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CHAPTER 9

THE NETHERLANDS

1. Policy Instruments

MONETARY POLICY

The Netherlands Bank, the central bank in the Netherlands, has gradually changed in character. Some acts affecting the Bank's structure, powers, and functions have been adopted since World War II. The Bank's constitution and the definition of its functions are incorporated primarily in legislation enacted in 1948.

The Netherlands Bank is almost entirely independent of the government. Its Board of Managers and its President are appointed by the Crown for periods of seven years. Representatives of the government participate in meetings of the larger Bank Council in an advisory capacity. The Finance Minister may formally give instructions to the Board of Managers; the latter is entitled, in this case, to present its objections to the Crown, which then has to make public both the arguments and counter-arguments and the final decisions it reaches. In effect, no such instructions have ever been given since the 1948 Act, and the Bank may thus be regarded as independent of the Ministry of Finance.

Banking institutions in the Netherlands vary widely in functions and structure. The greater part of banking transactions are conducted by regular commercial banks. These are highly concentrated: a few large banks, each with a large number of branches (up to 200 or 250), play a dominant role. The assets of the four largest banks amount to some 60 per cent of the total assets of commercial banks, and those of the thirty-three "representative" banks to 95 per cent. The high measure of concentration and the ease of communication may be important reasons for the tendency of the Netherlands Bank to act as much as possible by agreement with the banks rather than by directives and coercion; these factors also contribute to the high level of mutual understanding which is found between the Bank and the commercial banks.

The Netherlands Bank employs primarily the three classical instruments of monetary policy: changes in the discount rate, changes in minimum-reserve ratios of the banks, and open-market operations. To a lesser extent, it also applies quantitative credit controls.

The Discount Rate. Lending by the Netherlands Bank to commercial banks takes three forms. First, it may be done by discounting at the Bank. Eligible for discounting is short-term paper, such as Treasury bills or commercial bills of not over 105 days to maturity. More often, banks will resort to the second possibility, which is receiving advances on current account against the pledge of collateral—usually of Treasury bills. The rate charged by the Bank on these advances is one-half of 1 per cent above the discount rate. Finally, the Bank may buy Treasury paper from the banks with a repurchase stipulation. Technically, the Netherlands Bank regards such a transaction as the equivalent of a lending operation rather than an open-market operation.

In general, lending by the Bank to the commercial banks is very slight, and so are the absolute fluctuations in the amount of lending. Borrowing from the Bank is considered an emergency act, intended for the shortest duration, rather than one intended to add reserves to the borrowing bank for any length of time.

Changes in the discount rate thus have a very slight impact on the size of the banking system's reserves, since the amount of borrowing from the Bank is generally insignificant in relation to the size of reserves. However, the discount rate is considered an important yardstick. Changes in it are supposed to reflect the intentions of the Netherlands Bank, thus giving a directive to the commercial banks with regard to the tightening or relaxation of credit supply. A conventional semi-automatic relationship exists between the discount rate and the commercial banks' interest on their lending. Usually, the rate charged on lending to prime borrowers from the banks is about 2 per cent above the discount rate, although it could not fall below the level of 5 per cent.

Minimum-Reserve Ratios. Minimum-reserve policy was, most often, the major tool of the Netherlands Bank after 1954. Although the Bank was empowered by law to impose minimum-reserve ratios on the banking system, it preferred to do so by agreement. In February 1954, a gentlemen's agreement was concluded between the Bank and some forty commercial banks, which in their aggregate constituted the overwhelming majority of the banking system. According to the agreement, the participating banks were required to maintain balances at the Netherlands Bank at a ratio to their deposits determined by the Bank. Subject to this requirement were all sight and time deposits, excluding saving deposits and deposits in foreign currency. The ratio is the same for all types of banks and deposits covered by the agreement. It was not, however, to exceed 15 per cent, and the Netherlands Bank undertook not to raise it above 10 per cent without first selling Treasury paper in the open market on a large scale. In fact, the ratio has always stayed within the 10 per cent limit. The lower limit of fluctuations in the ratio was 4 per cent for most of the time. During 1963, however, it was reduced to zero and has stayed at that level since; that is, the minimum-reserve ratio has not been used as a policy instrument since mid-1963. Before that, on the other hand, changes in the ratio had been rather frequent.

The gentlemen's agreement was concluded at a time when commercial banks were extremely liquid due to an influx of foreign exchange. Market rates of three-month Treasury bills came down to as low as .4 per cent, and the Netherlands Bank was not equipped to eliminate liquidity to the desired extent by open-market operations. The reason for the highly liquid position of the banks is well reflected in the agreement itself. Given its importance, this part of the agreement deserves to be quoted:

> In view of the desire of the Netherlands Bank that the commercial banks should make a contribution towards financing the greatly increased stock of gold and foreign exchange the undersigned [name of bank] is prepared to enter into a gentlemen's agreement with the Netherlands Bank, directed to the maintenance at the Netherlands Bank of a cash reserve adaptable in relation to the movement in the stock of gold and foreign exchange.[1]

This relationship was explained by the Netherlands Bank in terms of equity:

> . . . the central bank must be supplied with . . . resources for the purpose of holding [stock of gold and foreign exchange]. Unless it is desired that these resources shall be provided by the Treasury, that is to say at the cost of the taxpayer, they will have to come from the banks—which in our modern national economy provide a part of the money in circulation, just as much as the Netherlands Bank does, and enjoy the resulting benefits in

[1] Preamble to the gentlemen's agreement, *Netherlands Bank Report,* 1953, p. 176.

the form of interest. It is no more than reasonable that, as against these benefits, the banks should also contribute towards providing the means for carrying the international cover for the country's money.[2]

The exceptions to the rule of behavior indicated in these passages are also explained in terms of equity. Suppose credit supply increases thanks to some autonomous factor. As a result of this expansion, external reserves fall. There would be no need under these circumstances to increase commercial bank profits by increasing their lending capacity, since the banks already had their credit raised at the beginning of the process. For such reasons, the Netherlands Bank stated that the relationship of the reserve ratio to gold and foreign-exchange reserves should not be entirely rigid, but that the Bank would investigate the reasons for the movements of foreign-exchange reserves in each case.

Open-Market Operations. Until 1952, open-market operations were conducted by the Treasury. In July 1952, an agreement between the Treasury and the Netherlands Bank specified that the former would limit itself to issuing new Treasury paper when old paper falls due, and since that time open-market operations have been conducted by the Netherlands Bank. But this does not rule out other financial operations by the Treasury, which, as will be noted later, have the same effect as open-market operations.

Although the Bank is empowered to deal in a variety of papers, its stock—and its operations—have been restricted to Treasury paper. These are mainly Treasury bonds with a maturity of one to five years. The stock of this paper held by the Bank at the beginning of its operations, in 1952, was later replenished by converting part of the Treasury's book debt to the Bank into Treasury paper, as well as by the transfer—against Treasury paper—of claims on the EPU from the Bank to the Treasury.

Open-market operations are not transacted with commercial banks. They are handled by special brokers, who buy and sell both for their clients and on their own account, financing the latter transactions by borrowing on the call-money market and, on occasion, by resorting to rediscounting at the Netherlands Bank. While the greater part of the Treasury paper which serves as instrument in open-market operations is held by banking institutions, a substantial proportion is also held by others, such as institutional investors, corporations, or households.

Open-market operations appear most of the time to be periodic

[2] *Ibid.*, p. 79.

rather than continuous: they are usually concentrated within short periods and not conducted gradually in small amounts.

Quantitative Controls. The Netherlands Bank is entitled by law to impose quantitative (as well as qualitative) restrictions on credit. In 1954, the Bank also concluded a gentlemen's agreement with the banks to that effect. The provisions of this agreement were not implemented; but on one occasion, between the fall of 1957 and the spring of 1958, the Bank tried to impose credit ceilings by charging penalty rates on the amounts by which the Bank's lending to commercial banks exceeded specified ceilings. In 1960, a new gentlemen's agreement was concluded by which quotas may be imposed on each bank's credit according to a uniform formula relating the size of credit to its size at some base period. A commercial bank which exceeds its quota would have to deposit at the Netherlands Bank, interest-free, an amount equal to the excess. In July 1961, the banks were directed under the stipulations of this agreement not to let the size of their lending exceed that of the base period (which was either the last quarter of 1960 or the corresponding month of the previous year) by more than 15 per cent. After that date, the banks were allowed to increase lending by .5 per cent per month. Since August 1962, it was found that this restriction was not effective; the actual size of credit was below the size permitted. The restrictions were removed altogether in January 1963. In September 1963, however, they were renewed and remained in effect until the end of the period investigated. The average amount of each bank's credit during the first half of 1963 was taken as the base. By the end of September 1963, the amount of the banks' lending should not have exceeded the base amount by more than 5 per cent; from that month on, expansions of credit by 1 per cent or .5 per cent per month were allowed, for a total of 3 per cent (of the base amount) during the last quarter of 1963, 9 per cent in 1964, and 10 per cent in 1965. In 1966, credit expansion was restricted to 8 per cent of the outstanding amount at the end of 1965; this rate represents a total, however, of a few imposed ceilings, which became gradually more restrictive.

In the last few years of the period, the Netherlands Bank thus appears to have used quantitative restrictions of credit to a significant extent. The Bank has also, on a few occasions, exercised its authority to restrict certain types of credit.

Occasionally, the Bank tried to prevent what it considered an excessive credit expansion by "moral suasion." Due to the close relationship between the Bank and commercial banks, this may have had some effect. However, in general, the Bank did not rely on this means as an important policy instrument.

FISCAL AND DEBT POLICY

The central government's budget consists of an ordinary, and an extraordinary, section. The latter always shows a large deficit—its expenditures may be as much as five or six times larger than its revenues. In the ordinary budget, on the other hand, a surplus is normally maintained. Most of the time, the surplus in the ordinary budget is smaller than the deficit in the extraordinary budget, so that total expenditures exceed total revenues. The difference is usually financed by borrowing from the public.

The central government maintains a strong influence on local budgets. The major source of the municipalities' normal revenue is transfers from the central government, which assigns 12 per cent of its tax revenues to the Municipalities Fund and, in addition, finances major local expenditures such as the costs of police and education. Borrowing by the municipalities in the form of general quantitative ceilings, ceilings on the rate of interest, and requirements for ad hoc approval of borrowing by the government.

The Treasury's cash balances are held exclusively at the Netherlands Bank, while those of local authorities are held outside it. According to the 1948 Bank Act, the Treasury is entitled to automatic advances from the Bank within fl. 150 million; beyond that, current advances to the Treasury may be given at the Bank's discretion. In effect, such advances have been negligible, usually nonexistent. The Bank extends credit to the government, instead, by purchasing Treasury bills. Variations in the size of this credit too are usually not considerable. In the earlier years of the period the Bank held a substantial book claim on the Treasury. From early 1952, this was gradually diminished until it disappeared completely by the beginning of 1958. On the other hand, in the earlier part of the period, the government maintained "special deposits" at the Bank, representing the counterpart funds of foreign aid. These grew considerably until early 1952, but declined continuously from then on until they too disappeared in early 1958.

Thus, until 1958, the movement in the government's net indebtedness to the Netherlands Bank was dominated by the movement of the Treasury's book debt and "special deposits," and to some extent by the movement of Treasury bills. Since then, the major sources of variations in the size of this indebtedness are the Treasury bills and, even more often, the government's deposits. The latter are a highly fluctuating category: weekly or monthly changes in them are very large in comparison with long-term movements.

Besides financing budgetary deficits, the government very often conducts financial transactions with the public for the exclusive purpose of affecting monetary conditions. It may, for instance, borrow from the public and deposit the proceeds at the Netherlands Bank. Changes in the government's net indebtedness to the Bank thus reflect not only the cash balance of its budgetary operations but also its financial transactions with the public. To an extent, therefore, the government conducts financial operations which have the same effect as, and may be regarded as a substitute for, open-market operations of the Bank.

2. Statistical Analysis

Movements of external reserves in the Netherlands do not give evidence of any cyclical pattern. An attempt to divide the whole period into cycles and use cyclical analysis does not, therefore, seem to be very useful. However, though a strong upward trend of reserves is apparent, a substantial number of episodes in which reserves declined, or rose with particular rapidity, make the analysis of policy reactions to balance-of-payments disturbances possible.

In Table 9-1, the period is divided into subperiods according to the fluctuations of the balance of payments. This division is based, until 1958, on the movements of external reserves and, from 1958 onward, on the IMF data of surpluses and deficits in the balance of payments, which series almost invariably gives results similar to those provided by the series of external reserves.

It may be seen that the discount rate is changed most often in the direction that would be required for balance-of-payments adjustment. Only in one subperiod—during 1950—is an opposite movement found; while in a few other cases the discount rate remained stable when balance-of-payments adjustment would have required some change. This relationship is further examined in Table 9-2, which gives the direction of balance-of-payments movements during all quarters in which changes were made in the discount rate. It appears, again, that discount rate changes were consistent with balance-of-payments requirements. This is true particularly with regard to all the changes made before 1962. Out of fourteen such discount rate movements, only one was in the opposite direction to the requirements of adjustment; three took place when no balance-of-payments adjustment was required; and ten could be explained by the requirements for balance-of-payments adjustment.

To help test this association still further, Table 9-2 also gives the movements of alternative target variables. It appears that the price stability target performs, in general, about as well as the balance-of-payments adjustment target—and better from 1962 on. On the basis of this evidence, one could not assert that the discount rate was used exclusively for balance-of-payments adjustment. It is evident that the requirements of the two targets—balance-of-payments equilibrium and price stability—coincided most of the time, so that the discount rate changes were consistent with both. This coincidence of the two targets may be expected in a country whose share in world trade is not very large, and the share of whose trade in its own economy is substantial. Changes in conditions abroad are likely to have only small impact on the trade of such a country; while inflationary or deflationary pressures within the economy, which are likely to be reflected in price movements, may be expected to have an immediate and substantial effect on the country's trade balance.

Movements of the other two targets examined in Table 9-2—industrial production and employment—do not reveal any consistent pattern in relation to discount rate changes. It appears from the evidence of this table that these two were not usually regarded as the targets at the service of which the discount rate is employed.

Column 3 of Table 9-1 shows the changes in another short-term interest rate, which is often quoted in the Netherlands: the rate (yield) of three-month Treasury bills. As may be seen from Chart 9-1, the movements of this rate and of the discount rate are highly correlated. It is thus not surprising that Table 9-1 shows this variable also moving in a way which is, by and large, consistent with the requirements for balance-of-payments adjustment.

In column 4 of Table 9-1, movements of the minimum-reserve ratio are described for 1954 through 1963, the period during which this instrument was used. It appears that, throughout these years, this variable was changed mostly in a direction opposite to the requirements of

TABLE 9-1

THE NETHERLANDS: MOVEMENTS OF POLICY VARIABLES DURING SUBPERIODS OF IMBALANCES

Subperiod	*External Reserves* (1)	*Discount Rate* (2)	*Market Rate for Three-Month Treasury Bills* (3)	*Reserve Ratio Requirements* (4)	*Open-Market Operations (net)* (5)	*Netherlands Bank Claims on Commercial Banks* (6)
I 1950 – IV 1950	rise	– raised	* stable	a	a	n.a.
IV 1950 – III 1951	fall	+ raised	– falls	a	a	– rise
III 1951 – II 1954	rise	+ lowered	+ falls	a	– sales	– fall
II 1954 – I 1956	stable	stable	rises	stable	no trend	stable
I 1956 – III 1957	fall	+ raised	+ rises	– lowered	* no operations	– rise
III 1957 – I 1959	rise	+ lowered	+ falls	– raised	– sales	– fall
I 1959 – IV 1959	stable	raised	rises	lowered	purchases	0
IV 1959 – IV 1961	rise	* stable	+ falls	– raised	* no trend	0
IV 1961 – I 1963	stable	no trend	no trend	lowered	purchases	0
I 1963 – IV 1963	rise	* stable	* stable	+ lowered	* no operations	0
IV 1963 – II 1964	fall	+ raised	+ rises	a	+ sales	0
II 1964 – IV 1964	rise	* stable	* stable	a	* no operations	0
IV 1964 – IV 1966	stable	raised	rises	a	no operations	rise

Subperiod	*Netherlands Bank Net Claims on Government* (7)	*Netherlands Bank Total Domestic Claims* (8)	*Commercial Bank Lending to Public (quarterly rate of increase, per cent)* (9)	*Money Supply (quarterly rate of increase, per cent)* (10)	*"Primary and Secondary Liquidity" (quarterly rate of increase, per cent)* (11)	*Budgetary Balance (quarterly average, in millions of guilders)* (12)
I 1950 – IV 1950	– fall	n.a.	(*) 4.6	(–) –2.0	n.a.	(–) +109
IV 1950 – III 1951	* no trend	– rise	(–) 7.2	(+) –.4	n.a.	(*) +116
III 1951 – II 1954	– fall	– fall	(–) 2.9	(+) 2.2	n.a.	(*) +119
II 1954 – I 1956	rise	rise	4.2	1.1	.9	–11
I 1956 – III 1957	– rise	– rise	(+) 3.0	(+) –.8	(+) .4	(–) –52
III 1957 – I 1959	– fall	– fall	(–) –1.2	(+) 2.3	(+) 3.0	(*) –50
I 1959 – IV 1959	no trend	no trend	4.7	.5	1.0	+225
IV 1959 – IV 1961	– fall	– fall	(*) 4.4	(+) 1.8	(+) 1.5	(+) +11
IV 1961 – I 1963	no trend	rise	3.3	1.9	2.2	–122
I 1963 – IV 1963	– fall	– fall	(*) 3.2	(*) 2.4	(–) .2	(–) –79
IV 1963 – II 1964	– rise	– rise	(–) 5.8	(*) 1.9	(–) 1.8	(–) –159
II 1964 – IV 1964	– fall	– fall	(–) 1.8	(*) 2.1	(+) 3.1	(+) –213
IV 1964 – IV 1966	rise	rise	3.3	2.1	2.3	–355

NOTE: For explanation of symbols, see Table 8-3. n.a. = not available. a = not applicable.

TABLE 9-2

THE NETHERLANDS: CHANGES IN THE DISCOUNT RATE AND POSITION OF TARGET VARIABLES

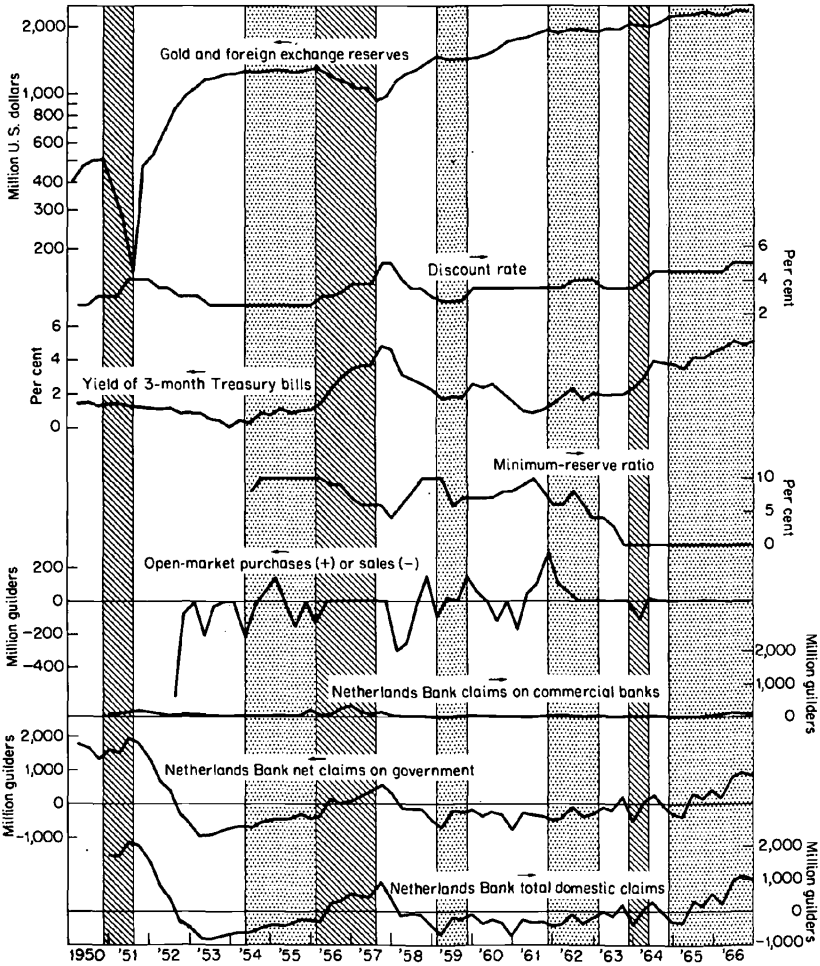
Discount Rate	*External Reserves* (*1*)	*Cost-of-Living Index (compared with trend)* (*2*)	*Industrial Production (rate of increase)* (*3*)	*Unemployment* (*4*)
Raised:				
III 1950	* stable	* stable	+ high	+ high
II 1951	+ fall	+ rises	– low	* stable
I 1956	* stable	* stable	* normal	* stable
IV 1956	+ fall	* stable	* normal	* stable
III 1957	+ fall	+ rises	– low	– rises
IV 1959	* stable	+ rises	+ high	+ falls
II 1962	– rise	+ rises	* normal	* stable
I 1964	* stable	+ rises	* normal	* stable
II 1964	* stable	+ rises	* normal	* stable
II 1966	* stable	+ rises	* normal	* stable
Lowered:				
I 1952	+ rise	– rises	+ low	+ rises
III 1952	+ rise	+ falls	+ low	+ rises
II 1953	+ rise	+ falls	– high	– falls
III 1956	– fall	* stable	* normal	– falls
I 1958	+ rise	+ falls	+ low	+ rises
II 1958	+ rise	+ falls	+ low	+ rises
IV 1958	+ rise	+ falls	– high	+ high
I 1959	+ rise	+ falls	* normal	– falls
I 1963	* stable	– rises	+ low	* stable

NOTE: For explanation of symbols, see Table 8-3.

balance-of-payments adjustment. This relationship is examined in greater detail in Table 9-3, which lists all the quarters in which the reserve ratio was changed.[3] The impression which emerges from this

[3] Excluded from this table are the changes through the first half of 1954. When reserve requirements were first introduced, by the gentlemen's agreement of February 1954, the rate was determined at 5 per cent, and was then increased each month by 1 per cent, until it reached the level of 10 per cent. These increases, however, should be regarded as part of the gradual process of establishing a starting ratio of 10 per cent.

CHART 9-1
THE NETHERLANDS: TIME SERIES OF SELECTED VARIABLES



NOTE: Diagonal-line areas represent period of downward imbalances; gray areas represent stability; white areas represent upward imbalances.

CHART 9-1 (*Concluded*)

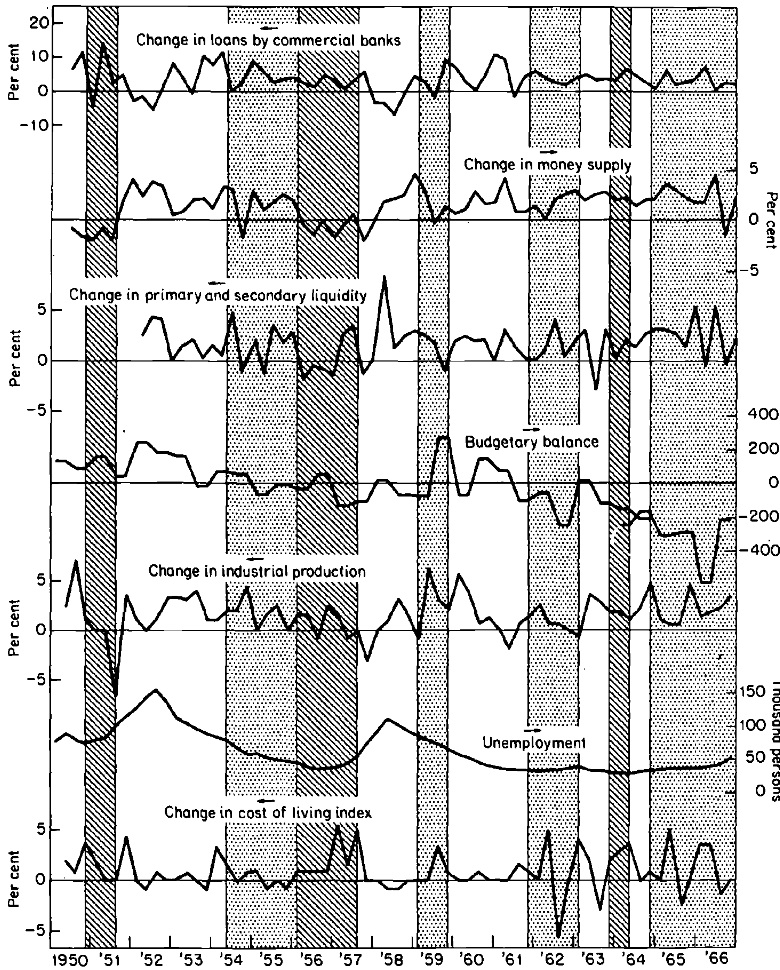


table is very clear: the minimum-reserve ratio was changed, with only a few exceptions, in the direction opposite to balance-of-payments requirements. This happened in thirteen of eighteen quarters in which the ratio was changed, while the opposite happened only four times. The association is even more striking for the period prior to mid-1961. This relationship might have been expected, of course, from the very justification given to concluding the gentlemen's agreement, which

TABLE 9-3

THE NETHERLANDS: CHANGES IN THE MINIMUM-RESERVE RATIO AND POSITION OF TARGET VARIABLES

Quarter	*Minimum-Reserve Ratio* (1)	*External Reserves* (2)	*Cost-of-Living Index (compared with trend)* (3)	*Industrial Production (rate of increase)* (4)	*Unemployment* (5)
II 1956	lowered	– fall	* stable	* normal	– falls
IV 1956	lowered	– fall	* stable	* normal	* stable
I 1957	lowered	– fall	– rises	* normal	* stable
IV 1957	lowered	+ rise	– rises	+ low	+ rises
I 1958	raised	– rise	– falls	– low	– rises
II 1958	raised	– rise	– falls	– low	– rises
III 1958	raised	– rise	– falls	* normal	– rises
II 1959	lowered	– fall	+ falls	– high	+ high
III 1960	raised	– rise	– falls	+ high	+ falls
I 1961	raised	– rise	– falls	* normal	+ falls
II 1961	raised	– rise	– falls	– low	* stable
III 1961	lowered	+ rise	* stable	– low	* stable
IV 1961	lowered	+ rise	– rises	* normal	* stable
II 1962	raised	– rise	+ rises	* normal	* stable
III 1962	lowered	* stable	+ falls	* normal	* stable
IV 1962	lowered	– fall	+ falls	+ low	* stable
II 1963	lowered	+ rise	– rises	+ low	* stable
III 1963	lowered	– fall	+ falls	– high	* stable

NOTE: For explanation of symbols, see Table 8-3.

established and governed the instrument under consideration, and the mode of operations which the agreement specified. As will be remembered, the agreement stated that movements of the minimum-reserve ratio should, as a rule, be positively correlated with movements of foreign-exchange reserves: when the latter rise, the ratio should be raised, and vice versa. This, of course, is a policy which works in the opposite direction from what balance-of-payments adjustment would require. The agreement did not call for a strict adherence to this rule, and the Netherlands Bank was always careful to point this out. Yet, throughout the 1950's, this was virtually an airtight rule.[4] Only in the 1960's did this practice change, and exceptions to it became as frequent as observance of it.

The competing targets are also observed in Table 9-3. It appears that the minimum-reserve ratio was definitely not used to maintain price stability; the ratio was changed in the direction opposite, as a rule, to that which price stability would require—a relationship which must be attributed to the correlation between price movements and imbalances of payments noted earlier. Once more, this seems to change during the 1960's. From 1962 on (to the effective abolition of the use of this instrument toward the end of 1963), changes in the reserve ratio were mostly consistent with the requirements of price stability, and might be explained by this target. On the other hand, no consistent relationship appears between changes in the minimum-reserve ratio, on the one hand, and either the level of unemployment or the level of industrial production, on the other. It appears quite safe to conclude that, like the discount rate, the minimum-reserve ratio was not generally employed either to serve the ends of high industrial production or high employment.

The third monetary instrument, open-market operations, is shown in column 5 of Table 9-1. It appears to move less often in the direction required for balance-of-payments adjustment than it does in the opposite direction; but, over all, the relation between this instrument and the movements of external reserves seems to be much weaker than that between either the discount rate or the minimum-reserve ratio and movements of external reserves. Open-market operations were taken, we recall, rather sporadically. They seemed to have been intended most of the time to "stabilize the market"—that is, to help maintain an existing level of interest rates. Apparently, they were considered a secondary tool rather than a major one and were not universally employed in pursuit of one of the major global targets.

Commercial-bank borrowing from the Netherlands Bank is described in column 6 of Table 9-1. It will be recalled that, as a rule, the amount

[4] Just a single exception is found, in the last quarter of 1957: while external reserves were rising, the minimum-reserve ratio was lowered, rather than raised, as was the normal practice. This, however, may perhaps be ascribed to a time lag and imperfections of knowledge and measurement. The ratio was lowered in October 1957; external reserves were falling until September 1957, and then started rising only just before the ratio was lowered.

of this borrowing was very small; hence changes in it were of no quantitative significance either. In only two instances did the amount of borrowing rise to considerable proportions—during the two discernible episodes of substantial declines of external reserves in 1951 and 1956–67. In both instances it dropped back to its normal low level in the subsequent periods of rising external reserves. These, of course, are movements in a direction opposite to the requirements of balance-of-payments adjustment. It should also be noted that they are in a direction opposite to that which movements of the discount rate should engender: that is, in both episodes, commercial-bank borrowing increased when the discount rate was lowered.

The net indebtedness of the government to the Netherlands Bank (excluding changes due to open-market operations) is illustrated next, in column 7 of Table 9-1. It appears immediately that its movements were usually in a direction opposite to the requirements of balance-of-payments adjustment: the indebtedness rises, most often, when external reserves fall, and falls when reserves rise. A glance at column 12, which describes the budgetary balance, will show that this pattern is quite similar to that of the movements of the budgetary balance, but is even more consistent in its negative relationship to the balance of payments. This greater consistency must be attributed to the government's financial transactions with the public—in distinction to the "real" transactions which find expression in the budget. In other words, the government must have conducted its equivalent of open-market operations—borrowing from the public and depositing at the central bank, or repaying (lending to) the public by drawing on deposits at the Bank—in a direction opposite to balance-of-payments requirements. To some extent, this seems to have been due to public initiative. When external reserves fall and reduce the economy's liquidity, banks (and other potential buyers) are less likely to increase their lending to the government (i.e., to buy Treasury bills or bonds), and more likely to reduce the amount of these assets held by them; and the opposite is true when the economy's liquidity increases by an accumulation of external reserves.

Total domestic claims of the Netherlands Bank, the combination of the last three elements (Bank lending to the commercial banks, Bank acquisition of government paper in the open market, and other net lending of the Bank to the government), is illustrated in column 8 of Table 9-1. The net claim on the government was usually the main component of this category and accounted for most of the changes in it. Since it (as well as Bank lending to the banks) moved in the opposite direction to the requirements of balance-of-payments adjustment, it is, of course, not surprising to find that so did the combined category. Indeed, this pattern was even more consistent for the total than for each of its components: only a single exception—the period from mid-1953 to mid-1954—appears to violate this inverse relationship.

Lending by commercial banks to their customers, described in column 9 of Table 9-1, appears to move in the disadjusting direction. It rises faster than usual when external reserves fall, and falls (or rises only much less than the trend) when reserves rise. This inverse relationship seems to be clearly indicated, although there are a few exceptions to it.

Quite the opposite pattern applies to changes in money supply, as is shown in column 10 of Table 9-1. It moves almost invariably in the direction which balance-of-payments adjustment would require. Money supply and external reserves appear clearly to rise together and fall together. Essentially, this is true also with regard to another measure of the economy's liquidity, to which much attention is given in the monetary analysis of the Netherlands Bank: the magnitude of "primary and secondary liquidity," [5] which is described in column 11 of Table 9-1. Like money supply, which is itself, of course, a major component (roughly two-thirds) of "primary and secondary liquidity," this moves most of the time in the direction indicated by the need for balance-of-payments adjustment, that is, in the same direction as external reserves.

Budgetary policy is described in column 12 of Table 9-1. As has been mentioned before, it appears to run most often in a direction contrary to the requirements of balance-of-payments adjustment. When external reserves rise, the government's excess demand falls (that is, its deficit turns to surplus, or becomes smaller in absolute magnitude, or a surplus gets bigger); and when reserves fall, the government's excess demand rises. This pattern has its exceptions, but they are few.

To test the budgetary policy further, Table 9-4 analyzes the episodes in which the budget was clearly either in a surplus or in a deficit position. Movements of external reserves are given in column 2 of the table. It appears, as before, that the budgetary balance behaved

[5] The "primary" liquidity is money supply, defined in the conventional way. "Secondary" liquidity includes: (1) claims on the government; (2) claims on the local authorities; and (3) claims on money-creating institutions, i.e., time deposits and day-to-day loans, foreign-currency balances of residents, and balances in savings accounts.

TABLE 9-4

THE NETHERLANDS: THE BUDGETARY BALANCE AND POSITION OF TARGET VARIABLES

Period	*Budgetary Balance* (*1*)	*External Reserves* (*2*)	*Cost-of-Living Index (compared with trend)* (*3*)	*Industrial Production (rate of increase)* (*4*)	*Unemployment* (*5*)
I 1950 – II 1953	surplus	– rise	* stable	* normal	– rises
IV 1956 – IV 1957	deficit	– fall	– rises	+ low	+ rises
II 1960 – II 1961	surplus	– rise	– falls	– low	+ falls
II 1961 – IV 1962	deficit	* rise slightly	* stable	* normal	* stable
II 1963 – IV 1966	deficit	+ rise	* stable	– high	* stable

NOTE: For explanation of symbols, see Table 8-3.

most of the time—but not consistently—contrary to what balance-of-payments adjustment would require. The price stability target does not appear to be generally served by budgetary policy, which seems to be "neutral" to these targets. In general, budgetary imbalances (surpluses or deficits) were rather small and apparently played only a minor role in pursuit of short-term targets. During one episode only, from the beginning of the period surveyed to the middle of 1953, were budgetary surpluses large and consistent. As can be seen from Table 9-4, none of the targets represented there could explain the surpluses during the period of the early 1950's. External reserves were rising rapidly. Price increases were normal, that is, not exceeding their long-term trend, or even slightly below it. Industrial production was also rising at its normal rate, while employment was even falling. The large surpluses must be explained either by other targets or as an accidental phenomenon. One explanation sometimes suggested is that budgetary policy was aimed at encouraging long-term growth by accumulating capital through government saving. Another possibility is that the surpluses resulted, as in Germany, from the planning of military expenditures which did not in fact materialize.

Another interesting episode of budgetary imbalances is that of 1957.

During that year, there was an obvious contradiction between the requirements of the targets of balance-of-payments equilibrium and price stability, on the one hand, and employment and output on the other. In this year changes in circumstances abroad were, apparently, particularly important and must have played a significant part in the Netherlands' balance-of-payments situation. While most often, as has been pointed out before, balance-of-payments deficits were accompanied by domestic expansions, this episode was an exception. External reserves were falling and prices were rising rapidly, while unemployment was rising and industrial production falling. The budgetary policy during those years appears to be expansive, as would be required by the targets of employment and production. Monetary policy, on the other hand, if judged by the movements of money supply and interest rates, was restrictive—as would be required by the balance-of-payments equilibrium and price stability targets.

3. Summary and Interpretation

From the preceding analysis it seems clear that, at least during the 1950's, monetary policy was strongly associated with the balance of payments—although in a somewhat intricate manner, which, on the surface, appears to involve contradictory tendencies.

A point of major importance is the extremely high share of foreign trade in the economy of the Netherlands. Foreign trade in proportion to national income is higher in the Netherlands than anywhere in Europe (save Luxembourg, which for economic purposes may in effect be considered a region of Belgium). Any change of a given proportion in exports or imports carries thus a heavier weight in the Dutch economy than in most other countries. Since the ratio of external reserves to trade is not particularly low in the Netherlands, the large trade means also a large size of reserves in relation to income or to money supply. A given proportional change in reserves thus has a particularly large monetary impact there.

Any imbalance of payments has thus a very large automatic impact on the economy of the Netherlands in comparison with other countries; and this inflationary or deflationary impact seems to have been judged too large by the Netherlands' policy makers—that is, the impact, by itself, gives too much weight to balance-of-payments adjustment and too little to other targets. Therefore, policy has been directed at counteracting this automatic impact. Thus, the discretionary monetary policy runs counter to the requirements of balance-of-payments adjustment. However, the counter-action is not complete, so that some adjustment is still allowed to take place.

Let us consider an imbalance in which external reserves fall. The typical pattern of monetary policy would be as follows: the fall of reserves is, by itself, a factor which tends to diminish money supply and commercial bank reserves. The lending capacity of banks is thus reduced—a factor which, if not offset, would tend to lead to a further reduction of money supply through reduced lending. At the same time, demand for credit by the banks' customers probably tends to rise, due to the drain on their liquidity caused by an imbalance in transactions with the outside world.[6] In effect, commercial-bank credit to the public increases in such instances more often than it diminishes. This is accommodated by replenishing the lending capacity of banks in three principal ways. First, the minimum-reserve ratio of the commercial banks is reduced; this is quantitatively of major importance. Second—and this is normally much less significant—banks increase their borrowing from the Netherlands Bank, despite an increase in the Bank's discount rate. Third, net indebtedness of the government to the Netherlands Bank increases, thus raising the liquidity of the economy in general and bank reserves in particular. To some extent, as has been mentioned earlier, this is an automatic reaction: lending by the public (including commercial banks) to the government—in the form mainly of acquisition of Treasury bills and bonds—falls, thus automatically raising the government's indebtedness to the central bank. In other words, some substitution takes place: the commercial banks increase their lending to private customers at the expense of their lending to the government. Yet even when an increase in commercial-bank credit occurs, and is combined with the increased indebtedness of the government to the Bank, the expansionary impact on money supply is not sufficient to offset fully the initial effect of the decline in external reserves. In the end, the amount of money does go down from its level in the period prior to the disturbance (or, more often, rises significantly less than the trend). Interest rates thus go up—as indicated, for instance, by the yields of short-term Treasury bills. The discount rate is raised, presumably for three interrelated purposes: one is to prevent

[6] It could also happen, however, that the increased demand for credit preceded the balance-of-payments deficit, and was the cause of it.

the banks from increasing their borrowing from the Netherlands Bank to an even larger extent than they actually do; the second is to "follow the market"—namely, some market rates (such as the yield of Treasury bills) which rise through the aforementioned process of diminished liquidity and reduced demand for the bills; and third—and this is probably a most important consideration—to indicate the trend of policy. The discount rate is regarded in the Netherlands, as in many other places, as a major weather vane of the government's intentions. Moreover, interest rates on commercial-bank lending are traditionally tied to the discount rate. As mentioned before, the rates on prime loans are usually 1.5 to 2 per cent above the discount rate; they move with the latter—as do other interest rates—in a semi-automatic way. Since in the final analysis money supply is diminished and interest rates should rise, the increase of the discount rate is thus called for.

This resolves the apparent contradiction between the movements of the two major monetary instruments employed—the minimum-reserve ratio and the discount rate. Minimum-reserve ratios are reduced in order to offset the automatic effect of a fall in external reserves. Yet this is only a mitigation and not a full counteraction. Eventually, money supply would fall and interest rates should rise—hence the increase of the discount rate. Whether this whole pattern of monetary measures should be called "restrictive" or the opposite is an open question. Likewise, it may be debated whether this should be called an "adherence" to the classical "rules of the game" or its opposite. According to the definition suggested and defended earlier in this study, this should indeed be regarded a compliance with the "rules of the game."

Similarly, when external reserves rise, the process runs in the opposite direction. In general, no asymmetry shows up in the conduct of monetary policy in the Netherlands. It appears to be equally consistent in adhering to the pattern described here, both in the course of balance-of-payments surpluses and deficits.

Compliance with this pattern was almost uniform during the 1950's, but from 1961 or 1962, this no longer holds true. From this point to the end of the period surveyed, the level of external reserves was rather stable in comparison with earlier years. Fluctuations in the level were rather weak; and the existing slight upward trend was apparently regarded as a desirable feature, not strong enough to be considered a disturbance. Monetary policy during these later years appears, thus, to be less concerned with balance-of-payments developments. It is now employed in the service of other targets as well—to a large extent, probably, the target of price stability.[7] It is important to note that the change in pattern came at a period of generally rising—albeit slowly—external reserves. An element of asymmetry may be indicated by this; however, it would be necessary to contrast a long period of slightly and gradually declining reserves with this period in order to check this indication, and such cannot be found.

Budgetary policy was oriented in a direction contrary to the requirements of balance-of-payments adjustment more often than it was in the direction which adjustment would require. This may be consistent with the hypothesis that automatic income effects of the trade balance were considered more than sufficient to achieve the necessary adjustment, so that some counteraction was called for. In view of the generally small size of either budgetary surpluses or deficits, however, a conclusion that budgetary policy was indeed fashioned in this way may not be justified. It seems that this policy was usually intended to be "neutral," not only in relation to balance-of-payments developments, but also with regard to other major targets. It would be even less correct to conclude that the combined pattern of monetary-fiscal policy adhered to the well-known policy mix, assigning monetary policy to the pursuance of balance-of-payments equilibrium and fiscal policy for "domestic" targets. Only one episode—1956–57—might be explained in this way. In this case, restrictive monetary policy could have been intended to adjust the balance of payments and expansionary fiscal policy, to counteract unemployment and slack production. In the two other episodes of significant budgetary deficits, increases in the discount rate are again found; but on these occasions the opposite movements could not be explained by the requirements of balance-of-payments equilibrium, on the one hand, and domestic targets on the other.

The rate-of-exchange instrument was used on only one occasion, March 1961, when the rate was lowered (and the currency appreciated) by 5 per cent. During the preceding period, external reserves

[7] This impression is supported by the observation of quantitative credit restrictions. Their introduction in 1961 came at a time of rising external reserves; their relaxation during 1962–63, at a time of stable reserves; and their reintroduction, in 1963, again at a period of accumulating reserves. This would be consistent with the pattern of the 1950's, of a counteracting policy. Yet the quantitative restrictions since 1963 do not seem to be affected by the balance-of-payments position. On the other hand, these years are characterized by substantial price rises, which could explain the introduction and preservation of credit restrictions.

were rising, and the economy was showing inflationary tendencies. This, indeed, is a combination in which currency appreciation would be a proper measure. However, the development of reserves and prices prior to the revaluation does not seem to be radically different in size or other circumstances than it was on many other occasions. The use of currency revaluation in this instance may thus presumably be explained, as, indeed, was insistently argued by policy makers when the measure was taken, only by the fact of the similar German measure. Since Germany is a major trading partner of the Netherlands, the appreciation of the mark could be expected to intensify strongly the trends of rising external reserves and rising prices in the Netherlands. Speculation could have contributed to it even further. It was thus not so much actual developments as the anticipations of strongly intensified trends which led to the Dutch measure. The fact that a change in the exchange rate could be represented as following the lead of another country must have also been a strong contributing factor. An additional explanation could be the realization that a long-term accumulation of external reserves may be an indication of fundamental disequilibrium. Despite this episode, it is obvious that during the period surveyed changing the exchange rate was not considered a proper instrument for balance-of-payments adjustment in the Netherlands.

References

Amsterdam-Rotterdam Bank N.V., *Economic Quarterly Review,* Amsterdam, September, 1924–66.

De Nederlandsche Bank N.V., *Report,* annual, Amsterdam, 1913–66.

Holtrop, M. W., "Method of Monetary Analysis Used by De Nederlandsche Bank," *International Monetary Fund Staff Papers,* Vol. 5 (February, 1957), pp. 303–16.

Organization for Economic Cooperation and Development, *Economic Surveys: The Netherlands,* annual, Paris.

Reports for 1953–61 issued for Benelux by the Organization for European Economic Cooperation.

CHAPTER 10 SWEDEN

1. Policy Instruments

MONETARY POLICY

The Sveriges Riksbank, Sweden's central bank, is legally independent of the government, and is directly responsible to the parliament. Most members of the Board of Directors (except its chairman, who is a government appointee) are nominated by—and are members of—the parliament, which provides general guidance to the Riksbank's operations. In the actual conduct of policy, a large measure of cooperation exists between the Riksbank and the government. Yet, the former has been known to have on occasion acted independently, even without prior consultation with the government.

The discount rate is the most significant of the monetary instruments employed by the Riksbank. Left almost untouched until 1955, the discount rate has been changed regularly (about once a year, on the average) since the beginning of that year. As in most other countries, these changes had little direct impact on the amount of commercial-bank borrowing from the Riksbank. Although not restricted to emergency situations, this borrowing was nevertheless quite limited and was used primarily as a device for smoothing out short-term fluctuations rather than as a long-term source of funds. In recent years the average amount of this borrowing has increased, but changes in the discount rate still do not play a major role in determining the size of borrowing. During a few recent periods (mid-1961 to early 1962; early 1964 to mid-1966), penalty rates were imposed on borrowings beyond given quotas—a measure which apparently did have a large impact on the amount of borrowing. In general, however, changes in the discount rate were important primarily as a major signal of changes in over-all policy. Rates of interest, both on bank deposits and on commercial-bank lending, tended to change with the discount rate, although the association was not rigid or automatic, and on a few occasions the order of change was reversed: the discount rate followed market rates rather than the other way around.

In addition to discount policy, the Riksbank uses a variety of other monetary instruments. Open-market operations are undertaken on occasion, but not continuously. The government, which regularly sells large amounts of its securities in the market, in fact carries out most of the open-market operations by its debt policy. However, the National Debt Office, which carries out these operations, works in close coordination with the Riksbank. Minimum-liquidity ratios are also regulated by the Riksbank. Actual formal changes in the ratios have been rare, and most of the time the minimum requirements have been of little relevance. But at the time of its introduction in 1952, the system of minimum ratios was used as a restrictive measure. Later, on a few occasions, the system was again used for this purpose, but more by agreement with the banks and by persuasion than by the strict legal enforcement of the schedule of liquidity ratios. Another and probably more important instrument was the direct regulation by the Riksbank of the amount of commercial-bank lending. A few times this took the form of "moral suasion." From mid-1955 to mid-1957, however, banks were actually instructed to reduce their credit by specific amounts (gradually, the reduction reached 5 per cent of the amount outstanding in mid-1955). The use of these various instruments, though by no means unimportant, was sporadic and often cannot be quantified. As a rule, they were applied in conjunction with changes in the discount rate, though not necessarily at precisely the same time. Movements of the discount rate may thus be taken to indicate the thrust of other policy instruments as well.

BUDGETARY POLICY

Sweden, unlike many other countries, does not aim at a regular balance in the government's budget. It is assumed that a rough balance in the budget should be attained over a number of years, but that for each year, or for even longer periods, the budget may yield a deficit or surplus. In other words, the budgetary balance—as well as specific components of the budget—is regarded as an important instrument in the conduct of short-term policy. The declared task of this policy is to counteract cycles in domestic economic activity.

In order to facilitate the fulfillment of this task, several devices have been introduced to make budgetary performance more flexible than in most other countries. Thus, the amount of expenditures authorized in the budget is only a ceiling, and the government may use its discretion in deciding whether or not to spend it fully. The government has an inventory of public work projects, which may be activated or terminated on a few months' notice when the need arises. Another important device is the "investment fund," a semibudgetary instrument that allows considerable tax concessions to firms that refrain from investment in boom times, depositing their allocations to the fund in a blocked account, while spending for investment in slack times. It is relevant to note that the time schedule for the operation of this device —that is, the decision on when is the proper time to save and when to spend—is determined by the government's Labor Market Board; the use of this tool is thus directly associated with the employment situation.

As has been noted, the government borrows on a large scale in the market. It also borrows from the Riksbank, which faces no legal limitations on the amount or form of its lending to the government.

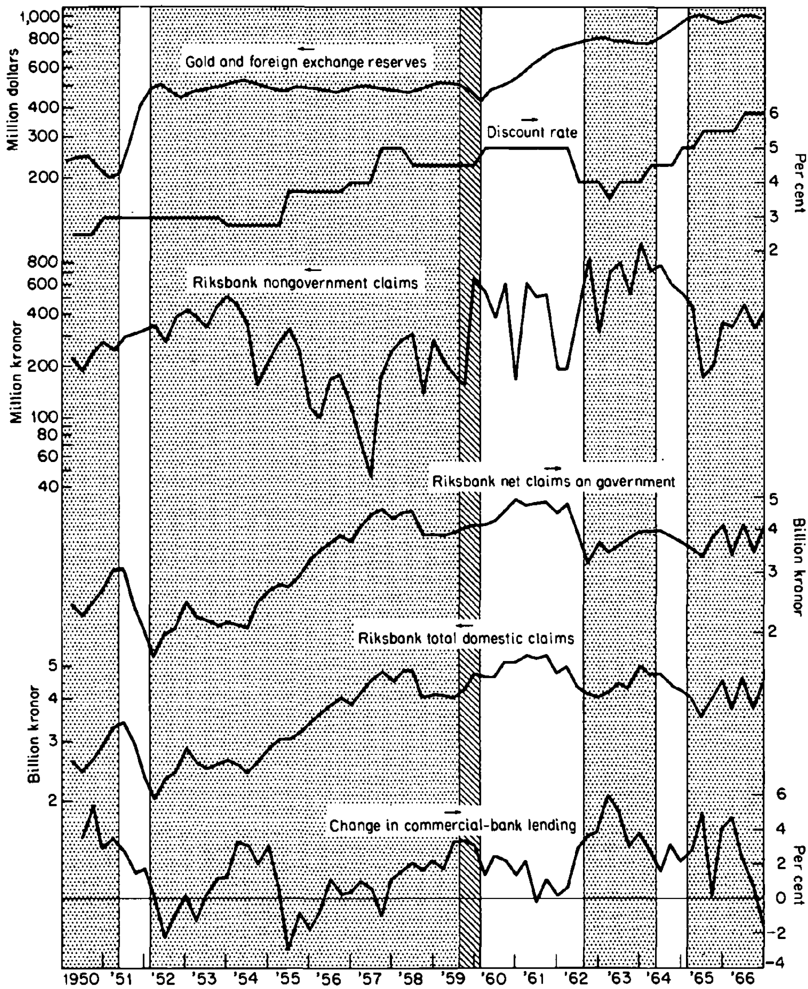
2. Statistical Analysis

The postwar record of Sweden is marked by an almost complete absence of balance-of-payments deficits of long duration or significant size. The only exception is the period between the third quarter of 1959 and the first quarter of 1960; but even this brief deficit was not very substantial in proportion to the country's trade, or even to its customarily quite small external reserves. Except for this episode, a graph of the level of the country's external reserves (as in Chart 10-1) has the form of long plateaus, interrupted by a few brief and quite steep upward steps. The first—and steepest—rise occurs from mid-1951 to early 1952, when reserves (which had been almost stable since 1947) more than doubled. The second upward movement took place between early 1960 and mid-1962, when reserves again nearly doubled; the last episode, a brief one, occurred between mid-1964 and early 1965.

A statistical analysis of the pattern of policy responses to balance-of-payments developments in Sweden must therefore be very limited in the number of observations covered. The summary presented in Table

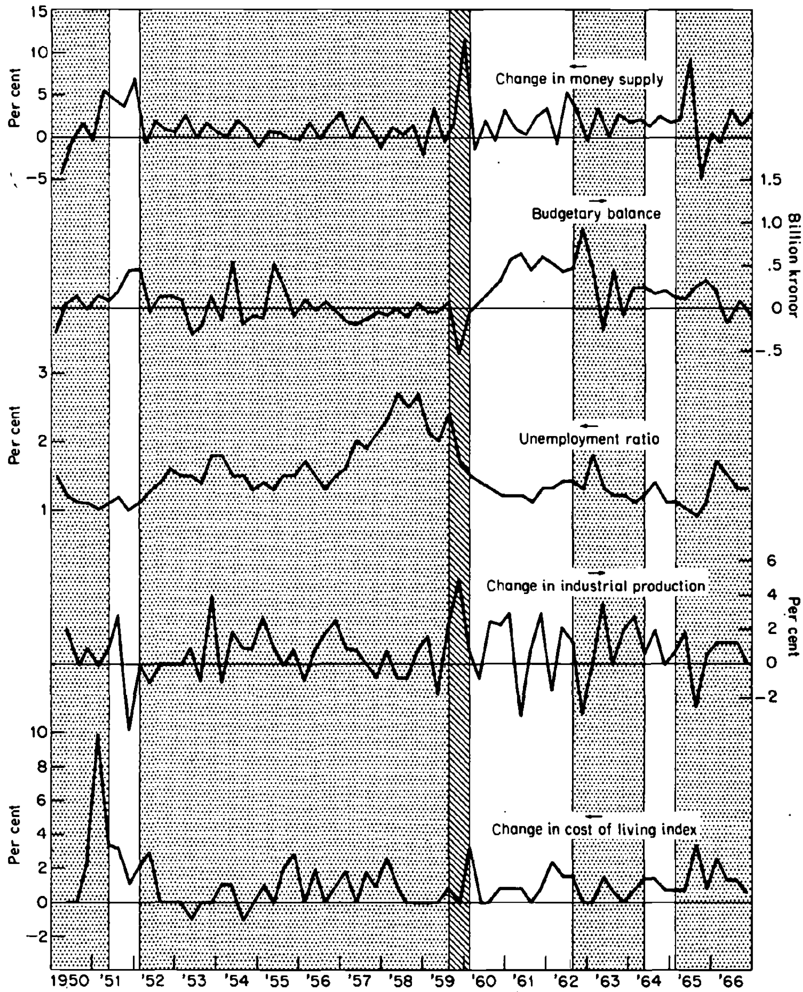
CHART 10-1

SWEDEN: TIME SERIES OF SELECTED VARIABLES



10-1 is confined to the three periods of surplus just noted, the single deficit episode of 1959–60, and several longer periods of stability. Starting with the discount rate (column 2), it seems clear that its movements do not conform to an assumption which would make them dependent on the balance-of-payments position. The discount rate is found to be stable in the first surplus period; almost stable in the sec-

CHART 10-1 (*Concluded*)



NOTE: Diagonal-line areas represent period of downward imbalances; gray areas represent stability; white areas represent upward imbalances.

ond—except for a lowering of the rate in mid-1962, toward the end of this relatively long period; and rising during the third. A response to the balance-of-payments position, however, would require the lowering of the rate during these periods. In the deficit period of III 1959–I 1960 the discount rate was raised, as balance-of-payments adjustment would require.

TABLE 10-1

SWEDEN: MOVEMENTS OF POLICY VARIABLES DURING SUBPERIODS OF IMBALANCES

Subperiod	*External Reserves*	*Discount Rate*	*Riksbank Claims on Commercial Banks*	*Riksbank Net Claims on Government*	*Commercial-Bank Lending to Public (quarterly rate of increase, per cent)*	*Money Supply (quarterly rate of increase, per cent)*	*Budgetary Balance (quarterly average, in millions of kronor)*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I 1950 – II 1951	stable	raised	rise slightly	rise	3.7	2.2	+17
II 1951 – I 1952	rise sharply	* stable	* rise slightly	– fall	(–) 1.1	(+) 3.3	(–) +426
I 1952 – III 1959	stable	raised	fluctuate	rise	.8	.8	+10
III 1959 – I 1960	fall	+ raised	– rise sharply	* stable	(–) 2.3	(–) 5.1	(–) –180
I 1960 – III 1962	rise	* mostly stable	* fluctuate	– fall	(–) 1.6	(*) 2.0	(–) +425
III 1962 – II 1964	stable	fluctuates	fluctuate	rise	3.7	1.7	+293
II 1964 – I 1965	rise	– raised	* fall slightly	* stable	(–) 2.7	(*) 2.1	(+) +166
I 1965 – IV 1966	stable	raised	fluctuate	fluctuate	2.2	1.6	+96

NOTE: For explanation of symbols, see Table 8-3.

Similar conclusions hold for all the other monetary variables—the Riksbank's nongovernment claims (column 3); the Bank's net claim on the government (column 4); the Bank's total domestic claims (not represented in Table 10-1, but very similar to the Bank's claim on the government, which is the chief component of the Bank's total domestic claims); the rate of expansion of commercial-bank credit (column 5); and the rate of expansion of money supply (column 6). In the examination of all these variables, the same pattern is repeated: when balance-of-payments movements (predominantly upward) take place, the variables either show no response (remaining stable) or move in the direction opposite to that which balance-of-payments adjustment would require.

Examination of the budgetary balance (column 7) leads to a similar conclusion with regard to this major fiscal variable. By and large, it moves in the direction opposite to that which the target of balanced external transactions would call for and in no single instance is a movement in the adjusting direction found. It is therefore safe to conclude that the budgetary instrument was not used in Sweden as a means of maintaining stability in the balance of payments.

It thus appears that none of the monetary and fiscal instruments examined were used for balance-of-payments adjustment. Tables 10-2, 10-3, and 10-4 are intended to investigate the possible relation of three major variables—the discount rate, the credit supply and the budgetary balance, respectively—to major economic targets. This may indicate whether the lack of use of these instruments for balance-of-payments adjustment might have been due to the assignment of the instruments to other targets, whose claims conflicted with those of the balance of payments. The only conclusion which emerges at all firmly from observation of these tables is that the budgetary balance changed regularly in a manner consistent with the target of high employment (column 4 in Table 10-4). This conforms, of course, with the announced target of budgetary policy, which is supposed to follow an anticyclical pattern where the "cycle" refers mainly to the employment situation. The two monetary variables (the discount rate and the rate of expansion of money supply) give some indication—as may be seen from column (5) in Tables 10-2 and 10-3, respectively—that they were intended to be used to maintain price stability. But the evidence is not very firm: the pattern is not entirely consistent, and the variations in price movements between periods of "high" and of "low" price increases are not very large—usually the differences are only in the order of 1 to 1.5

TABLE 10-2

SWEDEN: THE DISCOUNT RATE AND POSITION OF TARGET VARIABLES

Subperiod	*Discount Rate* (*1*)	*External Reserves* (*2*)	*Industrial Production (rate of increase)* (*3*)	*Level of Unemployment* (*4*)	*Rise of Cost-of-Living Index (compared with trend)* (*5*)
I 1950 – I 1955	stable	rise, stable	normal	fluctuates	slow (since 1952)
I 1955 – III 1957	raised	* stable	* normal	– rises	+ fast
III 1957 – I 1962	stable	fluctuate, rising trend	normal	falls	normal
I 1962 – I 1963	lowered	+ rise, stable	+ low	+ rises slightly	* normal
I 1963 – II 1966	raised	– rise	+ high	+ low	+ fast

NOTE: For explanation of symbols, see Table 8-3.

TABLE 10-3

SWEDEN: CREDIT SUPPLY AND POSITION OF TARGET VARIABLES

Subperiod	*Credit Supply (rate of expansion)* (1)	*External Reserves* (2)	*Industrial Production (rate of increase)* (3)	*Level of Unemployment* (4)	*Rise of Cost-of-Living Index (compared with trend)* (5)
II 1950 – IV 1951	high	* mostly stable	+ low	– low	– fast
IV 1951 – IV 1953	low (negative)	* stable	– low	– rises	– slow
IV 1953 – IV 1954	high	* stable	* normal	– falls	+ slow
IV 1954 – IV 1957	low (negative)	* stable	* normal	– rises	+ fast
IV 1957 – I 1961	high	* fluctuate	– high	+ high	* normal
I 1961 – I 1962	low	– rise	– low	+ falls	+ fast
I 1962 – II 1966	high	* mostly stable	* normal	– low	– fast

NOTE: For explanation of symbols, see Table 8-3.

TABLE 10-4

SWEDEN: THE BUDGETARY BALANCE AND POSITION OF TARGET VARIABLES

Subperiod	*Budgetary Balance* (*1*)	*External Reserves* (2)	*Industrial Production (rate of increase)* (*3*)	*Level of Unemployment* (*4*)	*Rise of Cost-of-Living Index (compared with trend)* (*5*)
I 1950 – I 1953	surplus	– rise	– low	+ low	+ fast
I 1953 – IV 1956	nil	* stable	– high	+ moderate	+ slow
IV 1956 – I 1960	deficit	* stable	+ normal	+ high	– fast
I 1960 – I 1963	large surplus	– rise	* normal	+ low	– slow
I 1963 – I 1966	moderate surplus	– rise	+ high	+ low	– fast
I 1966 – IV 1966	small deficit	* stable	* normal	+ moderate	– fast

NOTE: For explanation of symbols, see Table 8-3.

per cent per annum. It also seems that monetary policy was not tied to price developments until the mid-1950's; during these earlier years the discount rate was practically stable, while credit supply—which did fluctuate substantially—does not seem to have responded to the needs of price stability. It is possible, though, that the pattern of changes in credit supply during these earlier years was motivated by price developments, but with a quite considerable time lag.

3. Summary and Interpretation

Sweden entered the 1950's with an unusually low level of external reserves in relation to its volume of international trade. From 1950 to the end of the period surveyed, the absolute level of reserves increased about fourfold in a few relatively short episodes interrupting long periods of stable reserves. Yet this increase only more or less kept pace with the rising volume of the country's trade. Such an increase of reserves could well have been regarded as desirable, rather than as a disturbance which should be counteracted. Yet, the stability of the absolute size of reserves during most of the period was also apparently not considered a source of anxiety and a disturbance calling for adjustment through restrictive policies. Thus balance-of-payments developments appear not to have played a role in determining broad policy patterns in Sweden. Major policy instruments were reserved for the achievement and maintenance of other primary targets. Budgetary policy, which appears to be more flexible than in most other countries, was regarded as the major instrument to employ in counteracting cyclical fluctuations in the domestic economy, and, in particular, cycles in the labor market. Monetary policy does not appear to have followed the same consistent pattern. It seems likely that, part of the time, monetary instruments were used in the same way as fiscal policy, that is, for countercyclical adjustment. At other times—either by coordinated design or, not implausibly, due to a high degree of independence of the central bank—monetary policy must have been intended to prevent substantial price increases.

Only a single episode of an actual absolute fall of reserves of some significance may be distinguished: it took place during late 1959 and early 1960. During this time, the target of high employment appears to have been given preference in budgetary policy over the target of balance-of-payments stability. Unemployment at that time was still high, although declining, and the budget recorded an unusually large deficit. Indications are less clear-cut for the monetary instruments. The discount rate, the major instrument and the directional signal of monetary policy, was raised, as balance-of-payments equilibrium would require. In addition, "recommended" liquidity ratios of commercial banks were raised. But commercial bank borrowing from the central bank increased markedly, despite the higher discount rate—as is quite usual under similar circumstances in other countries; and both commercial-bank credit and money supply increased at a fast rate. The evidence of this episode is thus inconclusive in the monetary sphere. Needless to say, this review cannot suggest what the country's policy patterns, in both the monetary and the budgetary areas, would have been, had the country realized periods of substantial balance-of-payments deficits rather than a succession of periods of stability and of surplus. It is thus relevant to point out that the apparent disregard of the needs of balance-of-payments adjustment is confined to a period in which balance-of-payments deficits were, by and large, absent.

References

Nordisk Udredningsserie, *Yearbook of Nordic Statistics,* annual, Stockholm, 1962–66.

Organization for Economic Cooperation and Development, *Economic Surveys: Sweden,* annual, Paris. Reports for 1954–61 issued by the Organization for European Economic Cooperation.

Statistiska Centralbyrån, *Allman Månadsstatistik* (Monthly Digest of Swedish Statistics), Stockholm, 1963–66.

Stockholms Enskilda Bank, *Some Data about Sweden,* Stockholm, 1962.

Svenska Handelsbanken, *Economic Survey,* annual, Stockholm, 1951–66.

Sveriges Riksbank, *Yearbook,* annual, Stockholm, 1909–66.

Thunholm, L. E., "Monetary Policy in Sweden," *Banca Nazionale del Lavoro Quarterly Review,* Vol. 5 (October–December, 1952), pp. 195–200.