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CAPITAL CONTROLS--AN INSTRUMENT FOR REGULATING INTERNATIONAL CAPITAL FLOWS?

by

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In the last few years international mobility of capital has been growing simultaneously with the Euro-dollar market. Politicians and economists therefore have come to pay special attention to monetary policy, which has been increasingly eluding national control. Central banks and governments have tried to regulate "disturbing" international capital flows--in most cases without much success, at least in the long run. While during the period 1969-1971 there had seemed to be a tendency toward a more flexible exchange rate system--in whatever form--it became clear in 1971 that politicians everywhere considered fixed exchange rates indispensable and intended to regulate or control interest-equalizing capital movements. The eventual extent of international "disturbances" of domestic monetary policies can be judged by the volume of foreign exchange which was taken in by the central banks, largely against their will. The large increase in monetary reserves affected above all those countries whose monetary policies were mainly oriented toward stability. From 1965 to 1969 the foreign exchange reserves of all IMF countries rose by a total of $9 billion, in 1970 by $6 billion, in 1971 by $25 billion, and in 1972 the increase will hardly be any smaller than in 1971. But the problem was even more serious than one might assume on the basis of these global figures. Thus, in 1970 and 1971 almost one third of the increase in international reserves was absorbed by West Germany. A similarly large share went to Japan, although not because of restrictive monetary policies as was the case in West Germany. But also in France, Switzerland, and other countries net capital inflows reached such dimensions that it was hardly possible to maintain domestic stability.

Under the Bretton Woods system, each member country was basically entitled to regulate capital flows. During the fifties, it seemed possible to reduce such controls without jeopardizing the autonomy of national economic policies in any decisive way. But since the creation of the Euro-dollar market, the establishment and growth of multinational firms, and the strengthening of international links between banks, monetary capital has become extremely mobile--even across national borders. Capital flows are determined by the desire for profit maximization, which means that--to the extent that they are not of a purely speculative nature--they respond to net interest or profit rate differentials (after tax) on the alternative markets[1]. But if, in a world with growing mobility of capital, we wish to maintain both fixed exchange rates and national economic policies--different from the international average--we are faced with the following dilemma: We can have fixed exchange rates only if our economic policy is determined by balance of payments considerations, or we can pursue a domestically oriented economic policy only if we let the exchange rate float.

It has been tried to resolve this conflict by restricting the freedom of international movements of services and capital. Since restrictions on the movement of services are considered to cause a higher welfare loss than restrictions on capital movements, and since it is assumed that either measure can be used to restore the autonomy of domestic economic policy, capital controls are considered the lesser--albeit necessary--evil. But as autonomy of economic policy can also be achieved by means of flexible exchange rates or occasional parity changes and transitional floats, we can do away with capital controls--all the more so since, under a system of flexible rates, the advantage of national autonomy in economic policy matters does not have to be "paid for" with the disadvantage of allocation distortions resulting from capital controls[2], and since international price relationships can be rendered ineffective by flexible exchange rates whereas they remain valid under a system of capital controls.

From the point of view of an optimum allocation of the productive factor capital it appears desirable to do away with capital controls even if existing financial markets are imperfect and distorted by market interventions. Just as a retaliatory customs duty does not encourage international trade, mutually escalating capital controls tend to isolate financial markets rather than improve the exchange of the factor capital. In general, however, the problem of the optimum allocation of this factor does not appear to be urgent, which is why political decisions on this question--like nearly all decisions on structural matters--are frequently postponed. On the other hand, questions concerning the business cycle or the balance of payments are urgent and force the authorities to make decisions. The brief decision-making periods--imposed by massive foreign exchange flows--increase the willingness of central banks and governments to adopt measures which are politically opportune, i.e., which do not formally violate international agreements and appear to be relatively favorable to the best organized groups in the country concerned--usually the suppliers. Thus an alliance of individual interests in Europe has led to a network of capital controls rather than to a uniform European capital market.

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[1]The net interest rate differential is the difference between interest rates on the domestic market and those on the corresponding alternative markets, adjusted for the swap rate.

[2]See H.G. Johnson, Theoretical Problems of the International Monetary System. "Pakistan Development Review", Karachi, 1967, pp. 10 et seq.

In the following some measures to regulate the mobility of capital will be analyzed. The first part contains a survey of the theoretical possibilities to regulate international capital movements. A comparative table shows the various measures which have already been taken by France, Switzerland, and West Germany. Finally, the effectiveness of different German capital controls will be examined.

Measures to curb international capital movements

Basically, there are the following means--some of which have already been applied in one form or another--of regulating international capital movements:

Flexible exchange rates;

A policy mix, with monetary policy aiming at balance-of-payments adjustment and fiscal policy pursuing domestic goals;

A long-term interest rate based on domestic objectives and a short-term rate determined by foreign trade and payments considerations;

Recycling of capital inflows;

Changes in costs or earnings in the case of international capital transactions;

requirement of prior approval for, or a ban on, international money and capital transactions.

While the first alternative is not considered politically feasible, the second, third, and fourth have already been tested--largely without success. Neither the policy mix proposed by Mundell nor the so-called "operation twist" nor recycling has been able to prevent international monetary crises as they can only offset short-term cyclical deviations of domestic interest rates from the international level but are unable to solve long-term problems with regard to trends or levels[3,4].

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[3]As regards the effectiveness of the three strategies mentioned, cf. P. Wonnacott, The Floating Canadian Dollar, Exchange Flexibility and Monetary Independence. (Foreign Affairs Study 5) Washington, D.C., 1972, pp. 13 et seq.

[4]On the subject of recycling, cf. Deutsche Bundesbank, "Monatsberichte der Deutschen Bundesbank" [Monthly Reports], Frankfurt (Main), October 1972, p. 29.

Thus we are left only with those measures which consist in reducing or eliminating the mobility of the factor capital by means of cost increases or a reduction in earnings or by a requirement of approval for, or a ban on, international capital transactions. There are a great many possible ways of achieving such discrimination.

Measures to change the cost and earnings situation in international capital transactions

Measures changing the cost and earnings situation in international capital transactions do not deprive the economic community of the freedom to make independent decisions. The central bank or the government adds a new element to the market situation by discriminating certain international transactions. The effect of these measures on capital movements corresponds to that of customs duties on services. Measures to curb undesirable capital inflows can be applied either on the side of demand for capital or on the supply side, and they can directly affect either the foreign exchange market (two-tier exchange market, conversion requirement for capital exports) or the money or capital market; both monetary and fiscal policies can be used for this purpose. The following measures may be used:

Making it more expensive for residents to obtain capital abroad (cash deposits, interest equalization tax, special minimum reserve requirement for nonresidents' deposits, no possibility of converting foreign exchange obtained from borrowings abroad on the official exchange market and at the subsidized rate);

Making it less expensive for nonresidents to obtain domestic capital (possibility of converting credit to nonresidents into foreign exchange on the free market at a relatively favorable rate);

Making it more remunerative for residents to offer domestic capital to nonresidents (possibility of offsetting capital exports against nonresidents' deposits in calculating the minimum reserve requirements);

Making it less remunerative for nonresidents to invest in the domestic market (tax levied at source on capital earnings, ban on interest payments, negative interest rate).

This typology of possible measures for controlling international capital transactions constitutes the framework for the French, Swiss, and German policies shown in Annex A [Übersicht 1]. Since in the past three years Switzerland and Germany (and France in the past two years) have been confronted mainly with the problem of undesirable net capital imports, I will not discuss measures for promoting net capital imports in this context (in any case these would usually require merely the opposite of measures adopted to prevent net capital imports).

Requirement of approval for, or ban on, international capital transactions.

The capital control measures described so far have the same effect on capital movements as customs duties have on movements of services. The regulations outlined in this section correspond partly to a quota system and partly to a system under which the international allocation of the factor capital is placed above the wisdom of national authorities, provided that such measures are effective.

Such methods of controlling international capital movements may consist in a requirement of approval, ceilings, or a total ban. Control measures may directly affect the banks' foreign position, certain money or capital market transactions of special importance for international capital movements, and transactions involving substitutes for financial assets (e.g., real estate, direct investment).

The combination of the three methods of capital controls with the numerous transactions to which they may be applied result in a large number of possible measures. This is not the place for describing all the possible variations, however. It will be sufficient for our purposes to point to possible additions to the set of policy instruments when we describe the control measures adopted by the individual countries (see Annex B [Übersicht 2]).

Institutional barriers to smooth international capital movements which correspond to nontariff trade barriers in the case of movements of services, such as, for instance, the effects of investment regulations and of provisions concerning the acceptability of securities as collateral for loans and as insurance cover as well as negotiability on the stock exchange and freedom of establishment, are not discussed in this paper.

Development of capital flows following the introduction of control measures

If money and capital markets were perfect markets, interest or profit rate differentials (after tax, of course) would be reliable indicators of the existence and effectiveness of controls. It is, however, hardly possible to measure the effectiveness of capital controls solely on the basis of changes in interest differentials since, at a given level of imperfectness of financial markets, changes in interest differentials are influenced to a decisive extent by differing levels of restrictiveness of domestic monetary policies[5]. Furthermore, it would probably be difficult to determine the relevant net interest differentials in each case since in general the "objects" traded are hardly perfectly homogeneous in the markets under comparison. It will therefore be necessary to observe not only "price differentials" on individual markets but also other factors such as changes in net capital flows. However, in interpreting these indicators of the "success" of capital controls we must always consider the question whether a country's monetary policy is determined more by balance of payments considerations than by domestic policy objectives. If it is based on balance of payments considerations we may expect the net interest rate differential to disappear and net capital flows to cease, but in that case the original purpose of capital controls, namely autonomy of monetary policy, is no longer fulfilled.

The above considerations lead to a partial analysis of the effects of capital controls. The question is: How do net interest differentials or net capital flows in one section of the financial market react to the introduction of, or a change in, capital controls? (Of course, theoretically it would be better to ask: What would have happened if controls had not been introduced or changed? But in reality we can hardly test this.) Such an analysis can tell us little about the overall effect of control measures if uncontrolled substitution possibilities persist for the objects traded on the controlled section of the market. If, for instance, the interest rate on domestic securities differs from that on foreign securities because of the ban on sales of domestic bonds to nonresidents, the latter may circumvent the controls by buying domestic shares, for instance. Thus, interest rate differentials or changes in net capital movements on partial markets can indicate only a partial success of control measures. To assess the overall effect of control measures all substitution possibilities must be taken into consideration. This means that our indicator of the overall effect of capital controls will be all foreign exchange movements generated by transactions involving financial assets and by changes in the terms of payment. However, as was mentioned earlier, this applies only if the degree of restrictiveness of domestic monetary policy relative to that of the other countries' monetary policies remains unchanged. As long as the relevant domestic interest rates exceed foreign interest rates adjusted for the swap rate, and this differential remains constant, any change in "foreign exchange movements resulting from capital transactions and changes in the terms of payment" can be considered to be basically the result of capital controls. But if domestic monetary policy, measured by the international level, is so much less restrictive that the increase in the money supply which

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[5]The interest rate differential is determined by two factors: the imperfectness of markets--partly due to control measures--and differences between national monetary policies. The two factors are linked multiplicatively with each other. The interest rate differential will therefore be zero either when markets are perfect--regardless of individual countries' domestic monetary policies--or when national monetary policies are equally restrictive although financial markets may be imperfect.

had previously come from foreign sources now comes from domestic sources instead, the elimination of capital flows cannot be considered the result of capital controls. To verify this we also have to observe the development of the domestic money supply during the same period. In addition to these indicators of the effectiveness of control measures, which have been examined--as far as possible--for the three countries under consideration, we shall examine the question whether, and to what extent, partial markets in West Germany reacted to control measures adopted by the West German authorities. In addition to the effects on the controlled or regulated partial markets we shall also consider the possibilities of evading controls.

Capital controls in West Germany

The first chapter of the analysis deals with the effectiveness of individual measures to regulate international flows. The measures will be analyzed in the order in which they are introduced as this will make it possible to summarize their partial effects in the course of their analysis.

Special minimum reserve requirements for nonresidents' deposits

Special minimum reserve ratios for nonresidents' deposits were introduced as early as 1957. They were particularly high during phases of restrictive monetary policies. Here we shall only consider the last restrictive phase, i.e., the years since 1970.

The German banks' net foreign position increased only slightly during the past two years (from DM 8.5 billion to approximately DM 10 billion). "If the credit institutions' short-term foreign assets and liabilities thus expanded only very little compared to the foreign assets and liabilities of enterprises (without banks) or even the Bundesbank, this is mainly due to the Bundesbank's minimum reserve policies...Minimum reserve requirements could not, however, prevent an occasional shifting of considerable funds of foreign capital to German banks."[6] If we consider the development of nonresidents' deposits and the corresponding changes in minimum reserve ratios we get the impression that the development of nonresidents' deposits was temporarily influenced by the tightening of minimum reserve requirements (Chart 1). But this interpretation by the Bundesbank--that its minimum reserve policies were successful except in times of monetary crisis--is ill-founded. Indeed, the net foreign position decreased by nearly DM 10 billion during the period of floating exchange rates--and this is probably due to the floating rather than to the increase in minimum reserve ratios. Furthermore, the net foreign position by itself does not provide any relevant information concerning the "success" of minimum reserve policies if reactions to such policies are not mainly reflected in changes in

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[6] "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), October 1972, p. 16.

nonresidents' deposits with domestic banks but primarily in a shifting of the terms of payment. To take just one example: a study of the effects of changes in minimum reserve ratios during the period 1963-1970 showed that, as a rule, a DM 1 billion increase in minimum reserves will be followed within one month by a capital inflow of approximately DM 820 million, of which approximately DM 655 million will be reflected in the errors and omissions item of the balance of payments[7]. In the light of these results, the Bundesbank's method of considering changes in the net foreign position by themselves as an "indicator of success" in analyzing the effects of its minimum reserve policy appears to be in need of revision.

We can note two important reactions designed to circumvent the special minimum reserve requirements for nonresidents' deposits:

Domestic nonbanks themselves receive "nonresidents' deposits", i.e., they borrow from abroad;

Domestic banks issue securities which are bought by nonresidents and are not subject to minimum reserve requirements.

The evasive reaction by nonbanks led to the introduction of the cash deposit requirement while the attempt by credit institutions to circumvent the special minimum reserve requirements caused the authorities to apply Article 23 of the Foreign Trade and Payments Law.

The increase in special minimum reserve ratios for nonresidents' deposits with credit institutions caused domestic nonbanks to borrow direct from the Euro-market. The other major form of evasion was a shifting of the terms of payment, which is reflected in the errors and omissions item of the balance of payments.

The evasive reactions by credit institutions were reflected in a strongly increased activity of their subsidiaries abroad in transactions with nonresidents. Thus, in the period from mid-1971 to 1972 nearly one third of total sales of fixed-interest securities to nonresidents went to Belgium and Luxembourg--the monetary area preferred by German banks for the establishment of subsidiaries[8,9].

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[7] Cf. M.G. Porter, Capital Flows as an Offset to Monetary Policy. In: International Monetary Fund, Staff Papers, Washington, D.C., 1972, p. 408.

[8] Cf. "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), October 1972, pp. 27 et seq.

[9] A detailed description of the Bundesbank's policies in 1970 and 1971 with special emphasis on its minimum reserve policy and the effects thereof on the balance of payments can be found in a study by M.G. Porter in the IMF's Staff Papers. The study shows how the Bundesbank's attempt to influence the domestic monetary situation in a restrictive sense failed until the time of the floating. Cf. Appendix to M.G. Porter, ibidem, pp. 417 et seq.

Coupon tax

The aim which the authorities had been trying to reach by means of the coupon tax announced in 1964--namely, to change purchases and sales of domestic bonds by nonresidents in such a way as to eliminate the resulting net capital imports--was indeed reached, though not by means of the coupon tax but by a monetary policy in 1964 and 1965 which was not very restrictive compared to the international average. Thus, while net capital imports in respect of bonds had amounted to approximately DM 2.4 billion during the 14 months preceding the announcement that the coupon tax would be introduced (March 1964), the following 14-month period brought a net capital export in respect of fixed-interest securities issued by domestic banks of over DM 0.5 billion. During the period 1965-1969 there was a large increase in this net capital export of securities which--at least since 1967--was not due to the coupon tax but mainly to the Bundesbank's low-interest policy. In 1970 capital imports and exports in connection with sales and purchases of bonds were nearly equal (net capital export of DM 225 million) and in 1971 there was already a net capital import in connection with bonds in the amount of approximately DM 2.8 billion--notwithstanding the coupon tax--and in the first nine months of 1972 this net capital import reached nearly DM 10 billion[10] (see Chart 2). In 1971 and 1972 the two components of capital imports in connection with bonds, "net purchases of domestic bonds by nonresidents" and "net sales of foreign bonds by residents", showed a nearly parallel development. (The difference observed since July 1972 was caused by the introduction of the requirement of approval for the purchase of domestic bonds by nonresidents.) But since the coupon tax reduces only the net earnings from one component, namely net purchases of domestic bonds by nonresidents, while both components generated an equal amount of capital imports, we find that the coupon tax does not provide the desired protection against money imports through the bond market. The fact that since 1965 foreign DM bonds worth approximately DM 20 billion had been issued[11], of which during the years 1964 to 1967 about one fourth, and in 1968 and 1969--the years with record figures for issues of foreign DM bonds--two thirds, were sold on the domestic market[12], shows that there was considerable scope for importing capital in connection with the foreign DM bonds, which were owned by residents and were exempt from the coupon tax for nonresidents. A large part of the considerable net capital import in the first half of 1972 was generated by sales to nonresidents of foreign DM bonds held by residents. In addition to this open evasion of the coupon tax requirement by purchasing foreign DM bonds we also have to bear in mind that part of the capital which had previously been imported

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[10]For the figures quoted cf. Statistische Beihefte [Statistical Supplements] to "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), Reihe 2, Securities Statistics, November 1972, especially Table Ib.

[11]Foreign DM bonds are not subject to coupon tax since, having been issued by nonresidents, they are not considered domestic bonds.

[12]H.J. Dudler, ibidem, pp. 46 and 48.

through the bond market is now coming in under different items of the capital account in that a considerable part of the foreign DM bonds was issued by financial holding companies of German enterprises established abroad. A large part of these funds was transferred to the domestic market for financing purposes.

In conclusion we can say that the coupon tax considerably stimulated activity on one partial market--that of foreign DM bonds exempt from the coupon tax--, caused a small volume of capital imports to be shifted to other partial markets, and on the whole did not constitute much of an obstacle for international capital transactions.

Cash deposit requirement

From the political point of view, the cash deposit requirement is a West German concession to the other EEC countries, especially France, in connection with the floating of the exchange rate in May 1971. On that occasion the Council of Ministers, while indicating that it understood the reasons which caused the German Government to take this step, at the same time requested that the German authorities reinforce their exchange rate policy by appropriate measures "to discourage excessive capital inflows and neutralize their effects on the domestic monetary situation"[13]. This request implies either a lack of understanding on the Council's part as to the functioning of flexible exchange rates or an insinuation that the German Government was not really prepared to allow the exchange rate to be truly determined by market forces. This assumption by the Council of Ministers actually proved to be correct: When the DM revaluation turned out to be larger than had been expected there were increased attempts to impose controls with a view to restricting the inflow of capital. As early as July 21, 1971 the Federal Government requested the Federal Minister of Economics and Finance to prepare a bill proposing that a certain percentage of nonbanks' borrowings abroad had to be deposited in a noninterest-bearing account with the German Bundesbank. On October 14, 1971--notwithstanding a six per cent annual increase in the cost of living (compared to the previous year)--the discount rate was lowered to 4.5 per cent and the minimum reserve ratios on residents' deposits were reduced by 10 per cent on a linear basis in order to prevent a further DM revaluation. The scope for a domestically-oriented monetary policy was to be regained by capital controls[14]. To this end the Cash Deposit Law was passed on December 23. The uncertainty regarding the future exchange rate of the DM and the burden imposed by the cash deposit requirement, as well as a stronger orientation of domestic monetary policy toward balance-of payments and exchange rate considerations, caused the indebtedness of

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[13]EEC Council of Ministers, Communiqué of May 9, 1972.

[14]"Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), November 1971, p. 6.

domestic enterprises vis-a-vis nonresidents, which in June 1971 amounted to approximately DM 33.5 billion--compared to only approximately DM 10.5 billion at the end of 1969--to continually decline from the summer of 1971 to that of 1972[15]. The short-term foreign indebtedness of German enterprises abroad alone declined by over DM 10 billion from June 1971 to June 1972[16]. Thus this development, taken by itself, would appear to indicate that the cash deposit requirement had been "successful" in that it reduced the inflow of foreign capital. But this result can hardly be interpreted as an overall success whenever it is accompanied by unabated, high rates of increase in the domestic money supply. Anyone considering changes in the inflow of foreign capital as a sufficient indicator of the effectiveness of controls should be told: "You are confusing the fact that recently there have been no external disturbances due to inconsistent restrictive stabilization policies with a widening of the scope for restrictive monetary policies and the effectiveness of defensive control measures"[17]. The "success" of the cash deposit requirement was not, however, reflected in a deceleration of the increase in the domestic money supply but merely in a substitution of sources of the growth of the money supply. The cash deposit requirement caused domestic enterprises to shift from foreign sources of capital with lower interest rates to the slightly more expensive domestic lenders who in turn enjoyed relatively favorable refinancing possibilities not only with the German Bundesbank but also in the form of borrowings abroad not subject to the minimum reserve requirement. Thus we see again in the case of the cash deposit requirement that the intended primary effect, i.e., to reduce the foreign indebtedness of domestic enterprises, was achieved but that on the whole the expansion of the money supply was not curbed. The reduction of the foreign indebtedness by about DM 15 billion compared with an increase in domestic credits of DM 80 billion from the pre-year level, and this increase exceeded that recorded during the corresponding period of the previous year by approximately DM 30 billion[18] (see Chart 3). On the whole we find that, while after the introduction of the cash deposit requirement the foreign indebtedness of domestic nonbanks did indeed stop growing and temporarily even declined, this development does not appear to be primarily due to capital controls, in view of the rates of increase in the money supply. Rather, the introduction of the cash deposit requirement merely brought about a change in the distribution of profits in favor of domestic banks and to the disadvantage of domestic enterprises and foreign banks. If we consider the development of the net interest differential for three-month money between the domestic market and the Euro-dollar market we find that, despite the cash deposit requirement, it was profitable during the months July to September 1972 to borrow

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[15]"Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), November 1971, p. 20.

[16]Statistical Supplements to "Monatsberichte der Deutschen Bundesbank", Reihe 3, Table 17.

[17]E. Ketzel, Divergierende Auffassungen. "Die Sparkasse", Stuttgart, 1972, H. 11, p. 319.

[18]Statistical Supplements to "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), Reihe I, Bank Statistics by Bank Groups, October 1972, August 1971, Table 1.

on the Euro-dollar market[19] (see Chart 4). Thus the cash deposit requirement did not even make it possible to prevent interest-induced capital from entering West Germany at any time[20]. This is borne out by the increase of over DM 3 billion in domestic enterprises' liabilities vis-à-vis the foreign countries after June 1972 as well as by the increase in the amounts paid into the special cash deposit account at the Bundesbank[21]. Until July 1972 deposits on this account had amounted to not quite DM 1 billion—i.e., they corresponded to a new indebtedness abroad of less than DM 2.5 billion--but in the following months they rose to over DM 3 billion. This means that the foreign indebtedness must have increased by over DM 4 billion during the period July to October (the cash deposit ratio was raised to 50 per cent on June 29, 1972)[22,23].

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[19] Cf. "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), November 1972, p. 6.

[20] Throughout the period of validity of the cash deposit requirement it was profitable, up to the deductible amount, to borrow abroad instead of on the domestic market. Thus, if the cash deposit deductible was reduced twice this appears to indicate a consistent attitude of the Government. Especially the last reduction of the deductible to DM 50,000 at a time when interest rates on capital imports subject to the cash deposit requirement were no longer lower than those on domestic credit appears to contradict a view prevailing before the introduction of the cash deposit requirement. At that time it was maintained that only a few large enterprises needed to be prevented from borrowing abroad. This can no longer be true, however, if a deductible amount of DM 500,000 still permits substantial capital imports which are to be reduced by the renewed lowering of the deductible amount.

[21] Cf. Statistical Supplements to "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), Reihe 3, Balance of Payments Statistics, p. 17.

[22] Cf. "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), November 1972, p. 9.

[23] The multitude of legal and technical problems of the cash deposit requirement shall not be discussed in this paper. On this subject, cf., among others, Ch. Heinze, Rechtsfragen der Bardepotpflicht. "Außenwirtschaftsdienst des Betriebsberaters", Heidelberg, July 1972, pp. 313 et seq; W. Filc and L. Hübl, Diskontsenkung--Bardepotgesetz (I and II). "Wirtschaftswoche", Frankfurt (Main), 1972, No. 10, pp. 32 et seq; No. 11, pp. 32 et seq.--Wie mit dem Bardepot umzugehen ist. "Handelsblatt", Düsseldorf, March 10, 1972--"Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), March 1972; June 1972.--By way of a summary: K. Flachmann, Bardepot--Gesetze, Verordnungen und Materialien. Frankfurt 1972.

The introduction of capital controls runs counter to the EEC countries' desire to form an economic and monetary union, but they also give rise to serious reservations from the point of view of administrative policy. A detailed analysis of this aspect of capital controls can be found in "Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung" [Council of Economic Advisors], Bonn, Sondergutachten [Special Report] of July 3, 1972, Sections 12-19.

Requirement of approval for the sale of domestic fixed-interest securities to nonresidents

As was already mentioned in the description of the effects of the cash deposit requirement, capital imports through the bond market expanded to an unexpectedly large extent during the first half of 1972. A considerable part of this expansion was initiated by German banks which sold "made-to-measure" paper to their foreign subsidiaries, thereby circumventing both the minimum reserve requirement and the cash deposit requirement.

"Another important factor in the development until July was that foreigners were buying large amounts of German bonds as well as foreign DM bonds held by Germans"[24]. From February to July 1972 these capital transactions in respect of bonds generated capital imports in the amount of DM 8.4 billion. In this way nearly one half (46 per cent) of the total net sales of bonds during that period went abroad[25], causing the capital import in respect of bonds in this one six-month period to be twice as high as in the previous ten years taken together[26]. "The introduction of a requirement of approval was a necessary reaction to the rush into securities denominated in deutsche mark,... After on June 27 even Switzerland--the last country besides West Germany with free capital movements--stopped capital imports in respect of sales of securities to foreigners, the German Government finally also decided to require prior approval for the sale of domestic bearer bonds and registered bonds by residents to nonresidents..."[27] This measure by the German Government considerably influenced foreigners' purchases of securities on the domestic market and thus capital exports in respect of bonds (Table 1 and Chart 5).

Given the persistent interest-rate differential between West Germany and the other leading financial markets, the restrictions on international capital movements in the form of minimum reserve requirements and the cash deposit requirement led to net capital imports in respect of bonds in 1971--for the first time since 1963, the year preceding the announcement of the coupon tax. This capital import expanded considerably during the first half of 1972 and since the introduction on June 29 of the requirement of approval for the sale of domestic bonds to nonresidents has been generated exclusively by residents' sales of foreign securities to

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[24] "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), September 1972, p. 16.

[25] Ibidem, p. 16.

[26] Cf. Statistical Supplements to "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), Reihe 2, November 1972, Table 1b.

[27] "Monatsberichte der Deutschen Bundesbank," Frankfurt (Main), September 1972, p. 16.

nonresidents (Column 2 of Table 1). These transactions do not require approval, although the Bundesbank requested credit institutions and insurance companies, through their associations, to refrain from selling foreign bonds held by them to nonresidents. In the case of the credit institutions, this request was further specified on July 18 when they were asked not to let their total holdings of DM bonds issued by nonresidents fall substantially below the level shown in their monthly balance-sheet statistics for July 1972. However, banks and insurance companies hold only about one third of the total of foreign DM bonds held by Germans (approximately DM 5 billion)[28]. The coupon tax already caused the foreign investors' interest to shift to foreign DM bonds, and the requirement of approval also means that foreign investors wishing to purchase DM bonds are reduced to buying foreign DM bonds only. As a result, circulation yields of this type of bond declined from 8 per cent in December 1971 to 6.6 per cent in September 1972, while during the same period the circulation yield of domestic bonds remained practically unchanged at approximately 8 per cent[29]. This interest differential is a clear indicator of a market division brought about by the coupon tax and the requirement of approval.

Methods to evade the requirement of approval have so far centered on sales of domestically held foreign DM bonds to nonresidents. Since July of this year, however, there has also been an increase in purchases of German shares by nonresidents (Chart 5). In 1971 there had still been a net capital export in respect of shares in the amount of DM 1.5 billion, and in the first half of 1972 there had been a corresponding net capital import of only DM 650 million, but in the third quarter of 1972--i.e., after the introduction of the requirement of approval for the purchase of domestic bonds--this net capital import reached nearly DM 1 billion[30]. Not even the uncertainty in respect of the general elections on November 19, which caused domestic buyers to be somewhat hesitant, could dampen the nonresidents' enthusiasm--notwithstanding a marked increase in interest rates on international financial markets, which meant a higher opportunity cost of buying shares.

If we consider economic developments over the past two years and the economic policy measures which were adopted to overcome crises and resolve conflicts, and if we find in particular an uninterrupted inflationary trend, especially in Germany's EEC partners, combined with a lack of willingness and/or ability to combat this trend by means of restrictive policies, we can hardly expect, if a country such as West Germany is genuinely prepared to try to stabilize the national economy,

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[28] Ibidem.

[29] Statistical Supplements to "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), Reihe 2, Securities Statistics, November 1972, Table 7b.

[30] Ibidem, Table 1b.

that the EEC will attain economic and monetary union within the foreseeable future. It is to be feared, on the contrary, that the responsible authorities will consider a further tightening of capital controls indispensable--even within the EEC[31].

Capital controls in West Germany without effective monetary stabilization?

The main reason for introducing capital controls in Germany was to fight the importation of inflation; at the same time Germany was not ready to revalue the D-Mark, for--it was said--the current account was in equilibrium. Speculators, however, do not spend all their time looking at past performance, they look towards the future. This is one reason why, when examining the current account, one arrives at the wrong answers to currency problems. Yet another factor is possibly even more important: The current account includes remittances by foreign workers, and since the importation of foreign workers is already a by-product of 'wrong' exchange rates and has led to further unwanted regional problems in Europe the current balance is not a suitable indicator of the need for exchange rate variations. Not even the basic balance should be used as the sole indicator of equilibrium in the foreign sector. In order to get some information on the necessity of exchange rate variations it would seem to be better to observe the medium-term variations of the foreign exchange balance (see Table 2).

The indicator "inflow of liquidity from abroad"[32], which is used by the Bundesbank to determine the effectiveness of capital controls, can furnish reliable evidence only if the domestic monetary policy is, and remains, more restrictive than the international level. This will always be the case when the relevant net interest differentials are positive and do not decrease, i.e., when domestic interest rates, corrected for the corresponding swap rate, exceed the corresponding foreign interest rates by a constant or at least not declining amount. Thus, since the reduction of liquidity inflows could be considered to be exclusively the result of capital controls only if the relative domestic degree of restrictiveness remains unchanged, it appears necessary to consider not only the inflow of liquidity but also changes in the relative degree of restrictiveness. We shall therefore examine, for the period 1970 to 1972,

the development of capital inflows which are reflected in the capital account and result from a shifting of the terms of payment, and changes in the net interest differential and the money supply in West Germany.

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[31] In a first version of this article--finished in December 1972--I wrote that I expected the Federal Government to introduce the mandatory authorization of purchases of German shares by nonresidents as the next step. This happened--as already mentioned--on February 5, 1973.

[32] "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), June 1972, p. 12.

In the year 1970, during which the Bundesbank's monetary policy was largely based on domestic considerations, capital imports reached approximately DM 11 billion, and the errors and omissions item of the balance of payments corresponded to a capital import of over DM 8 billion (Chart 6). In the first half of 1971 there was still an inflow of approximately DM 11 billion, notwithstanding an incipient external orientation of monetary policy, but in the second half of that year--the period of the floating--the influx of foreign exchange decreased considerably (to little more than DM 4 billion). In the first nine months of 1972, the year of increasing capital controls, the inflow of foreign exchange rose to DM 19.1 billion as a result of capital transactions and a shifting of the terms of payment, i.e., as much as in the entire year of 1970, when the Bundesbank was applying a domestically oriented monetary policy largely without capital controls[33]. After an outflow of about DM 3 billion during the last quarter of 1972, a new wave of dollars flooded Germany in February and at the beginning of March 1973 (about DM 15 billion) despite tightened capital controls (February 5). Since the summer of this year the decrease in interest rates in the United States and the growing confidence in the dollar have tended to reduce the net interest differential and thus capital imports into West Germany[34]. If we consider the development of capital imports from July to September 1972 we find that they clearly showed a tendency to decline. Since then, however, the rates of growth of the domestic money supply (M_1 and M_2) have not increased. But this could hardly be interpreted to mean that capital controls are beginning to show their effects. Rather, the narrowing of the net interest differential between West Germany and its partners appears to indicate that capital controls have the same shortcoming as other market regulations in that they are not effective until the very conditions which make them superfluous are fulfilled. In the new monetary system (established at the beginning of March 1973) with rates floating vis-à-vis the dollar, capital controls against the dollar seem to have no function

> except that the jointly floating group does not tolerate market decisions with respect to the new exchange rates, i.e., it wishes to avoid an unwanted revaluation of its currencies.

The only function of capital controls in respect of the jointly floating partners is to protect the newly pegged exchange rates from coming under pressure. The fact that capital controls exist, and recently were even strengthened, within the EEC contradicts the views expressed by European governments as regards formation of an economic and monetary union within this decade.

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[33] Statistical Supplements to "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), Reihe 3, November 1972, Table 1.

[34] Cf. Chart 4 of the Report "Zur konjunkturellen und währungspolitischen Lage der westlichen Industrieländer an der Jahreswende 1972/73" in this issue.

It can hardly be questioned that the introduction of capital controls was effective for a transitional period--while possibilities of evasion were being sought--and that it was hardly possible, in each individual case, to fully circumvent regulations. If, however, we consider the overall monetary development, rather than "partial success" and the possible gain of time, then, judging by the rates of increase in the money supply in, for instance, November 1972--when the monthly rate of growth of M_1 was slightly below 7 per cent--we find that the aim of capital controls, namely, autonomy of domestic monetary policy, has been achieved in a very limited sense only[35]. In view of this negative result, it is surprising that the Bundesbank is among those continually demanding increasing powers of control, despite the fact that its own analyses have led to basically similar conclusions[36]. Thus, the following conclusion arrived at earlier by a prominent member of the Central Bank Council seems to have been forgotton: "It is clear, however, that the scope for economic and monetary policy action...has already been highly restricted by the general economic integration, especially in the goods trade, and the resulting interdependence as to the business cycle. Capital controls can hardly be sufficient any longer to correct this situation and expand the scope for national action. In any case, the financing of the goods trade can involve considerable capital movements... which could be prevented only by intervening in trade operations... It is therefore doubtful whether the maintenance of capital controls is so useful from the point of view of economic and monetary policy as some expect it to be"[37].

Some consequences of capital controls

1. In any economic system with some freedom of action controls will continually require further specification and supplementary measures to counter methods of evasion. In this process the legislator is always running after renewed attempts at evasion. Any partial success

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[35]Due to considerable seasonal distortion, this monthly rate cannot be used as a basis for determining the corresponding annual rate. It is, however, interesting that the change in the money supply in November 1972 exceeded that of November 1971 and 1970 by approximately 50%. Cf. Deutsche Bundesbank, Frankfurt (Main), Press Release of December 28, 1972.

[36]Cf. Die Verschuldung inländischer Wirtschaftsunternehmen an das Ausland [Foreign Indebtedness of Domestic Economic Enterprises] "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), November 1971, pp. 20 et seq. --Geld und Kredit [Money and Credit] "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), September 1972, pp. 10 et seq. --Die kurzfristige Auslandsposition der deutschen Kreditinstitute [The Short-Term Foreign Position of German Credit Institutions vis-à-vis Nonresidents] "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), October 1972, pp. 16 et seq.

[37]L. Gleske, Rechtsangleichung und Verflechtung der Kapitalmärkte, paper prepared for the International Congress on "Assimilation of Commercial Law in Europe" in Cologne on March 19, 1969, p. 12 of the hectographed manuscript.

of control measures tends to obscure the overall problem. In an open economy with fixed exchange rates and differing national economic policies, it does not seem possible, even with administrative controls, to regulate demand by means of a monetary policy that is to be rendered autonomous by capital controls--at least not unless the authorities are prepared to renounce the liberal economic system.

2. In introducing controls we must bear in mind that they require a considerable volume of human labor, both in the government and in the private sectors. This creates new jobs which, while raising the nominal GNP[38], will hardly contribute to an increase in welfare[39].

3. One important consequence of the introduction of capital controls is the fact that they jeopardize European integration. "In restricting international capital movements the Federal Republic has embarked on a path which will first of all lead us away from a European monetary union... Anyone applying capital controls of this kind in the name of European monetary union, even though he may always be able to point to a need for defensive measures, is open to the criticism by third countries that he considers the European monetary union to be nothing but an association in which countries with a mercantilist attitude unite to collectively promote their export possibilities vis-à-vis the United States and other third countries[40].

4. Capital controls of the type introduced in France, Switzerland, and West Germany are unable to stem waves of short-term speculation, nor do they lead to the desired long-term results, due to evasion. They merely have a limited effect during a transitional period while market operators are searching for methods of evasion. The closing of exchange markets (for a short period of time) or the floating of the exchange rate are successful strategies for overcoming monetary crises characterized by waves of speculation but without exchange rate disequilibria. If however, a monetary crisis also reflects exchange rate disequilibria it can be terminated only by floating the exchange rate or making an appropriate parity adjustment.

5. Because of their temporary and partial effectiveness, capital controls contribute to delay necessary exchange rate adjustments. This introduces a wrong factor into the long-term plans of enterprises basing their calculations on fixed exchange rates. If an exchange rate

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[38] This can take the form of either an increase in the number of persons employed or--more likely--labor shifting from a less remunerative to a more remunerative employment.

[39] Considering the multitude of ordinances, comments, and even legal proceedings on this question, the following statement by Dr. Emminger, Vice President of the Bundesbank, appears particularly noteworthy: "We are particularly glad that we were able to stem inflationary inflows of capital from abroad without any bureaucratic control apparatus. A handful of people will be sufficient to implement the defensive measures adopted." Cf. Dr. Emminger's interview with the magazine "Intereconomics", Hamburg, 1972, No. 12, reprinted in "Deutsche Bundesbank, Auszüge aus Presseartikeln", Frankfurt (Main), No. 93, p. 2.

[40] Council of Economic Advisors, Special Report, ibidem, Sections 11, 12.

adjustment becomes necessary after all at a later date, at which time it will usually be larger, this comes as a surprise to enterprises and may mean that some of their investments turn out to be failures. It would therefore be useful, in the interest of a steady development of the economy and an appropriate structure of production, to refrain from aiming at an artificial stabilization of exchange rates by means of capital controls.

6. If capital controls were fully and comprehensively effective, i.e., if they made monetary policy truly autonomous, then a large part of decisions on the use of the factor capital would be left to the wisdom of government authorities while nothing would be gained with regard to long-term price stabilization because: "Inflationary processes are transmitted across national borders largely via direct price relationships on the markets for internationally traded goods. These relationships are not affected by capital controls."[41]

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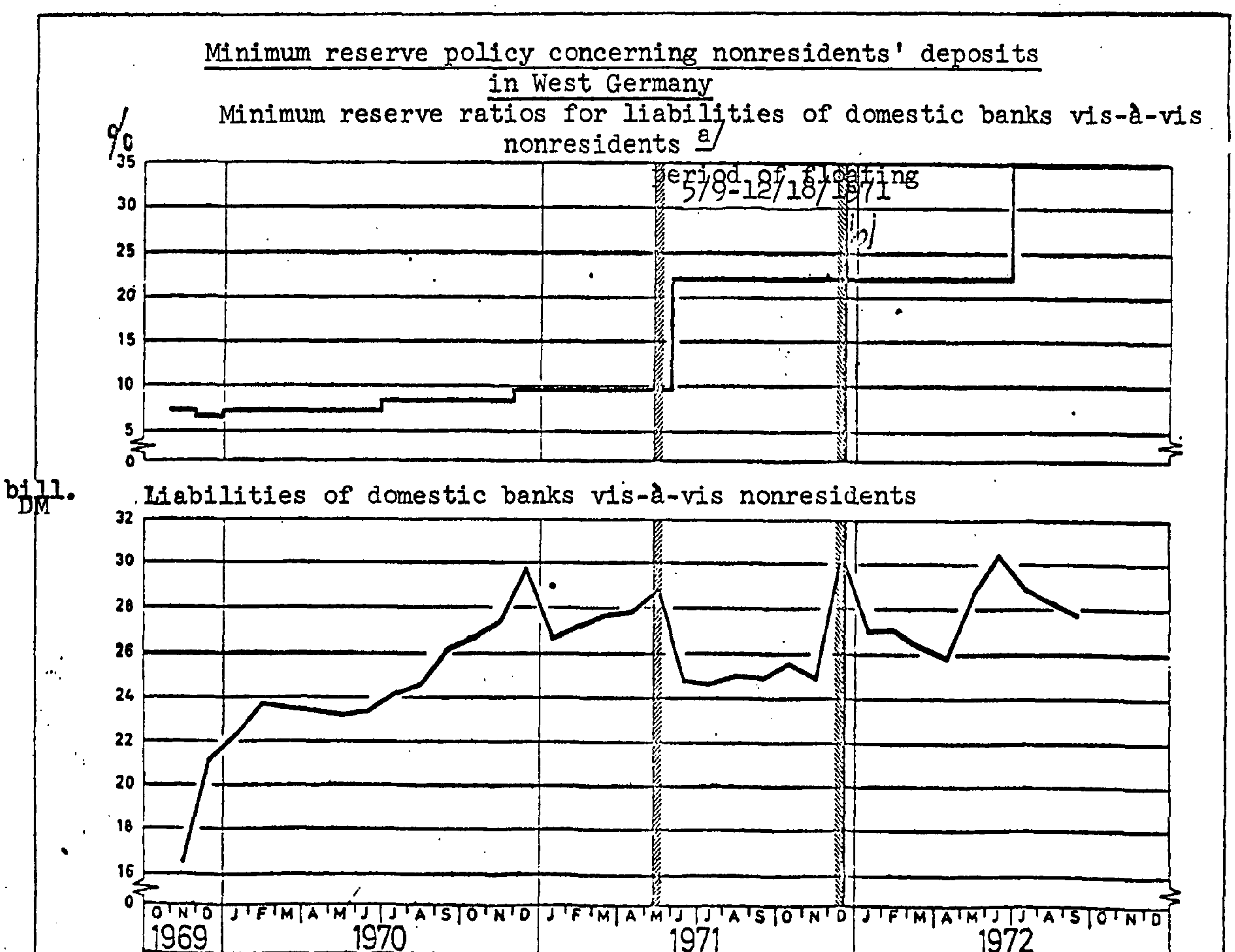
[41] Council of Economic Advisors, Special Report, ibidem, Section 17.

Chart 1



a/ Banks' time liabilities of reserve category 1.-- b/ Revaluation on 12/18/72.

Chart 2

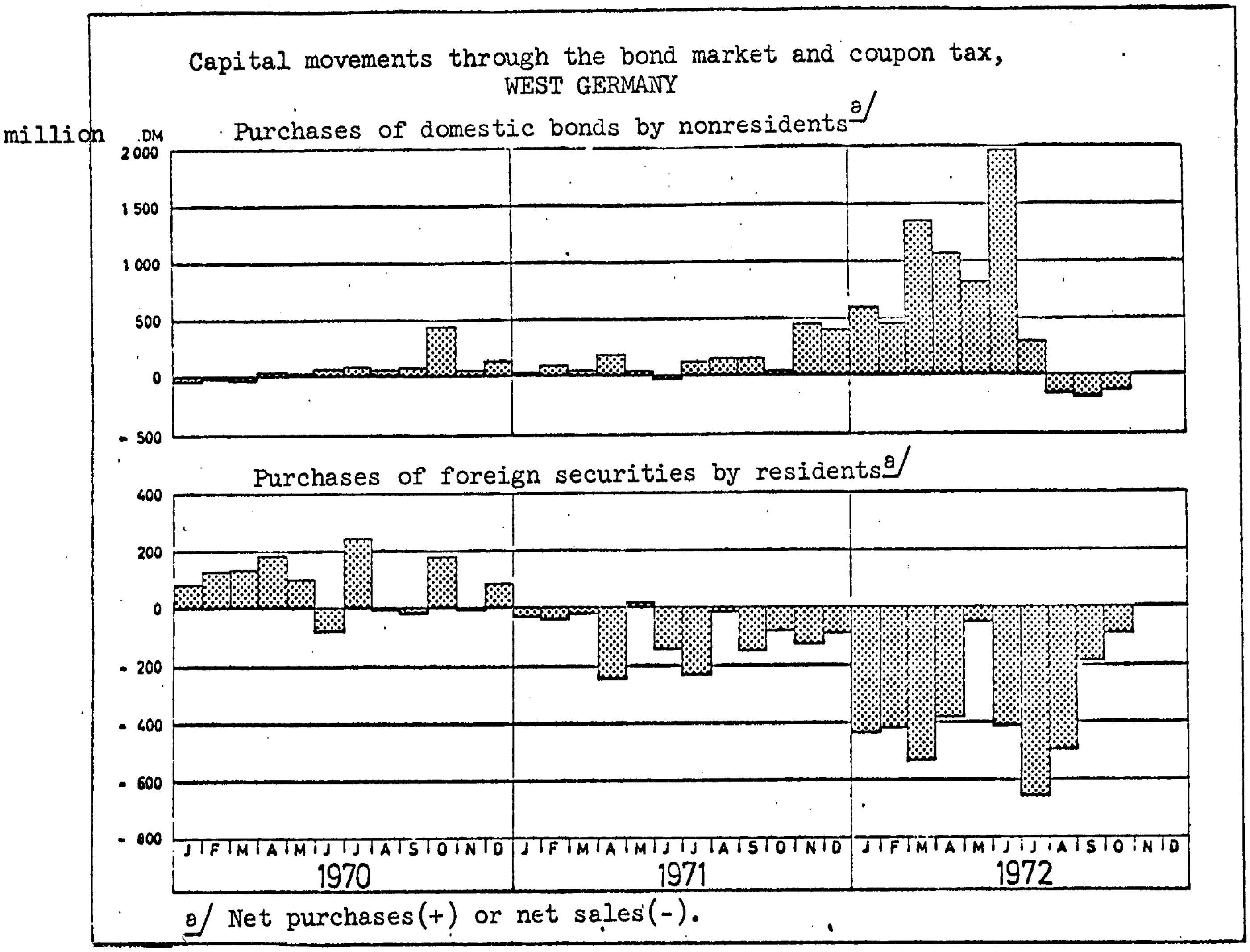
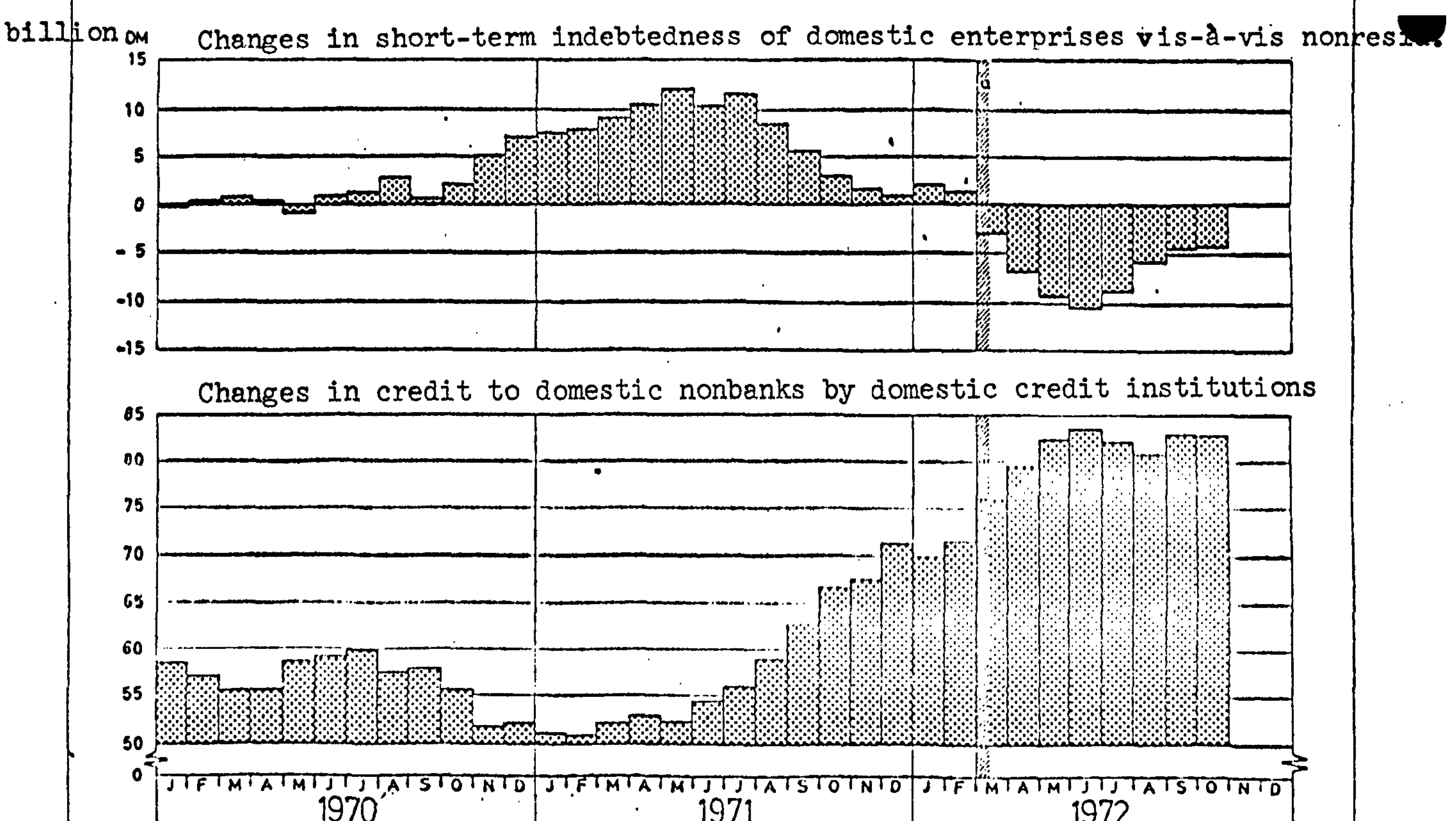

Capital movements through the bond market and coupon tax,
WEST GERMANY
million DM
Purchases of domestic bonds by nonresidents[a]
2 000
1 500
1 000
500
0
- 500
Purchases of foreign securities by residents[a]
400
200
0
- 200
- 400
- 600
- 800
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1970
1971
1972
a/ Net purchases(+) or net sales(-).

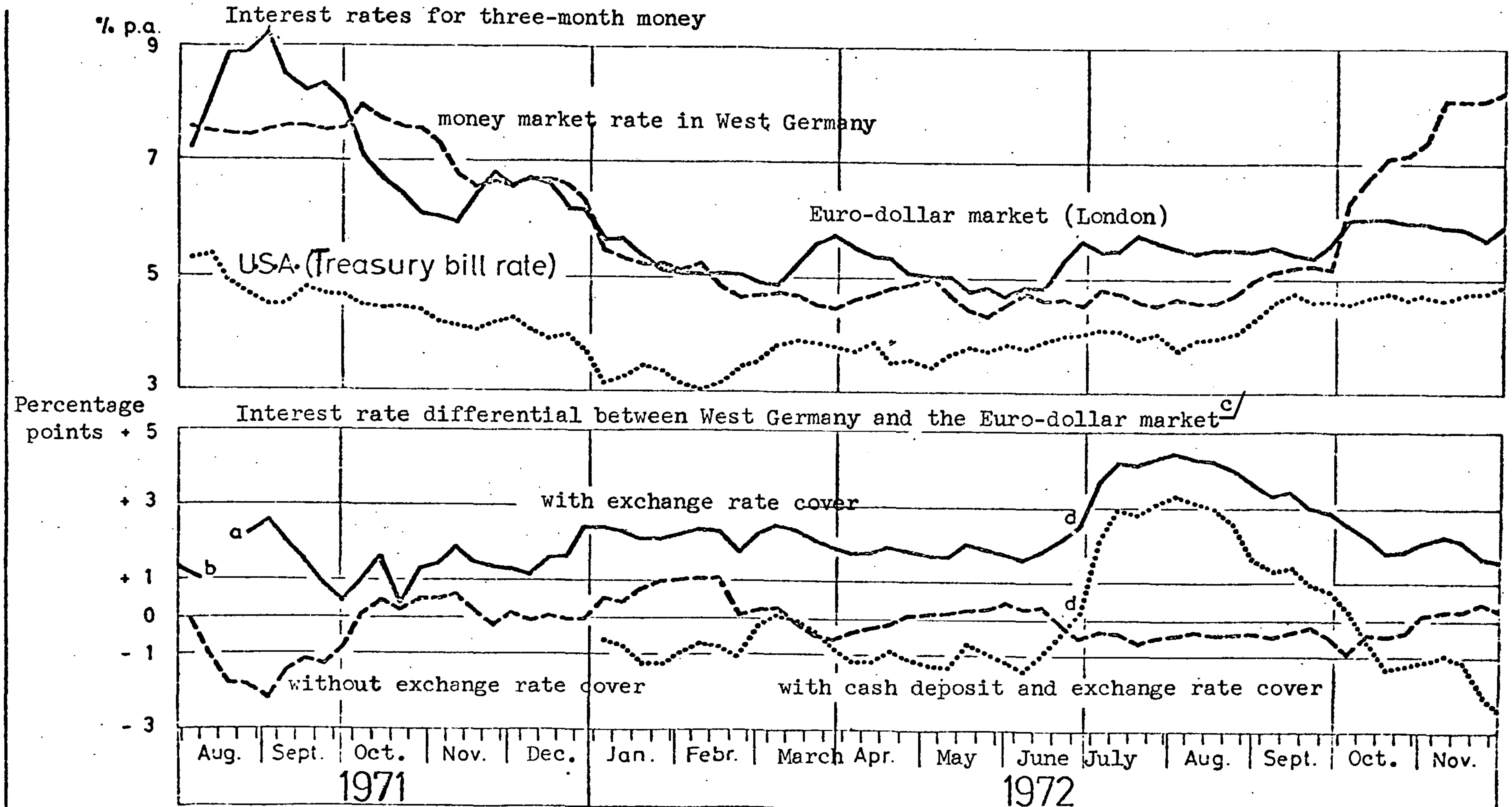
Chart 3

Credit to domestic nonbanks and cash deposit--WEST GERMANY
(Changes from previous year)



a/ Introduction of the cash deposit requirement on 3/1/1972.

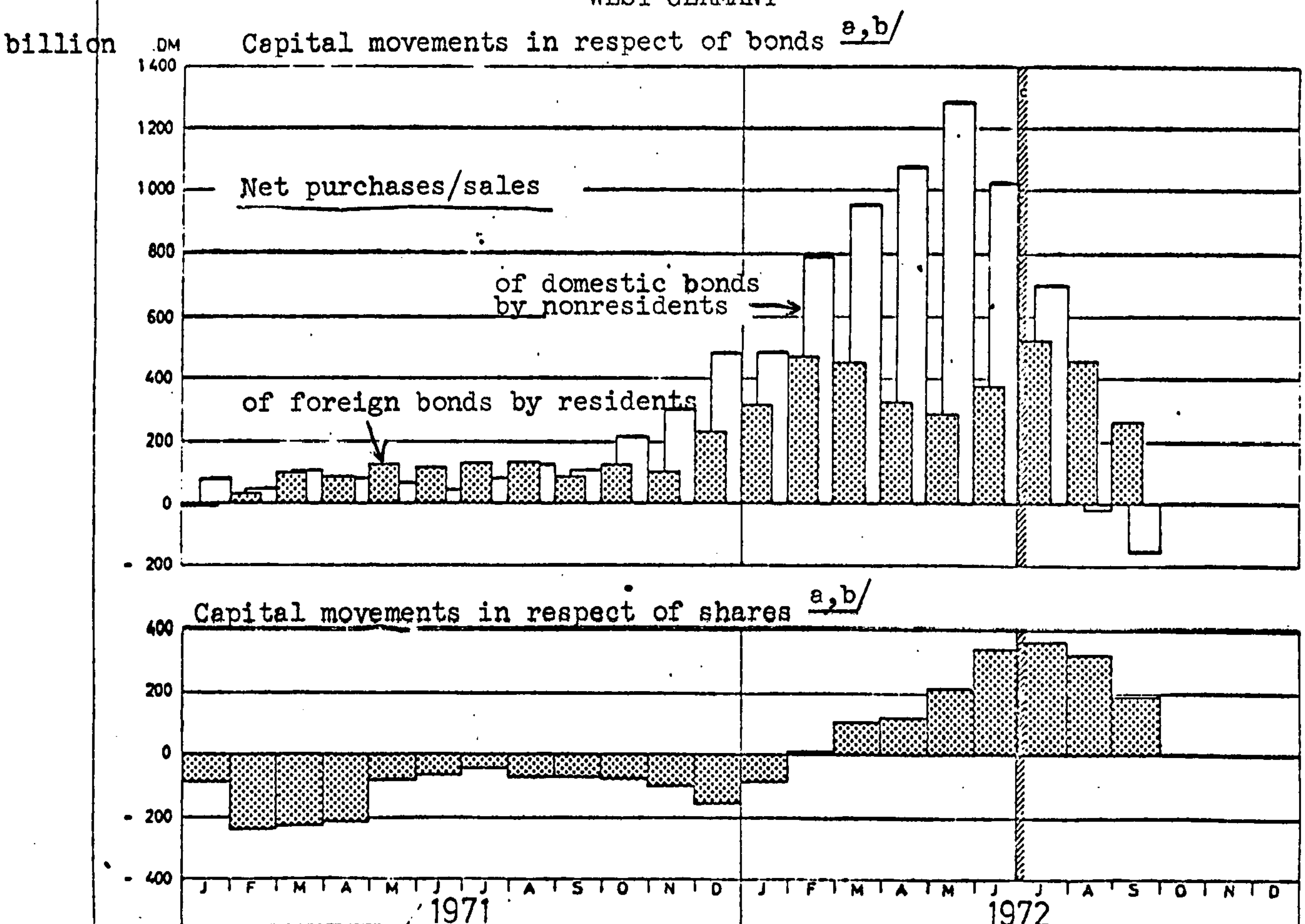
Chart 4



a/ Exchange markets closed.-- b/ No forward rates quoted.-- c/ Calculated for enterprises in West Germany, the assumption being that they pay on the domestic market a debtor interest rate exceeding the discount rate by 3 percentage points, while for the Euro-dollar market it was assumed that there is a markup of 0.9 percentage points on the Euro-dollar rate quoted among banks. +(-) means that interest rates in West Germany are above (below) those on the Euro-dollar market.--d/Exchange markets closed June 23-27,1972.

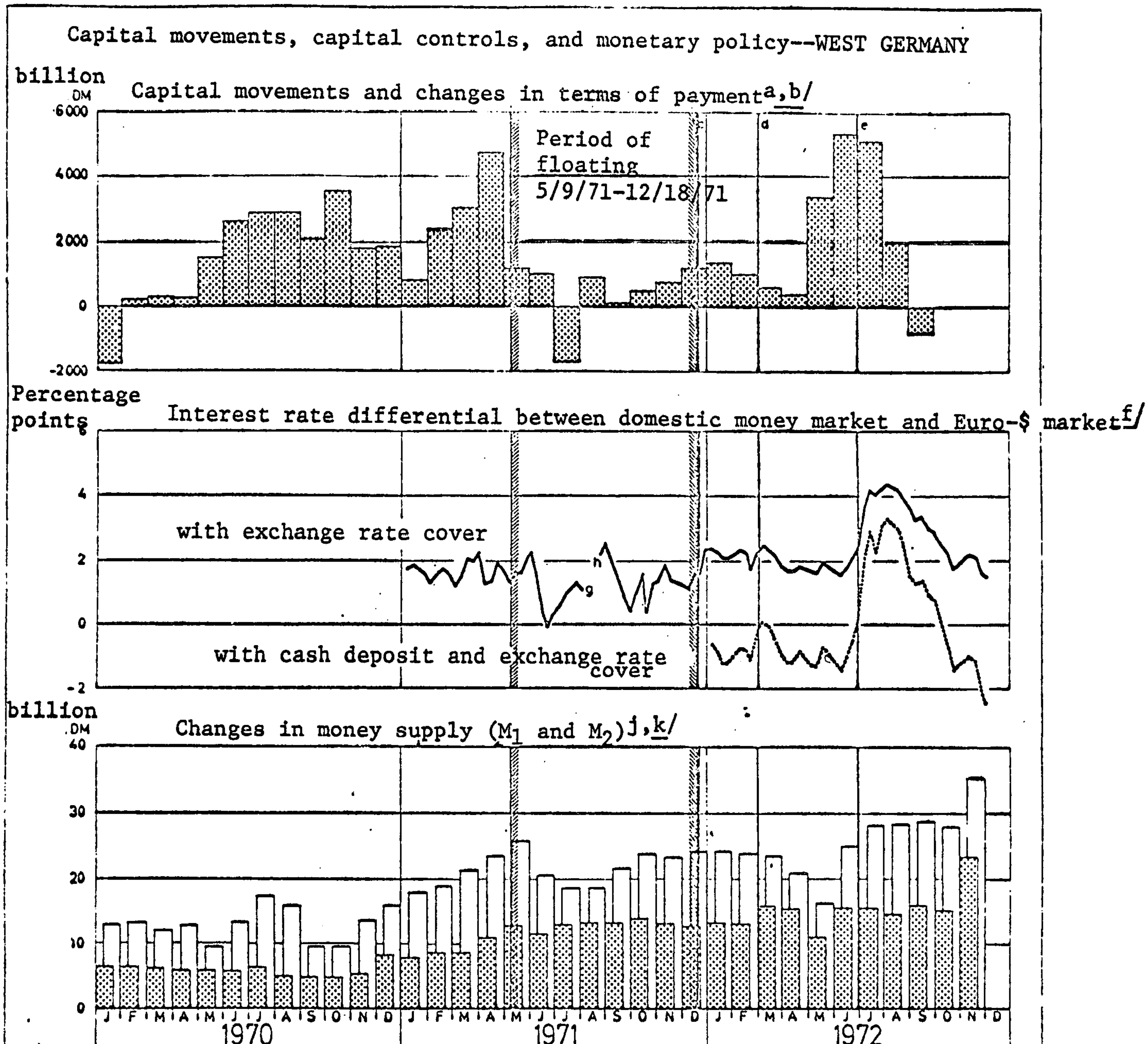
Chart 5

Capital movements through the bond and stock markets, and requirement of approval for the purchase of domestic bonds by nonresidents,
WEST GERMANY



a/ Three-month moving averages.-- b/ Negative values mean capital exports, positive ones mean capital imports.-- c/ Introduction of requirement of approval for the purchase of domestic fixed-interest securities by nonresidents, 6/29/1972.

Chart 6



a/Measured by the balance of the capital account and the errors and omissions item.--b/Three-month moving averages.--c/Revaluation on 12/18/71.--d/Introduction of cash deposit requirement on 3/1/72.--e/Introduction of requirement of approval for purchase of domestic fixed-interest securities by nonresidents on 6/29/72.--f/Three-month money.--g/No forward rates quoted.--h/Exchange markets closed.--i/Exchange markets closed June 23 to 27.--j/Compared to previous year.--k/Seasonally adjusted.

M_1 corresponds to circulation of cash and sight deposits

M_2 corresponds to M_1 plus time deposits.

Table 1 — Capital movements in respect of bonds, West Germany

1970 - 1972 (in million DM)

period	net purch. (+) or net sales (—) of foreign bonds by resid.	net purch. (—) or net sales (+) of domestic bonds by non-residents	balance of capital movements in resp. of bonds
1	2	3	4 = 3 ./. 2
1970 1. quarter . .	+ 351	— 74	— 425
2. "	+ 214	+ 90	— 124
3. "	+ 218	+ 202	— 16
4. "	+ 259	+ 599	+ 340
1971 1. "	— 90	+ 137	+ 227
2. "	— 380	+ 195	+ 575
3. "	— 398	+ 391	+ 789
4. "	— 315	+ 893	+ 1 208
1972 1. "	— 1 383	+ 2 386	+ 3 769
2. "	— 849	+ 3 830	+ 4 679
3. "	— 1 346	— 58	+ 1 288
4. "	— 737	— 428	+ 309

Source: Statistical Supplements to "Monatsberichte der Deutschen Bundesbank", Frankfurt (Main), Reihe 2, Securities Statistics, March 1973, Table 1 b.

Table 2

Balance of payments data for West Germany

Period		Net result of trade balance	Net result of balance of goods & services	Net result of current account	Net result of basic balance	Net result of foreign exchange balance
1970	I	+2.95	+2.04	+0.04	-3.87	+1.45
	II	+3.37	+2.87	+0.73	-0.23	+5.32
	III	+4.26	+2.10	-0.15	+0.44	+8.27
	IV	+5.09	+4.72	+2.05	+3.38	+7.62
1971	I	+3.66	+3.28	+0.77	+1.08	+8.50
	II	+3.23	+2.36	-0.24	+1.75	+3.34
	III	+4.66	+2.20	-0.81	+2.32	+1.94
	IV	+4.34	+3.29	+0.87	+1.77	-2.79*
1972	I	+4.51	+3.43	+0.20	+5.02	+3.92
	II	+3.91	+2.76	-0.23	+5,59	+9,94
	III	+4.59	+1.73	-1.52	+0,73	+4.48
	IV	+7.25	+6.19	+3.26	+2,90	-3.15*

Source: Supplements to "Monatsberichte der Deutschen Bundesbank", Reihe 3, Balance of Payments Statistics, March 1973, Table 1.

*/ Partly due to the adjustment of the value of monetary reserves (1971 adjustment of value of dollar reserves; 1972 adjustment of value of gold holdings).