank advances are for capital expenditures rather than for working capital, the applications are gen-

erally referred to the CIC. The cooperation between the commercial banks and the Bank of England is generally good, and this type of control, despite the discretionary element involved, undoubtedly has had a commendable effect. This cooperation also explains why no formal reserve requirements of any kind have been imposed in the United Kingdom.

New Monetary Policy of November 1951

Prior economic situation

The state of its balance of payments and external reserves is the chief determinant of economic policy in the United Kingdom. The gold and dollar reserves began to increase after the devaluation of September 1949, and this increase was stimulated by the Korean war (Table 8).

TABLE 8. U.K. RESERVES OF GOLD AND U.S. AND CANADIAN DOLLARS[1]

(In millions of U.S. dollars)

Date	Reserves	Date	Reserves
1949 Mar	1,912	1951 Mar	3,758
Jun	1,651	Jun	3,867
Sep	1,425	Sep	3,269
Dec	1,688	Dec	2,335
1950 Mar	1,984	1952 Mar	1,700
Jun	2,422	Jun	1,685
Sep	2,756	Sep	1,685
Dec	3,300		

[1] Data are as of end of month.
Source: Central Statistical Office, *Monthly Digest of Statistics.*

But after June 1951, the reserves were subject to a heavy drain (amounting to US$1.5 billion in six months), largely as a result of the U.K. balance of payments position. The monetary policy initiated in November 1951 was designed largely to stop this drain. It was believed that, if the investment outlay at home could be checked, some investment goods could be released for export. Secondly, if tighter money conditions could bring some of the stocks of goods and materials built up during the earlier months on to the market, the flow of production in the export industries could be maintained despite the more severe import restrictions. Also, it was felt that tighter money conditions would restrain the upward movement of wages in response to the rising cost of living, and thus maintain export opportunities. Moreover, higher short-term rates and improved confidence in the monetary stability of the country were expected to have a salutary effect on the movement of capital out of the country.

The devaluation of September 1949 seems to have been followed by a significant increase in bank advances. Between August 1949 and May 1950, these advances increased by 14.6 per cent, against an increase of 7.5 per cent between August 1948 and May 1949 (Table 9). Unlike most

TABLE 9. BANK ADVANCES IN GREAT BRITAIN

(In millions of pounds sterling)

Date	Advances	Date	Advances
1948 Feb.	1,307.0	1951 Feb.	1,806.8
May	1,351.0	May	1,894.9
Aug.	1,380.9	Aug.	1,964.4
Nov.	1,379.5	Nov.	2,016.2
1949 Feb.	1,461.2	1952 Feb.	2,055.8
May	1,487.8	May	2,003.8
Aug.	1,497.1	Aug.	1,847.6
Nov.	1,532.5		
1950 Feb.	1,645.9		
May	1,715.1		
Aug.	1,691.2		
Nov.	1,683.2		

Source: Central Statistical Office, *Monthly Digest of Statistics*.

other countries, the United Kingdom did not experience a sharp expansion in bank advances immediately after the outbreak of the Korean war. The initial reaction to the boom ushered in by the hostilities in Korea was to use up current stocks of goods and materials, and it was not until 1951 that a serious movement toward stockpiling began. In February 1951, bank advances were only 5 per cent greater than in May 1950, and 10 per cent greater than in February 1950; but between February and November 1951, there was a further increase of 11.6 per cent, and the November advances were 20 per cent above those in November 1950.

The monetary policy measures adopted in November 1951 should be studied in the light of the following factors: (1) the deterioration in the U. K. balance of payments position and foreign exchange reserves; (2) the expansion of 20 per cent in bank advances in one year (November 1950–November 1951); (3) the liquidity of the banks, which made further expansion possible; (4) the low level of short-term rates, hinging around the pegged Treasury Bill rate; (5) the strong inducement for banks to increase (more profitable) advances because of the pressure of rising costs, low rates on money market loans and Treasury Bills, and the added strain on their inner reserves because of the falling gilt-edged prices; (6) the upward pressure on wages; and (7) the existence of large stocks built up in earlier months. Perhaps one more factor may be mentioned,

viz., that the huge increase in rearmament expenditure made it all the more imperative to curtail private expenditure and at the same time made it difficult to employ the device of a budget surplus, to any significant extent, for curtailing such expenditure. It is perhaps worth emphasizing that the return to monetary orthodoxy in the United Kingdom was accompanied by a budgetary policy that was less stringent than in most of the earlier postwar years.

Summary of monetary measures

(1) On November 8, 1951, the Bank Rate was raised from 2 to 2½ per cent, the first increase since 1932, barring an increase for two months in August 1939. On March 12, 1952, it was raised further, to 4 per cent. When it was first changed in November 1951, a special arrangement was made whereby 7-day loans from the Bank of England against Treasury Bills would cost 2 per cent and loans against commercial bills or short bonds would cost 2½ per cent. These rates also were raised by 1½ per cent in March 1952.

(2) The Treasury Bill rate was unpegged in November 1951. The Bank of England's "special buyer" would buy or sell Treasury Bills only on its own initiative and to such extent and at such rates as it deemed appropriate. The tender rate on new Treasury Bills was raised steadily—from 0.51 per cent in October 1951, to 0.98 per cent in December 1951, 2.01 per cent in March 1952, and 2.49 per cent in September 1952. Once the Treasury Bill rate was unpegged and the Bank Rate was raised, the only way to keep the cost of short-term government borrowing low would have been to compel the banks to subscribe to Treasury obligations by the revival of a system like the TDR's. But it was decided to suspend TDR's, and the last of these disappeared in February 1952. The rise in the cost of short-term borrowing has benefited the holders of sterling assets abroad.

(3) In November 1951, Treasury Bills worth £1,000 million were exchanged for Treasury Funding Stock with maturities of 1, 2, and 3 years, and redemption yields of 1¼, 1½, and 1¾ per cent, respectively. The commercial banks accounted for nearly half of this conversion, which led to a decline in the ratio of their "quick assets" (cash, money at call, and bills) to gross deposits from 39 per cent in October 1951 to 32 per cent in November 1951, i.e., just above the conventional 30 per cent. The significance of this step is quite clear: it mopped up the excess reserves of the banks in the form of "quick assets", at least for the time being.

(4) At the same time, it was decided that the rates charged by the Public Works Loan Board for loans to local authorities should be raised

and brought more in conformity with market yields. The effect of this, however, has been offset to some extent by increased housing subsidies.

(5) The direct or qualitative controls were further intensified. Early in December 1951, the Capital Issues Committee was instructed to discourage the banks generally in making advances for capital expenditure, and to supervise the terms on which such advances are made. The banks were instructed to limit credit to finance hire-purchase and this was supplemented by a Board of Trade order fixing minimum deposits and maximum repayment periods on a wide variety of goods, particularly metal and engineering products. This attempt to utilize the authority of the Board of Trade to restrict credit along the lines of Regulation W of the Federal Reserve System in the United States marks a new departure in credit policy in the United Kingdom.

Consequences of the new policy

The new monetary measures have affected initially the structure of short-term rates. Once the peg on Treasury Bills was removed and the tender rate for these Bills was raised, all short-term rates would tend to be geared to the Bank Rate or, more accurately, to the rate at which the money market could borrow from the Bank of England against Treasury Bills (3½ per cent) or other bills and government bonds (4 per cent). The higher yield on bank assets has also enabled the banks to raise their deposit rate from ½ to 2 per cent. The effect on the rate for bank advances and overdrafts is less pronounced than on other short-term rates. Even prior to the changes in monetary policy, the banks were trying to raise the rates on advances to meet the pressure of rising costs and, in a sense, the higher yield on their other assets would tend to mitigate the urgency of raising the rate on advances. But the authorities exhorted the banks to raise their charges to customers, and the increases that have occurred are partly the result of such appeals. The truth of the matter seems to be that, as long as short-term rates on bills and discounts were kept too low by government policy, the spread between such rates and the rates on advances was more than in proportion to the difference in risk and liquidity. The stiffening of the money and bill rate structure has tended to narrow this spread somewhat, rather than to cause a proportional rise in all interest rates. It is difficult to give a precise idea of the movement in the rates for advances, since these rates vary widely from customer to customer. Prior to the changes in monetary policy, some privileged industrial borrowers were paying as little as 3 to 3½ per cent; by and large, they are now paying about 1 per cent more. The majority of industrial borrowers paying around 4 to 4½ per cent have had to face a smaller increase in charges. More signifi-

cant, perhaps, is the increase in the rates charged to nationalized industries and other public or semipublic enterprises. But, on the whole, the new monetary policy cannot be said to have raised the rates on advances to levels which would significantly affect the willingness of business to borrow.

As far as bank advances are concerned, the decisive change has been the funding of Treasury Bills, which has impaired the ability of the banks to lend by reducing their excess reserves. During the nine months ended August 1952, total commercial bank loans to business and individuals actually declined by nearly 12 per cent. However, the psychological effect of higher interest rates on business prospects, the direct effect of tighter qualitative controls, and import controls were responsible in part for the slowing down of bank credit expansion. Again, it is purely a matter of convention for the banks to maintain 30 per cent of their deposits in the form of quick assets, and it remains to be seen how strong this convention will prove in the face of any sizable reinforcement of the demand for credit. The funding of Treasury Bills for a period of one to three years implies also that the problem will re-emerge when these securities mature—or even as they approach maturity. Therefore, the attack on the liquidity of the banking system relies for its success largely on the ability of the Government to restrict its own need for short-term accommodation from the banks.

In this respect, the record of the Government for some time was not encouraging. During the period April–August 1952 (i.e., the first five months of the fiscal year 1953), there was a sizable budget deficit, and the Government had to increase its borrowing from the banking system by more than £500 million. (In the corresponding period of 1951, the Government's use of bank credit was virtually unchanged.) The net result was an unfortunate increase in the liquidity ratio of the banks, to nearly 37.4 per cent by the middle of September 1952.[16] It was clear that, unless the budgetary position showed a marked reversal in the coming months, the attack on bank liquidity would have to be renewed all over again. It is perhaps worth recalling that in suspending the TDR system a warning was given that it would be resumed if the Treasury felt the need for doing so.

To examine whether or not the new monetary policy has helped significantly in stopping the drain on the U.K. gold reserves is outside the scope of this survey. There has been some improvement in the underlying situation in the country—personal savings were higher in the first half of 1952 than in the first half of 1951, and the rise in wage rates was less pronounced. Bank credit in fact has declined during the year, and

[16] Subsequently, the ratio declined a little, as a result of the refinancing operations that fell due in October.

wholesale prices at present are no higher than they were a year ago. During the third quarter of 1952, however, industrial production was somewhat lower and unemployment higher than in the corresponding period of 1951. This seems to be reflected also in the value and volume of exports, which are running lower than a year ago. The decline in imports has been even greater and the trade balance has improved. But it is difficult to disentangle the role of monetary policy in these developments, and in any event the United Kingdom has not yet reached a stage where the task of monetary policy can be considered to have been accomplished.

Conclusions

Despite the withdrawal of the support to the government bond market as early as 1947 and the continuous use of qualitative controls, vigorous use of monetary policy in the United Kingdom has been made only during the last year. But the changes in the United Kingdom represent a more complete return to monetary orthodoxy than in most other countries. Although the new monetary policy relies heavily on restricting the availability of bank credit by controlling bank liquidity, this is not done with the help of statutory reserve requirements, and it is not made a justification for keeping interest rates low. The fear of any addition to the cost of the government debt has been cast aside firmly, at least for the time being, in favor of a flexible monetary policy. The interest rate on short-term government paper has been raised drastically to make the higher discount rate effective and to induce banks to hold their short-term government investments. Only to the extent that qualitative credit controls are employed and indirect pressure is exercised on banks in connection with the refinancing operations of the Government is a departure made from the simple discipline of the Bank Rate and open market operations. But even in this field, nothing approaching a supervision of individual loans is attempted.

The prospects for monetary policy in the near future still remain uncertain. The liquidity of the banks has been strengthened in recent months, and the budgetary position is not above concern. Despite the expansion of private loans in the past few years, government loans still comprise a relatively larger part of the portfolio of commercial banks than before the war.[17] Whether the banks' notions about the normal distribution of their assets have changed in the meanwhile can be tested only by time. The ratio of money supply to national income, which was 64 per cent higher in 1946 than in 1939, exceeded the prewar level

[17] In 1939, loans to the Government by commercial banks amounted to 80 per cent of their private loans; but at the end of August 1952, they were still 125 per cent of private loans.

by approximately 34 per cent in 1951. Presumably, this ratio has declined further in 1952, and there may have been a secular increase in the need for money over the last ten or twelve years. But the disappearance of latent inflation from the British scene cannot be regarded as established on the basis of available evidence. The importance of the national debt has diminished in recent years, with the growth in production and prices. But the total sterling debt is still nearly twice gross national product. The incidence on the government budget of the rise in government bond rates in the past few years will be felt only in the coming years as some of these bonds mature. How far the Government will be able to subordinate the consideration of minimizing the cost of the public debt to the pursuit of a vigorous monetary policy remains to be seen.

MONETARY POLICY IN FRANCE

France has pursued an active monetary policy throughout the postwar years; but this policy had to operate in an economic setting which was somewhat unique among the countries studied here. The latent inflation accumulated during the war was worked off at a very early stage, mainly by a rise in prices. Nevertheless, in most of the postwar period prices and wages have continued to rise sharply (Table 10) in an

TABLE 10. SELECTED ECONOMIC DATA FOR FRANCE

Date	Money Supply[1]	Franc Debt[1]	National Income	Wholesale Prices	Wages	Ratio of Money Supply to National Income[1]
	←(billion francs)→			←(1948 = 100)→		(1938 = 100)
1938[2]	192	414	360	5.83	6.92	100
1945	1,013	1,823	....	22	26	....
1946	1,349	1,975	2,596	38	44	85
1947	1,676	2,118	3,303	58	59	86
1948	2,165	2,451	5,430	100	100	66
1949	2,704	2,723	6,539	112	101	70
1950	3,120	2,846	7,117	121	120	77
1951	3,678	3,032	9,082	155	....	70
1952 Jul.	3,917	....	....	162	....	....

[1] Money supply and franc debt refer to the end of the year, but for calculating the ratio of money supply to national income, the average of the money supply at the end of the year and at the end of the previous year has been used.

[2] The 1938 data are not fully comparable with those for the later years.

Source: International Monetary Fund, *International Financial Statistics*. See source for description of series.

environment of persistent and large budget deficits, political instability, and social tensions. Higher and flexible interest rates can have only a limited usefulness under these circumstances, with the result that, despite the early departure from the wartime cheap money policy, the corner-

stone of French monetary policy in recent years has been an elaborate system of quantitative and qualitative controls over credit. Few other countries can claim such a complete panoply of direct credit controls. But as long as active inflationary pressures continue to be generated, particularly by the Government, massive wage and price rises become inevitable and the lid on credit has to be raised correspondingly. The story of French monetary policy in the past few years has been one of periodic attempts to patch up the loopholes in existing credit controls as avoidance became common, without being unrealistic about the need to raise the lid on credit with the progress of inflation.

Monetary Policy, 1945–48

Latent inflation

At the time of liberation (September 1944), the total money supply in France was more than five times that in 1938; and the increase in total liquid assets (money supply plus deposits in savings banks and holdings of Treasury bills) held by the public was of the same order. Official prices, however, were only 2½ to 3 times their prewar level; but black markets were rampant, and prices on those markets were much higher. On the other hand, production was less than before the war.

Unlike Belgium or the Netherlands, France did not embark on a monetary purge to get rid of the surplus money. The exchange of notes in the spring of 1945 did not aim at blocking any part of it, although it did reduce the money supply to the extent that notes held by Germans or collaborators were not exchanged. Similarly, the Liberation Loan also had no permanent contractionist influence insofar as its proceeds were spent by the Government. However, the money supply was a little below the liberation level until August 1945. In the meanwhile, prices rose sharply and production began to recover: wholesale prices rose by 75 per cent in the fifteen months after liberation. Although precise calculation is not possible, it is reasonable to conclude that the ratio of the money supply to national income had fallen to its prewar level by the end of 1945 or early in 1946. This must have been true *a fortiori* of the domestic national debt held outside the Bank of France, since the increase in total debt during the war was smaller than the rise of the money supply (Table 10), and a higher proportion of it was held by the Bank of France at the end of the war. However, like most countries, France still had to contend at the end of 1945 with one of the legacies of the war: government securities held by the commercial banks accounted for a much larger share of the banks' total assets than in prewar days, and the elasticity of the credit system was consequently greater.

Even in the early postwar years, France's major fight was against current and open inflation rather than against the latent inflation inherited from the war. The prime mover in the inflationary process was the government budget deficit which amounted to 12 to 14 per cent of national income during 1946–48. There was also an increase of 600 per cent in bank credit to the private sector between the end of 1945 and the end of 1948 (Table 11); and during the same period the money supply

TABLE 11. DOMESTIC LOANS AND INVESTMENTS OF BANKS IN FRANCE

(In billions of francs)

Date	Bank of France[1]			Commercial Banks[2]		
	Government	Business and individuals	Total	Government	Business and individuals	Total
1938	38	13	51	12	41	53
1945	468	30	498	239	101	340
1946	591	84	675	235	250	485
1947	766	123	889	179	398	577
1948	799	251	1,051	243	665	908
1949	893	369	1,262	279	867	1,146
1950	913	433	1,346	308	903	1,211
1951	956	781	1,738	327	1,079	1,406
1952 Jul	939	856	1,795	381	1,245	1,626

[1] Data refer to last Thursday of year or month.
[2] Data refer to end of year or month.
Source: International Monetary Fund, *International Financial Statistics*. See source for description of series.

more than doubled, and prices rose to 4½ times and wages to nearly 4 times the previous level. Despite some attempt to control wages and prices, massive increases were granted; e.g., wages increased by 50 per cent in August 1944, 40 per cent in March 1945, 25 per cent in July 1946, 30 per cent in April–July 1947, 35 per cent in December 1947, and 15 per cent in September 1948. To some extent, the inflationary process was accompanied by a flight from money.[18] It was in this environment that various monetary measures were taken to stave off the price-wage spiral.

Higher interest rates

France departed from the wartime cheap money policy early in 1947. In January 1945, the Bank of France had actually reduced its discount

[18] See Table 10. The ratio of money supply to national income may, however, exaggerate the extent of the flight from money that developed after the end of 1945. In the postwar period, black markets have declined in significance and black market prices have risen less than official prices. Insofar as official national income estimates disregard black markets, the growth of national income is exaggerated.

rate from 1.75 to 1.625 per cent; but after January 1947, the discount rate was moved up in various stages to 3½ per cent in early September 1948 (Table 12). The increase in September was mainly for psychological

TABLE 12. INTEREST RATES IN FRANCE

(In per cent)

Date	Government Bond Yield[1]	Call Money Rate[1]	Treasury Bill Tap Rate[2]	Discount Rate[2]
1938	4.04	2.21	2.60	2.50
				3.00
				2.50
1945	2.99	1.38	1.50	1.625
1947	3.91	1.57	1.625	1.75–2.25
			2.00	2.50–3.00
1948	4.62	2.09	2.00	3.50–4.00
				3.00
1949	4.78	2.26	2.00	3.00
1950	5.18	2.43	2.00	2.50
1951	5.51	2.70	3.00	3.00
				4.00
1952 Jun	5.08	3.66	3.00	4.00

[1] The annual figures are averages of monthly data.
[2] For dates of changes, see source.
Source: International Monetary Fund, *International Financial Statistics*.

reasons at a time of government crisis, and toward the end of the month the rate was lowered to 3 per cent. In the meanwhile, the rate on advances against securities also was raised from 2.75 to 4.5 per cent. These increases naturally added to the cost of borrowing from banks—the cost of advances and overdrafts being as high as 5½ to 7½ per cent.

The rates of interest on government securities were allowed to move up, and new bonds were floated at higher rates. Thus, the yield on 3 per cent irredeemables increased from 2.99 per cent in 1945 to 4.62 per cent in 1948. In 1945, the large Liberation Loan was floated at 3 per cent. But the rate of interest on newly issued bonds averaged 4.36 per cent in 1946, 4.98 per cent in 1947, and 5.86 per cent in 1948. The Treasury bill tap rate was also raised, from 1.5 to 1.625 per cent in January 1947 and to 2 per cent later in the year. The semipublic institutions which provide medium- or short-term finance to the private sector also raised the rates on their loans significantly. However, even these higher money rates of interest were much smaller than the annual rate of price rise, i.e., *real* rates of interest were still negative.

Direct credit controls

Direct credit controls have evolved gradually in France and are administered by a variety of institutions. The whole system of credit controls was systematized, however, in the autumn of 1948.

In December 1945, the National Credit Council (Conseil National du Crédit) received power to issue orders or recommendations to banks about the type of credit they should encourage or discourage. This was reinforced in 1946 by making it obligatory for banks to report all extensions of credit in excess of 5 million francs to a new department of the Bank of France. The instructions of the National Credit Council were revised from time to time. For example, the banks were directed early in 1947 to refuse credit for nonessential purposes and to firms which could obtain funds by other means.

In October 1947, a further provision was made requiring the prior approval of the Bank of France for all advances and overdraft commitments in excess of 30 million francs. This limit was later raised to 50 million francs. The limit did not include the prime commercial bills discounted by banks on the assumption that such credit represents a movement of goods and is noninflationary. But since nearly two thirds of bank credit to commerce and industry consists of discounting prime bills, a large area of credit was uncontrolled. It was also difficult to ensure that the qualitative provisions were implemented fully by the banks.

Therefore, a more comprehensive system of control was set up in September 1948. The new scheme had two additional features: control over bank reserves, and ceilings to a bank's rediscount facilities.

In France, as in most other countries, the danger of a shift from government credit to private credit by banks was real. In October 1945, the Bank of France had entered into "gentlemen's agreements" with important banks whereby the latter undertook not to unload government securities except when their deposits were withdrawn. This voluntary measure had worked well, on the whole; but under the system set up in September 1948, the banks were legally required to maintain their holdings of government paper at the September 1948 level, except in the event of a withdrawal of their deposits. Also, at least 20 per cent of any addition to their deposits had to be kept in cash or short-term government paper. Clearly, the success of such a reserve requirement is contingent on the Government's ability to do without central bank finance.

The ceilings fixed for the total rediscounts that banks can secure at the Bank of France naturally are revised from time to time. The larger banks are able to get special accommodation from the Bank of France for 5 to 30 days against Treasury bills and acceptances of the Crédit National. Such accommodation falls outside the scope of the general "ceilings", although, naturally, it too is restricted to certain limits by agreement between the parties. Another kind of accommodation not included in these ceilings is the borrowing under the so-called "pension" system whereby banks can sell securities to the Bank of France with an arrangement to buy them back within 15 days.

The qualitative instructions of the National Credit Council and the prior approval of the Bank of France for advances to any customer in excess of 50 million francs, of course, remained in effect. But the quantitative reserve requirements and rediscount ceilings introduced a degree of automaticity and decentralization of decisions into the system.

Monetary Policy, 1949–50

The pace of inflation slowed down considerably during 1949 and most of 1950. The government budget was still unbalanced; but the deficit was smaller in relation to national income than in the preceding three or four years. Prices and wages rose by only 20 per cent during the two years, and the balance of payments deficit was reduced. The money supply and bank credit to the private sector increased by about 45 per cent, and the ratio of the money supply to national income recovered somewhat from the abnormally low level of 1948, indicating that the flight from money was perhaps less pronounced and the confidence in the franc was greater. Production continued to increase, and unemployment remained low. A variety of factors was responsible for this outcome; but the credit controls introduced in the autumn of 1948 must have strengthened the efforts made in fiscal and other fields.

During this period of comparative stability, there was some tendency to liberalize the restraints on credit in an effort to be realistic about the price rises that had taken place. Thus, in April 1950, the limit beyond which bank advances cannot be given to a customer without the approval of the Bank of France was raised from 50 million to 100 million francs. The ceilings on rediscounts also were raised. In June 1950 (just before Korea), the discount rate was lowered from 3 to 2½ per cent, and the rate on advances against securities from 4½ to 3¾ per cent. As a consequence, the rates on bank credit also were reduced. There was no attempt to reduce the rates on government securities, however. The Treasury bill tap rate remained unchanged at 2 per cent, and the yield on 3 per cent irredeemables increased from an average of 4.62 per cent in 1948 to 5.18 per cent in 1950.

Monetary Policy, 1951–52

When hostilities broke out in Korea, the trend in France was toward a relaxation of credit controls. France, like the United Kingdom, felt the inflationary impact of the Korean war somewhat later than most countries of Western Europe. In the early stages, the speculative outburst of demand was absorbed by using up stocks; but toward the end of 1950, a rapid expansion of credit began. After the spring of 1951,

the balance of payments showed an alarming deficit, and in the autumn of 1951 various steps were taken to tighten credit. Thus, in contrast to developments in most countries, the post-Korea revival of monetary policy in France and the United Kingdom came more than a year after the onset of the Korean war. In France, however, this revival took the form mainly of an intensification of existing credit controls, although the interest rate weapon was not ignored.

The deterioration that set in during 1951 is best illustrated by the balance of payments position. The over-all balance of payments deficit of the franc area had declined from roughly US$1,900 million per year during 1946–48 to $700 million in 1949 and $200 million in 1950. But it rose to $1,100 million in 1951. Despite the greater contractionist impact of external factors, the money supply increased more in 1951 than in 1950. The expansion of bank credit to business and individuals was also more rapid: some 40 per cent in 1951, against less than 10 per cent in 1950. The Government's budgetary position began to deteriorate after the middle of the year. Wholesale prices had already risen by 34 per cent in the year following the Korean war. Several administratively controlled prices were sharply raised; e.g., the price of wheat was raised by no less than 39 per cent in August 1951. It was impossible to administer credit ceilings in the face of such massive price rises, and considerable laxity in the implementation of credit controls had in fact developed. The monetary reform in the fall of 1951 was aimed both at the establishment of more realistic credit ceilings and at a stricter regulation of new credit.

Thus, the rediscount ceilings for each bank were revised, in most cases upward; but the banks were warned that the new ceilings would be enforced more rigidly. In the past, the ceilings had been too easily raised. The total of rediscount ceilings was raised from 290 billion francs to 500 billion. The loophole of the banks' borrowing from the central bank under the "pension" scheme was sealed by decreeing that such borrowing could not exceed 10 per cent of a bank's rediscount ceiling and could be made only at a penalty rate fixed from time to time by the Bank of France.[19]

Another abuse that had developed was the use of commercial bills in place of advances by firms, in order to circumvent the provision requiring permission from the Bank of France for any advances to a customer in excess of 100 million francs. In October 1951, this limit was raised to 500 million francs, but commercial bills as well as advances had to be included in this limit. However, this figure of 500 million francs left many firms with a comfortable margin for extra borrowing—a factor

[19] At present, the penalty rate is 1½ per cent higher than the bank rate of 4 per cent.

that was responsible for the continuance of credit expansion for some months after the monetary reform.

The compulsory reserve requirement provisions were also revised. Previously, the banks had been required to attain the required ratios in their assets only once a month, with the result that a practice of window-dressing developed. But since October 1951, these ratios have had to be maintained on a daily basis.

The discount rate was raised in October from 2½ to 3 per cent, and in November to 4 per cent. The Treasury bill tap rate was raised for the first time in four years, from 2 to 3 per cent. The government bond rate was allowed to find its own level, and it continued its upward movement. Perhaps the willingness of the French Government to offer more attractive terms on its loans is best evidenced by M. Pinay's gold clause loan of May 1952. This loan gives a smaller return of 3½ per cent, but it carries important fiscal privileges and an insurance of the capital against a fall in its gold value, as measured by the quotations of the napoleon on the Paris market.[20] Thus, despite the pace of the French inflation and the reliance on direct credit controls, the interest rate weapon is actively used in France.

Bank credit continued to expand during the last quarter of 1951 and the first quarter of 1952, and the budgetary and foreign trade situation reached a crisis in February 1952. The average monthly deficit with the European Payments Union rose from the equivalent of US$36 million in the third quarter of 1951 to US$95 million in the fourth quarter and to US$129 million in February 1952. Only after March 1952 were some signs of an abatement of inflationary pressures discernible in France. Wholesale prices fell slightly and bank credit increased only a little. The foreign trade deficit declined from a monthly average of US$172 million during the first quarter of 1952 to US$65 million during July–August, and the proportion of imports covered by exports rose during the same period from 53 to 74 per cent. However, this improvement over a few months can be regarded only as tentative, and it is, in any event, the product of many policies and circumstances unrelated to the monetary reform of 1951.

MONETARY POLICY IN FEDERAL REPUBLIC OF GERMANY

The foundation of an active monetary policy in the Federal Republic of Germany was laid in June 1948, when a drastic currency reform was undertaken. Prior to the reform, confidence in the currency was at a low

[20] The price of the napoleon on the Paris market is generally significantly higher than that of the same weight of bar gold, and the Government is in a position to influence the price of napoleons, within limits, by increasing their supply on the market.

ebb, black markets were widely prevalent, and much of the exchange in the economy was conducted on a barter basis. But once most of the old money in circulation was wiped out and the amount of liquid assets held by the general public and the banking system was drastically reduced, it was possible to remove rationing and price controls to a great extent. The Bank Deutscher Länder, which was set up in March 1948,[21] responded with alacrity to the opportunity offered by the far-reaching currency reform. The main objectives of economic policy in the Federal Republic in recent years have been the restoration of productive capacity and the resettlement of the large number of refugees from Eastern Germany without permitting a serious rise in prices which would postpone the attainment of external equilibrium. Since the middle of 1948, monetary policy has played a very active role in steering the economy through the twin dangers of inflation and underemployment, and, on the whole, the achievements of the monetary authorities so far have been creditable.

Currency reform of 1948

In June 1948, the unit of currency was changed from the old Reichsmark to a new Deutsche Mark. The Reichsmark holdings, including bank balances, of all individuals and entities were converted into Deutsche Marks at the ratio of RM 100 to DM 6½. This provision did not apply to banks, governmental agencies, and a few other institutions. Of the DM 6½ exchanged for every RM 100, a part (i.e., DM 1½) was temporarily blocked; and a part of the blocked balances could be invested only in certain securities. The process of converting old money into new money was gradual; but it was virtually completed by the middle of 1949. The monetary purge was more drastic than in the Netherlands or in Belgium insofar as it permanently wiped out more than nine tenths of the money in circulation.

The currency reform provided for the conversion of most of the monetary claims in the ratio of RM 10 to DM 1. The entire internal debt of the old Reich was declared worthless. Thus, along with the money supply, the liquid assets in the economy were curtailed.

An equally far-reaching reorganization of the banks was undertaken. Their entire holdings of notes and coins of the Reichsmark period,

[21] The new central banking system in Germany is modeled on the Federal Reserve System in the United States. Each of the eleven lands constituting the Federal Republic has its own legally independent Land Central Bank which is subordinate to the main central bank, the Bank Deutscher Länder, in the sphere of credit control. However, the capital of the Bank Deutscher Länder is held by the Land Central Banks, whose presidents constitute eleven of the twelve members of the governing body of the central bank. The central banking system is formally independent of the Government; but in August 1951, the Federal Government was given a larger voice in the formulation of central banking policy.

their claims against the Reich, and their balances with other banks were eliminated altogether. The banks had suffered, as a result of wartime destruction, the loss of their assets outside Western Germany and the confiscation of their holdings of foreign exchange. It was necessary to compensate them in some manner, if their books were to balance and if they were to be able to resume their normal activities. This was done, first, by giving them an initial quota of balances with the central bank, and, second, by giving them certain amounts of equalization claims.[22] These claims are tantamount to funded government debt, but their negotiability is restricted; they can be bought and sold or be used as security only between banks, and the transfer can take place only at par. The banks could sell these claims to the Land Central Banks or the Bank Deutscher Länder or use them as security for borrowing from these institutions; but the central banking system could exercise its discretion in permitting such use of the claims. The net effect of the reorganization of the assets of the banks was to restore their usefulness on the one hand, and bring them under the discipline of the central bank on the other. Unlike banks in most other countries, the banks in the Federal Republic were left with no legacy of short-term government securities which they could liquidate in order to increase their ability to lend to the private sector.[23]

All the governmental agencies were given an initial quota of Deutsche Marks to enable them to carry on their normal functions. But the currency laws contained express provisions forbidding budget deficits in principle and allowing borrowing only in anticipation of future receipts—that is to say, in the form of short-term credits. At the same time, under the central bank laws, definite limits were set to the total credits that public authorities can obtain from the Land Central Banks and the Bank Deutscher Länder. These limits have been revised from time to time; but it is clear that the central banking system was launched on its career with sufficient safeguards against the frustration of its monetary policies by the budgetary imprudence of the Government.

Monetary policy before the Korean war

The immediate effects of the currency reform were gratifying. Confidence in the currency was revived, and production increased substantially during the second half of 1948. At the same time, the policy

[22] Equalization claims were also given to insurance companies and to building and loan associations.

[23] New government securities have come into existence since the currency reform, but their magnitude is small. In August 1952, the new internal debt amounted to about DM 1.3 billion, against a national income of about DM 90 billion.

of decontrol led to a sharp rise in prices; but since the official prices before the reform were largely nominal, owing to the prevalence of black markets, it is difficult to attach any precise significance to the price increases that took place in the first months after the removal of controls.

The process of economic recovery, at the time, depended heavily on bank credit. In the absence of an active capital market, the banks were responsible for granting medium- and long-term, as well as short-term, credit. The Bank Deutscher Länder had to develop gradually the techniques of control over bank credit. The discount rate was initially set at 5 per cent, and at the time of the reform the banks were already subject to reserve requirements. This was supplemented by issuing directives concerning the type of bills and acceptances the central bank would discount and the conditions under which the bank would buy or lend against equalization claims. Thus, the mechanism of the central bank discounts was used for modifying the quality of bank credit; and by varying the severity of the tests implied in the directives, the bank could also affect the volume of bank credit.

For some time after the currency reform, the banks were in a fairly liquid position, and they were able to expand credit considerably without much recourse to the central bank. It was feared that, if this expansion were not checked, an inflationary price-wage spiral might develop; therefore, steps were taken to restrict bank credit. In November 1948, the conditions attached to central bank rediscounts were made more severe; and in December 1948, the minimum reserve requirements for sight deposits at "Bank places"[24] were raised from 10 to 15 per cent. The indirect powers of suasion by the central banking system were also used by requesting the banks not to increase their lendings beyond the level of October 31, 1948, without consultation with the appropriate Land Central Banks.

The policy of tighter credit was reversed, however, in 1949. After December 1948, prices began to decline a little, and the rate of credit expansion slowed down. The influx of refugees from Eastern Germany continued to swell the ranks of the unemployed, and the need to create further employment became more urgent. During 1949 and the first half of 1950, Germany followed a deliberate policy of encouraging credit expansion.

In March 1949, the banks were released from the requirement of keeping their credits down to the level of October 31, 1948. The minimum reserve requirements were lowered in June 1949; and by July 1949, the discount rate had been reduced to 4 per cent. In September 1949, the minimum reserve requirements were reduced once again.

[24] "Bank places" are localities at which there is a Land Central Bank or a branch of one.

In August 1949, the central bank laid down a liberal procedure under which the banks could make use of their equalization claims in order to expand credit for long-term purposes. The banks could get total assistance of DM 300 million by selling their equalization claims to the central banking system if they could satisfy the authorities that the funds were needed for financing essential export orders or investment projects and that they would repurchase the claims in future under suitable circumstances. The central bank thus bought at par some of the bonds held by commercial banks; but there was nothing automatic about this process, and the purpose, extent, and duration of such "monetization of the funded public debt" was determined by the central banking system.

Despite the various steps taken to liberalize credit during 1949, the monetary authorities did follow, on the whole, a cautious policy in view of the disequilibrium in the balance of payments. Economic recovery continued during 1949; but the continuous influx of fresh labor and the rationalization of industries led to unemployment of uncomfortable proportions. The number of unemployed persons had increased from 450,000 shortly after the currency reform to 760,000 at the end of June 1949. In the winter of 1949–50, the situation deteriorated still further, and in February 1950 unemployment reached 2 million persons,[25] the highest level since the middle of 1948.

In the spring of 1950, the central banking system took various steps to facilitate the Government's employment promotion program. This program consisted of various schemes to expand export industries and the construction of houses, and the central banking system promised total assistance of DM 2 billion by way of cash advances and rediscount facilities. The Government's credit limit at the central bank was raised from DM 1 billion to DM 1.5 billion. Institutional investors (i.e., savings banks, building associations, insurance companies, etc.) were promised that the central banking system would buy equalization claims in specified amounts in order to enable such investors to participate in the different employment promotion schemes. The Reconstruction Loan Corporation also received assurances of help by the central bank. The intention of the central bank was to give assistance for only a short period, i.e., in anticipation of the future receipts of funds by the agencies themselves. Only part of the credit promised by the central banking system was utilized before the outbreak of hostilities in Korea; and the unutilized portion of this credit was used to feed the post-Korea boom. The repayments of central bank assistance were not so rapid as originally planned.

[25] These unemployment estimates apparently include a significant proportion of persons that are not employable; this is due to the large number of refugees from Eastern Germany.

The expansionist policy of the Government and the central bank had a salutary effect on production and employment. The number of unemployed was reduced from 2 million in February 1950 to approximately 1¼ million by the end of September 1950; in the meanwhile, employment increased by 1 million and industrial production by more than 25 per cent. This improvement, however, was partly in response to purely seasonal factors.

Monetary policy after outbreak of Korean war

With the outbreak of hostilities in Korea, the process of economic expansion in Germany developed into an inflationary boom. In the early phase of industrial expansion, there was already a tendency for imports to increase faster than exports; and when, after the war began, demand tended to outstrip the growth in production, a serious balance of payments disequilibrium developed. It is not necessary, for our purpose, to go into the detailed causes or extent of this imbalance; but clearly, the development of a serious imbalance in external accounts was facilitated by the ability and willingness of the banking system to expand credit.

In October and November 1950, the central bank took several measures to restrict credit. The discount rate was raised from 4 to 6 per cent, and the minimum reserve requirements were raised by an average of 50 per cent. Of course, the reserve requirements would become meaningless if the banks were to continue to get generous rediscounting facilities from the central banking system. It was decided, therefore, that bank acceptances would be rediscounted at Land Central Banks only if the bank concerned undertook not to increase its acceptance credit beyond the level reached on October 12, or promised to restore it to that level by the end of 1950. The Land Central Banks were also requested to reduce their credits to banks in respect of discount of bills, or of advances upon bills as security, by 10 per cent before January 31, 1951. However, certain types of credit, such as those for the promotion of exports, were excluded from these provisions. To make the financing of imports still more difficult, it was decided that import permits could be granted or prolonged only if 50 per cent of the value of the permit were first deposited in cash at the central bank.

These monetary measures were the mainstay of Germany's efforts to resolve its balance of payments crisis at the turn of 1950. But the success of the policy fell short of expectations. By the end of February 1951, Germany had practically exhausted its special credit with the European Payments Union, and had to resort to severe import restrictions. The tighter money policy did slow down the rate of expansion of bank credit; but, in view of the urgency of the crisis and the loopholes that

manifested themselves in the system of monetary discipline, it became incumbent on the authorities to resort to additional measures. The higher discount rate was not much of a deterrent to borrowers who expected prices to rise sharply. It was not possible to raise reserve requirements in a manner which would impinge equally on the liquidity of different banks: insofar as the positions of banks differ, some banks are left with excess reserves even when others are squeezed to the utmost, as long as reserve requirements are more or less uniform. Apart from this, the criteria established by the central bank for the rediscounting of bank bills and acceptances still left some scope for shifting to other types of credit for obtaining additional accommodation from the central banking system. The unutilized portion of the credit promised by the central bank in connection with the employment promotion program of the earlier period facilitated the process of credit expansion. Also, the post-Korea boom in Germany was fed in part by the use of near-money assets, such as savings and time deposits—a process which cannot be significantly countered by monetary policy.

This experience with monetary policy led the central bank to adopt new measures of a somewhat permanent significance. It was felt that, if the operations of the banking system were to be subject to some traditional checks, some guiding principles had to be developed. In most countries, banks have certain more or less fixed ideas about the distribution of their assets, the size of their business in relation to their net worth, etc. In Germany, the chaotic conditions after the war and the drastic reorganization introduced by the currency reform had left a vacuum in this respect. Early in 1951, the central bank laid down certain principles in regard to the amount of short-term credits a bank can give, the proportion of its assets it should hold in a liquid form, and the volume of acceptance credit it can give. Such principles could not be compulsorily established. But the idea was to develop certain uniform practices over a time by utilizing the powers of suasion and supervision and, if necessary, by making use of the central bank's power of denying rediscount facilities.

With the imposition of import restrictions, the balance of payments position began to improve. But the tighter money policy was not given up, in view of the need to remove import restrictions as soon as possible. In fact, simultaneously with the introduction of import restrictions, the banks were asked to reduce their short-term credits to trade and industry by DM 1 billion in a few months. Instead of relying merely on indirect pressures, the central bank thus required the banks to follow a direct quantitative course. This scheme for reducing credits permitted different treatment for different banks, insofar as they were not subject to a uniform proportionate reduction. It also implied a selective approach

to credit restriction: long-term credits necessary for enlarging the capital base of the economy were not included in the scheme, and even short-term credits for the promotion of exports, for example, were exempt from the provision.

The new monetary policy was successful, on the whole, in achieving its immediate purpose. By the end of May 1951, the type of bank credit subject to reduction quotas was in fact curtailed by DM 840 million, against the DM 1 billion which had been intended.[26] This reduction no doubt reflected, in part, the fall in import credits resulting from the import restrictions, the decline in raw material prices, and the reaction to the earlier hoarding wave; it was also more than offset by the increase in bank credit which was not subject to reduction quotas. But this was not in conflict with the aim of promoting the long-term recovery of German industry and exports. The program of credit reduction helped to restore confidence in the financial stability of the economy and encouraged fresh savings; and a large part of the new loans made by banks during the first five months of 1951 represented a channeling of current savings deposited with the banks in the absence of a capital market.

After June 1951, the central banking system followed a somewhat less restrictive credit policy. The credit reduction scheme was renewed, but it was administered more liberally and was finally dropped in October 1951. Additional assistance to the Reconstruction Loan Corporation was promised, and in September 1951 the requirement that cash deposits in respect of import permits must be lodged with the central bank was abolished. In April 1952, the minimum reserve requirements were lowered for the first time since October 1950, and they were lowered again in September 1952. The discount rate was also lowered in May 1952, from 6 to 5 per cent, and again in August 1952, to 4½ per cent.

Along with these liberalizing measures, however, the central banking system also refined the instruments of monetary control at its disposal. These refinements had no immediate restrictive or other purpose, but they were intended to add to the ability of the central bank to perform its functions adequately.

Thus, when the minimum reserve requirements were lowered in April 1952, a new principle of differentiating between banks was introduced. Until then, the reserve requirements had been different for different types of deposits and for banks in different localities (i.e., at Bank and non-Bank places)—more or less on the model of the U. S. practice. But a further distinction now prevails between banks on the basis of the size of their deposits which are classified into six ranges. A more favorable treatment is meted out, in general, to the smaller banks.

Another recent innovation is the determination of specific ceilings

[26] The base period is the end of January 1951.

TABLE 13. SELECTED ECONOMIC DATA FOR FEDERAL REPUBLIC OF GERMANY

	1948	1949	1950	1951	1952
			Billion Deutsche Marks		
Money supply[1]	11.48	13.81	15.79	18.59	19.20 (Jul)
National income	29.4[2]	63.2	71.7	90.2	47.2 (Jan–Jun)
			Million U.S. dollars		
Balance of payments surplus or deficit (−)	−974	−1,035	−664	53	....
			Per cent of employable wage and salary earners		
Unemployment (all types)	4.2	8.3	10.2	9.0	7.6 (Jun)
			1950 = 100		
Employment (manufacturing)	88[3]	94	100	108	108 (Mar)
Industrial production	55	79	100	119	124 (Aug)
Wholesale prices (home-produced goods)	101	102	100	121	124 (Aug)
Cost of living	....	106	100	109	113 (Aug)
Wages (weekly earnings)	71	90	100	....	122 (May)
Volume of exports	....	....	100	143	148 (Aug)
Volume of imports	....	....	100	102	110 (Aug)

[1] Data refer to end of year or month.
[2] July through December.
[3] Less than 12 months.
Source: International Monetary Fund, *International Financial Statistics*.

to the amount of rediscount facilities that credit institutions can obtain from the central banking system. These ceilings, which came into effect on May 1, 1952, are not to be exceeded even temporarily. However, certain types of credit are excluded from the ceilings in order to encourage the growth of selected activities. A credit institution whose rediscount quota is exhausted can still get advances from the central bank against securities. The cost of such advances is 1 per cent higher than the discount rate, and the conditions under which they can be obtained are more severe than those for ordinary rediscounts. By lowering or raising these ceilings, the central bank can obviously wield additional influence over bank credit.

Economic achievements

It is clear that the central bank has shown considerable ingenuity in forging new weapons of monetary control and in applying them. Since the currency reform of 1948, Germany has shown remarkable recovery in production and has attained virtual external viability. It would be

easy to attribute the economic achievements of Germany to monetary policy alone; however, generous U.S. assistance, among other things, has played a vital part in this process. But a few facts may be noted here, to give a general idea of the progress that has been made.

Since 1948, employment in industries has increased by more than 20 per cent and industrial production has more than doubled (Table 13). Real wages have increased with the productivity of labor. Prices of domestically produced goods have increased by about 25 per cent and money wages by over 70 per cent. The 1951 balance of payments showed a small surplus, although there was a sizable deficit with the dollar area. The acute crisis in Germany's relations with EPU at the turn of 1950 was overcome by the spring of 1951, and by the end of the year Germany was able to repay all the credits received from EPU in earlier months. During 1952, Germany has restored the liberalization of trade with OEEC countries to over 80 per cent, and yet has achieved a commanding cumulative surplus with EPU (a cumulative accounting surplus of approximately 450 million units at the end of September 1952, against a deficit of like amount at the end of February 1951). In August 1952, there were still approximately 1.1 million persons unemployed, but employment in Germany must be judged against the background of the rise in employment and real wages, and the influx of 7–8 million refugees from Eastern Germany.

MONETARY POLICY IN BELGIUM

Belgium was one of the first countries to return to economic liberalism and external viability after the end of World War II. This was achieved to a great extent by the vigorous use of monetary policy; in keeping with the prevalent liberal philosophy of the country, the monetary technique employed, for the most part, was the orthodox one of changing the discount rate. The foundation for the active use of such a simple technique was laid soon after the liberation, and the Government has pursued a budgetary and debt management policy that is consistent with the continued effectiveness of discount rate manipulations.

Monetary purge of 1944

In October 1944, Belgium undertook a drastic currency reform to drain off the excess purchasing power accumulated during the occupation. Prior to the purge, the money supply was four times its prewar level; and although the national income at that time is unknown, it is quite clear that the extent of latent inflation was enormous.

In essence, the currency reform blocked part of the currency and bank deposits, and reduced the money supply at one stroke, from Bfr 164 billion to Bfr 57 billion. Whether, in relation to national income, the

amount that remained in circulation was larger than in prewar years is difficult to say; but the circulation was smaller relative to prices and wages. Nearly 40 per cent of the blocked balances were to be released gradually as production increased; and the remaining blocked balances were later converted into a special nontransferable currency reform loan. The proceeds of the loan were not utilized by the Government, and the loan was to be paid off by special capital levies and (later on) from ordinary revenue.

However, the money supply increased in 1945 from about Bfr 69 billion to Bfr 125 billion, as a result of the large budget deficit[27] in the year and the generous releases from the temporarily blocked balances. Some latent inflation seems to have returned during 1945; but the budgetary situation improved considerably in 1946, and by 1947 the ratio of the money supply to national income returned to the prewar level (Table 14), despite the practically complete unblocking of the tem-

TABLE 14. MONEY SUPPLY, NATIONAL INCOME, AND PRICES IN BELGIUM

Date	Money Supply[1] (billion francs) (1)	National Income (billion francs) (2)	Wholesale Prices[2] (1948 = 100) (3)	Ratio of Money Supply to National Income (1938 = 100) (4)
1938	41.2	65.2	26	100
1945	125.6	....	....	....
1946	138.1	190.6	85	107
1947	142.3	214.6	91	101
1948	150.1	243.9	100	93
1949	155.9	249.1	95	95
1950	155.2	265.0	100	91
1951	168.8	296.0	121	85
1952 Aug.	171.0	....	112	....

[1] Money supply refers to the end of the year, but for calculating the ratio of money supply to national income, the average of the money supply at the end of the year and at the end of the previous year has been used.

[2] The figure for 1938 is not fully comparable with those for later years; see source. The 1946 figure is for November–December.

Sources: Columns 1, 2, and 3, International Monetary Fund, *International Financial Statistics*.

porarily withheld money supply. Most of the direct controls were also withdrawn during 1946 and 1947, and the stage was set for the free play of market forces.

Control over bank credit, 1944–49

The monetary purge of 1944 was also reinforced by an attack on the liquidity of the banking system in the early postwar years. As in most

[27] The budget deficit of approximately Bfr 60 billion was the result of heavy expenditure on behalf of allied forces and for the reconstruction of transport facilities.

countries, the banks in Belgium had acquired large amounts of government paper during the war, and the danger of an excessive expansion of bank credit by monetizing these obligations was very real.

At the time of the currency reform, two measures were adopted to stave off this danger. The first required the banks to inform the National Bank and the Banking Commission of every request for credit in excess of a million francs. This did not amount to prior approval, but it obviously carried a degree of moral suasion. Secondly, the maturities of all government securities falling due during the year after the currency reform were automatically extended for one year, and a further extension was made later. But in February 1946, these provisions were set aside in favor of compulsory reserve requirements. The banks were required to keep 50 to 65 per cent of their demand deposits in the form of cash or government securities, the percentage depending on the size of the bank. This provision has remained in force ever since then, with minor modifications.

Once the excess money supply was eliminated and the elasticity of credit supply was curtailed by reserve requirements, the way was cleared for the use of the discount rate technique. In January 1945, the discount rate was lowered from 2 to 1½ per cent in order to promote the revival of production and the replenishment of stocks. With the progress of economic recovery, the rate was gradually raised to 2½ per cent in November 1946, 3 per cent in December 1946, and 3½ per cent in August 1947. In October 1949, when Belgium was suffering from an economic recession, the rate was lowered to 3¼ per cent. The Belgian banks had to have recourse to the central bank during all these years, and the discount rate was effective in practice.

Increasing the cost of credit through changes in the discount rate does not, however, exclude all elements of selectiveness from credit controls. The banks were enjoined from time to time to use certain rules and preferences in granting credit and, insofar as the banks had to seek rediscounts with the central bank, these directives were not mere gestures. Also, in the early postwar years, the central bank, with the cooperation of the Institut de Réescompte et de Garantie, set up a system of certified bank acceptances for imports and exports. This system of the central bank giving prior visa or certification to certain bank paper has been developed considerably in recent years, and has become the basis for charging different discount rates for different types of bank paper. The central bank rediscounts all bank paper with the necessary signatures and of a specified currency period. But if a bank acceptance is visaed in advance by the central bank, it gets preferential treatment in several ways: the necessary signatures can be obtained easily in the market, and the acceptance can be rediscounted at a preferential rate.

Bills not visaed by the central bank can be rediscounted, but generally at a higher rate, depending on the nature of the paper. Even among the bank paper visaed by the central bank, some bills (generally those pertaining to exports) get a preferential rate (of ½ to ¾ per cent) from time to time, depending on circumstances. The spread between the lowest and the highest discount rate can thus be of the order of 2 to 3 per cent. Apart from this, the central bank may apply different tests of the maximum currency period of the bills it would visa, thus encouraging (or discouraging), in advance, credit for certain purposes. Thus, by changing the criteria for giving its prior visa to bank paper, the central bank can influence not only the cost of credit for different purposes, but also the duration of credit a bank is willing to give, and the ease with which a customer can get credit from banks.

Government finances and rates of interest, 1946–49

The tap rate for Treasury bills (4 months) has remained unchanged at 1.3125 per cent since January 1946. But in view of the compulsory reserve requirements and the need for rediscounts on the part of the banks, this rate does not set the tone of short-term rates in the market. The Government has allowed the bond rate to find its own level, and has exercised great caution in its own expenditure, to minimize its resort to the market for new borrowing. Thus, during 1947–49, investments of public authorities in Belgium amounted to only 3 to 4 per cent of national income, against 7 to 10 per cent in France and 5 to 7 per cent in the Netherlands and Norway. Despite this restraint, Belgium ran a budget deficit averaging approximately Bfr 15 billion per year during 1946–49, and although a large part of it was financed by long-term borrowing, some resort to the central bank was entailed.[28] A further restraint on government spending was instituted, therefore, in September 1948 when, by an agreement with the central bank, a limit of Bfr 10 billion was put to the total debit balance of the Treasury with the central bank.

Effectiveness of monetary policy, 1946–49

How effective the different monetary measures discussed above were in restoring the Belgian economy and in restraining inflation is very difficult to say. The increase in the money supply and prices during 1946–49 was very moderate, and both industrial and agricultural production increased beyond prewar levels. In 1949, equilibrium in the over-all balance of payments was restored, and gold and foreign exchange reserves actually increased by roughly 10 per cent during 1946–49. Belgium

[28] No part of this deficit, however, was covered by the use of counterpart funds.

had to devalue less than most European countries. Monetary policy was responsible for this outcome only in part.

Unemployment in Belgium increased significantly during these years, particularly after 1948 (Table 15). There are special difficulties in Bel-

TABLE 15. UNEMPLOYMENT, EMPLOYMENT, AND WAGES IN BELGIUM

Date	Unemployment, All Types[1] (*per cent of insured workers*)	Employment, Manufacturing[1] (*1948 = 100*)	Real Wages[2] (*1948 = 100*)
1945	9.3	....	....
1946	3.6	....	....
1947	3.5	....	105
1948	6.4	100	100
1949	11.7	95	108
1950	10.9	98	115
1951	9.8	102	116
1951	9.5 (Jul)	104 (1st quarter)	114 (Jun)
1952	10.4 (Jul)	99 (1st quarter)	120 (Jun)

[1] From International Monetary Fund, *International Financial Statistics*.
[2] Hourly earnings deflated by retail prices. Based on data from *International Financial Statistics*.

gium, e.g., the immobility of the unemployed in Flanders for language reasons. It is arguable also that the high unemployment reflects the greater rationalization of Belgian industry, and that it should be set off against the significant increase since 1948 in real wages. But whatever the explanation or justification, the fact remains that unemployment in Belgium has been high in recent years, when compared with most other countries.

Monetary policy, 1950–52

At the time of the outbreak of the Korean war, Belgium was just recovering from the recession of 1949. During the summer of 1950, the industrial unrest connected with political developments had disorganized government finances. The Korean war superimposed the usual outburst of speculative demand, with the result that prices rose very sharply and the balance of payments deteriorated. The resurgence of inflationary pressures, however, was also the product of temporary factors, like the disorganization of government finances in earlier months and the large demand for raw materials in the first phases of industrial recovery. Nevertheless, the discount rate was raised from 3¼ to 3¾ per cent in September 1950, and the central bank issued fresh instructions to the commercial banks to curb credit, particularly consumer installment credit. This type of credit has gained in importance in recent years;

but unlike the United States, Belgium has not made any general attempt to modify the terms of such credit. At the same time, the central bank shortened the maximum currency period of some of the bills it would accept for rediscounting, so as to discourage the financing of specific transactions. Early in 1951, the private credit institutions set up, at the initiative of the bank, a program of voluntary qualitative selection among credit applicants.

By the middle of 1951, Belgium's balance of payments position improved and internal inflationary pressures subsided. Certain consumers' goods industries began to feel the pinch of a slackening of the internal demand. Consequently, the discount rate was lowered to 3½ per cent in July, and to 3¼ per cent in September, i.e., to the pre-Korea level. The most important discount rate increase since the beginning of the Korean war has been that on certified export bills which was raised from 2½ per cent to 3 per cent in September 1950, and to 3¾ per cent in December 1950. It was reduced to 3¼ per cent in 1951, along with other rates. Various steps were taken in the second half of 1951 to reduce the export surplus with EPU countries and the import surplus with the dollar area by modifying the procedure of guaranteeing import and export bills. Thus, the maximum currency period of the bills relating to imports from the EPU area was extended and that relating to imports from the dollar area was shortened, in deciding which bills the bank would certify.

During 1951, Belgium had an over-all surplus on current account of Bfr 11.3 billion. To limit the inflationary significance of such an export surplus, exporters to the EPU area were required in September 1951 to surrender part of their export proceeds to a blocked account. The conditions governing such surrender have been changed frequently since then, but the general provision still remains.

The inflationary impact of an export surplus depends, of course, on the manner in which it is financed. A part of Belgium's export surplus to EPU was financed by Belgian Government credit: In March 1951, the central bank had put an upper limit of approximately Bfr 10 billion to its own part of the credit to EPU. This made it necessary for the Government to find the finance for a part of the credit to EPU by ordinary budgetary devices of taxation or borrowing.

Thus far in 1952, prices have tended to fall, and there has been no significant change in monetary policy. Unemployment has been somewhat higher and industrial production somewhat lower than in the corresponding period of 1951. Bank credit has been slightly greater than in 1951. During the first half of 1952, the Government and official entities were able to borrow Bfr 10 billion in the capital market, against Bfr 2 billion in the corresponding period of 1951.

The foregoing account of the developments in monetary policy in Belgium since the outbreak of the Korean war shows how uneventful these changes have been in comparison with those in other countries. Unlike most other countries, Belgium had developed a well-integrated system of monetary control long before the Korean war and had to do little but make minor adjustments from time to time in response to various temporary disturbances to monetary equilibrium.

MONETARY POLICY IN THE NETHERLANDS

Latent inflation, 1945–49

On the eve of the liberation (May 1945), the Netherlands suffered from acute latent inflation, with the money supply four times that in 1938 and wholesale prices around 80 per cent higher than in prewar years (Table 16). A reliable estimate of the national income at the time

TABLE 16. MONEY SUPPLY, NATIONAL INCOME, AND WHOLESALE PRICES IN THE NETHERLANDS

Date	Money Supply[1]		National Income[2]	Wholesale Prices	Ratio of Money Supply to National Income[1]	
	Million guilders	1945 = 100	(*billion guilders*)	(*1945 = 100*)	Per cent	1938 = 100
	(1)	(2)	(3)	(4)	(5)	(6)
1938.....	2,541	62	5.39	56	46	100
1945.....	4,100	100	....	100	....	....
1946.....	6,193	151	9.93	139	54	117
1947.....	6,954	170	12.07	150	54	117
1948.....	7,332	179	14.23	156	51	111
1949.....	7,552	184	15.96	162	46	100
1950.....	7,081	173	17.72	183	41	89
1951.....	7,292	178	19.35	223	36	78
1952 Aug...	7,871	192	....	214	....	....

[1] Money supply figures refer to the end of the year, but for calculating the ratio of money supply to national income, the twelve months' average of the money supply at the beginning and end of each month has been used for all years except 1938; for 1938, the average of the money supply at the beginning and end of 1938 has been used.

[2] At market prices.

Sources: Columns 1, 3, and 5, Netherlands Bank, *Report for the Year 1951* (Amsterdam, 1952), and International Monetary Fund, *International Financial Statistics*. Column 2, computed from Column 1. Column 4, based on data from *International Financial Statistics*. Column 6, computed from Column 5.

of the liberation cannot be given; but it is believed that the money supply at that time was more than twice the national income, compared with only 40 to 50 per cent of national income during 1934–38.

The total amount of liquid assets had also grown substantially during the war. The internal debt of the Government grew to more than five

times the prewar level, and government securities came to occupy a predominant position in the assets of the commercial banks.[29]

The principal attack on the redundant money supply was made in September 1945, when all currency and deposit money were withdrawn from circulation and blocked. The idea was to reduce the money supply to practically nothing, and to inject new money into the system by a gradual deblocking of old accounts in such a way that means of payments would be made available only to enable people to make their current contributions to production. It was believed that, insofar as the Netherlands retained wartime direct controls over wages and prices, the new money created needed to be no more than the amount required to finance and exchange production at current prices, and that latent inflation should cease to be a problem.

Part of the blocked money was to be released gradually. Part was to be withdrawn permanently from the stream of circulation by floating medium-term and long-term loans, and by capital levies. Unlike the procedure in Belgium, no specific fraction of the blocked money was compulsorily converted into government debt. The subscription to government loans from blocked money was voluntary. In 1946, a large 3 per cent loan with maturity of 50 years and savings certificates with 5-year maturity and 2½ per cent yield were floated. It is not possible to say how much blocked money was absorbed this way, because these loans were subscribed to by means of free money and by the conversion of old Treasury bills as well as by the use of blocked money. Apart from this, the 1946 long-term loan and certificates could be used for payment of certain taxes or levies so that the money locked up in them could return to circulation.

In addition to the money supply, the Netherlands attempted to block other liquid assets, to some extent, as a part of the Currency Rehabilitation Program. Thus, some holders of old Treasury bills had to reinvest in new Treasury bills on maturity or put the proceeds in a blocked account. The long-term 3 per cent government stock floated in 1946 was not transferable until March 1949, and the savings certificates floated at the time had similar conditions attached to them. In addition to demand deposits, time deposits and savings deposits at various institutions were also blocked.

In actual practice, the deblocking of old money and assets together with the creation of new money by the expansion of bank credit led to the re-emergence of some latent inflation in the early postwar years. The government budget was unbalanced, and part of the deficit was

[29] Before the war, loans to the Government by the banks were nearly 60 per cent of their private loans; but at the end of 1945, government loans were seven times the amount of private loans.

financed by means of capital levies and taxes paid out of blocked accounts. The public was also allowed to use, to some extent, blocked accounts for investment purposes, with the result that part of the investment was financed by monetizing old savings rather than from new savings. The money supply in 1946 was greater in relation to national income than in 1938, indicating that some excess of the money supply had re-emerged, despite the monetary purge and the subsequent growth in production and prices. The Netherlands retained, therefore, most of the direct controls (rationing, price controls, etc.) for some years. During 1947–49, the money supply increased moderately, but not so much as production. In 1948, and more so in 1949, various decontrol measures were adopted, and prices rose with the restoration of market forces. In the meanwhile, most of the blocked money and assets had also been released (Table 17). But only in 1949 was the ratio of the money supply

TABLE 17. BLOCKED ACCOUNTS OF THE NETHERLANDS[1]

(In millions of guilders)

Year	Blocked Money (1)	Other (2)	Total (3)
1945	3,058	3,705	6,763
1946	1,613	5,049	6,662
1947	1,432	4,389	5,821
1948	931	2,649	3,580
1949	459	672	1,131
1950	54	347	401
1951	20	90	110

[1] Data refer to end of year.

Sources: Column 1, International Monetary Fund, *International Financial Statistics*. Column 2, computed from Columns 1 and 3. Column 3, Netherlands Bank, *Report for the Year 1951* (Amsterdam, 1952).

to national income restored to the 1938 level and the excess money supply worked off; in achieving this, the blocking procedure had the assistance of rising prices and import surpluses.

Control over bank credit, 1945–49

The success of the monetary purge was, of course, contingent on the control over new money creation, including that by banks. During the period 1945–49, bank credit to business and individuals did expand (Table 18), although not so rapidly as production.

The major control over bank credit was exercised by virtue of one of the provisions of the monetary purge whereby bank credit was not to be given to anyone still holding blocked accounts. Thus, in theory, no one could evade the control over deblocking by obtaining accommodation

TABLE 18. DOMESTIC LOANS AND INVESTMENTS OF COMMERCIAL BANKS IN THE NETHERLANDS[1]

(In millions of guilders)

Date	Government	Official Entities	Business and Individuals	Total
1938[2]	293	24	485	802
1945	3,850	50	489	4,389
1946	3,357	91	686	4,134
1949	3,596	151	1,005	4,752
1950	2,933	121	1,207	4,261
1951	3,021	210	1,475	4,706
1952 Aug.	3,760	159	1,361	5,280

[1] Data refer to end of year or month.
[2] The 1938 figures refer only to the five leading banks.
Source: International Monetary Fund, *International Financial Statistics.*

from banks. The banks were left free to grant small loans for specified purposes, but the prior approval of the Netherlands Bank was necessary for all loans in excess of 50,000 guilders. Apart from this, there was also an informal control over nonessential credit by virtue of the "gentlemen's agreements" between the central bank and the credit institutions.

The discount rate was not changed during the period; it remained at the 1941 level of 2½ per cent. Neither were the banks subject to any reserve requirements.[30] The mainstay of credit control in these years was a direct quantitative control.

As a result of the expansion in bank credit, government loans became relatively less important in the portfolios of banks. But at the end of 1949, they were still much larger than in prewar years—nearly three and one-half times private loans, compared with only 60 per cent of private loans before the war. Thus, even if excess money was worked off by the end of 1949, the elasticity of the credit system was still quite great.

Interest rates, 1945–49

The interest rate weapon was not used vigorously in the early postwar years, and the general tendency was toward low rates. As stated above, the discount rate was not changed during the period. Early in 1946, the interest to be allowed to depositors with the State Post Office Savings Bank was reduced from 2.64 to 2.16 per cent. The State prescribed maximum rates of interest that municipalities and local govern-

[30] However, insofar as the provisions concerning the blocking or nonnegotiability of assets as a part of the currency rehabilitation decrees applied to the assets of the banks, this was tantamount to compulsory reserve requirements. But it is difficult to assess the significance of this factor.

ments could pay. The offer rate for Treasury bills was reduced in June 1947, from 1 per cent to ¾ per cent for 3-month bills, and by a corresponding margin for other bills. The Agent of the Ministry of Finance generally sold unlimited amounts of Treasury bills at these rates, irrespective of the needs of the Government. It is not necessary to go into all the refunding operations in connection with medium-term and long-term loans; suffice it to say that with the general progress of reconstruction there was some tendency toward offering slightly better yields. But on the whole, the rise in the long-term bond yield was moderate (Table 19).

TABLE 19. INTEREST RATES IN THE NETHERLANDS[1]

(In per cent)

Date	Government Bond Yield		Industrial Bond Yield	Treasury Bill Rate	Call Money Rate
	2½ per cent irredeemables	3 per cent, 21-year loan, 1937			
	(1)	(2)	(3)	(4)	(5)
1938	2.87	....	....	0.21	0.26
1946	2.99	2.96	3.20	1.20	0.95
1947	3.06	3.05	3.15	1.35	0.99
1948	3.10	3.13	3.18	1.30	0.90
1949	3.14	3.20	3.11	1.27	1.03
1950	3.14	3.21	3.11	1.40	1.07
1951	3.44	3.85	3.98	1.36	1.03
1952 Aug	3.34	3.68	3.98	.85	.58

[1] Annual figures are averages of monthly data.

Sources: Columns 1, 3, 4, and 5, International Monetary Fund, *International Financial Statistics*. Column 2, Netherlands Central Bureau of Statistics, *Statistical Yearbook of the Netherlands, 1947–50* (The Hague, 1951) and *Monthly Bulletin of Statistics*.

The relatively low rates of interest, however, were not the product of any active support to government securities. The central bank did not buy such securities in an effort to support their prices. The low rates were the product of other policies, e.g., the practice of restricting the negotiability of certain assets for some time, the acceptance of blocked money in payment of taxes, the prevalence of direct controls, repressed inflation, and an abundance of liquid assets inherited from the war which were not fully consolidated into long-term debt.

At the end of 1949, the total amount of liquid assets in the hands of the public (i.e., excluding banks) was large. The near-money assets[31] held by the public amounted to nearly one fifth of the national income;

[31] The near-money assets include short-term Treasury securities, tax certificates, freely available balances at the Treasury, cash advances and day-to-day loans to municipalities, etc., and time deposits. For a description of these items see the Netherlands Bank, *Report for the Year 1951* (Amsterdam, 1952).

and although precise comparisons with earlier years are not possible, it is clear that the inflationary potential in the economy was by no means small.

The situation at that time may be summarized as follows: The excess money supply had been worked off, but the amount of near-money assets and the elasticity of the credit system were still large. Apart from the qualitative control over bank credit, there was very little check on the ability of the banking system to shift from government to private loans. In the meanwhile, considerable progress had been made toward eliminating current inflationary pressures, particularly during 1949. The improvement in the budgetary position, combined with large foreign assistance, and the recovery of production were responsible for this outcome. But insofar as the internal equilibrium was dependent on the large import surplus made possible by foreign aid, it cannot be taken as a perfectly satisfactory one.

Inflationary pressures and monetary policy, 1950–52

During 1950 and the first half of 1951, the expansion of bank credit and the use of privately owned near-money assets did lead to the emergence of active inflationary pressures. The fillip to demand was given first by the liberalization of trade with the OEEC countries, and second, and more so, by the Korean war. For the first time since 1947, bank credit expanded faster than production. The Netherlands balance of payments took a sharp adverse turn; and after the autumn of 1950, the Government introduced various monetary measures to head off inflation at home. At the same time, the balance of payments deficit played a vital role in absorbing the excess liquidity of the general public (and to a lesser extent of banks). Despite the large expansion of bank credit during 1950 and the first half of 1951, the external deficit helped to reduce the money supply and near-money assets held by the public. In June 1951, these two types of liquid resources amounted to only one half of the national income, against nearly two thirds of the national income at the end of 1949. In September 1950, the discount rate of the Netherlands Bank was raised for the first time since 1941—from 2½ to 3 per cent. This increase, however, was not effective in view of the ability of the banks to shift from government to private loans. The attack on bank liquidity came with the quantitative reserve requirements introduced in January 1951. The required reserves were both in cash and short-term Treasury obligations. This was in contrast to the U.S. policy, but in line with the practice in Belgium. The required reserves were different for different types of banks. The large commercial banks reporting regularly to the central bank had to keep reserves in

specified assets to the extent of 90 per cent of such assets at the base date plus (or minus) two thirds of the increase (or decrease) in deposits since that date.[32] As a counterpart to this measure, the provision requiring the central bank's approval for loans in excess of 50,000 guilders was dropped. The direct and discretionary supervision of hundreds of loans was thus replaced by a simple and uniform discipline for each group of banks.

The rapid expansion of bank loans in early 1951 and the compulsory reserve requirements made it necessary for the banks to have recourse to the Netherlands Bank. Advantage was taken of this situation in April 1951, when the discount rate was raised from 3 to 4 per cent. Unlike the increase in September 1950, the 1951 increase was effective in the sense that it increased the cost of borrowing to the banks and thus obliged them to charge higher rates to customers.[33]

The government rates of interest also showed an upward trend in the market, particularly in 1951. Some steps were taken to issue new securities at higher interest rates in response to this development. Thus, in April 1951, and again in July 1951, the maximum interest rates for loans floated by local authorities were increased. There was no interference in the bond market, and the 25-year State loan raised in April 1951 was at the slightly higher yield of 3½ per cent. The offer rates on Treasury bills, however, were not raised, in sharp contrast to what happened in the United Kingdom; the compulsory reserve requirements in the Netherlands would have made such a move much less significant than it was in the United Kingdom.

By the middle of 1951, the monetary measures outlined above had begun to yield results and the balance of payments situation took a favorable turn. Apart from the restrictive credit policy, a number of other measures,[34] together with the fall in international prices, were responsible for the remarkable improvement in the economic position, and it would be difficult to sift the impact of different policy measures. The extent of the improvement may be shown by a few illustrations, however: After increasing by nearly 36 per cent between June 1950 and

[32] Even these banks were given the option of choosing a credit ceiling which limited their credits to industry to an amount 5 per cent higher than the level reached on the base date. Different provisions had to be made for smaller banks and agrarian banks, thus illustrating the need for complex arrangements in a scheme of reserve requirements.

[33] Another step, of a somewhat different nature, was taken in May 1951, when forward purchases of foreign exchange were made subject to a 25 per cent advance payment in guilders. This added to the pressure on bank reserves insofar as importers had to seek credit at an earlier stage. The provision was withdrawn in the second half of the year.

[34] For example, the reduction of subsidies and other government expenditures, reduction of the building program, acquiescence in a cut in real wages by the trade unions, higher taxes, and some tightening of import restrictions.

May 1951, commercial bank credit to business and individuals actually declined by 6 per cent in the next twelve months. The corresponding changes in wholesale prices were a rise of 29 per cent in the first period and a fall of 4 per cent in the second. In January-May 1952, the ratio of exports to imports was 94 per cent, compared with 67 per cent in the corresponding period of 1951. The net gold and foreign exchange holdings of the Netherlands Bank increased from an equivalent of US$235 million in July 1951 to US$788 million in July 1952. The response to the loans floated by municipalities and provinces was greater than in earlier years.

Relaxation of credit restrictions, 1952

In the wake of the general improvement in the balance of payments situation, some steps were taken in 1952 for liberalizing credit conditions. The discount rate was reduced from 4 to 3½ per cent in January, and again to 3 per cent in August. In April, the compulsory reserve requirements were lifted, with the result that the only credit control left in operation was the informal one of general supervision exercised by the central bank. However, early in 1952, an act was passed whereby the central bank was given well-defined but extensive powers of control over bank credit.[35] Prior to the passing of this act, the central bank's powers in this field were generally exercised by virtue of certain emergency powers acquired in 1945 at the time of the currency reform. The 1952 act, however, is to cease to have effect on January 1, 1955, unless experience warrants its continuation.

In May and August 1952, the offer rates on short-term Treasury paper were lowered. Thus, the selling rate for 3-month Treasury paper was reduced from ¾ to ⅜ per cent, and for 1-year paper from 1½ to 1 per cent. The large export surplus naturally tended to lower interest rates, and the commercial banks showed a readiness to absorb Treasury paper. From July 1951 to July 1952 (13 months), the commercial bank portfolio of government paper increased by nearly 900 million guilders. It would seem from this experience of the Netherlands that prompt anti-inflationary measures can be successful without raising interest rates to too high a level or for too long a period. The promptness with which the tighter money policy of 1950–51 has been reversed in 1952 has shown the monetary policy in the Netherlands to be flexible in both directions.

[35] These powers include prohibiting certain loans, putting a limit to certain types of loans, prescribing reserve requirements in the form of different assets in relation to deposits or parts of them, etc. However, the central bank is enjoined to consult credit institutions before exercising these powers.

The increase in foreign exchange reserves has naturally added to the liquidity of the economy. The banks' holdings of government assets in relation to private loans are greater now than they were a year ago, and the public, too, holds more liquid assets. In July 1952, the money supply was approximately 15 per cent higher than a year earlier. But the foreign exchange reserves of the country had increased even faster and provided a better cushion against any flight from liquid assets.