The Need to Control International Bank Lending

Introduction

This paper deals with the process of international bank lending and with the policy implications for monetary management.

It is argued that foreign bank credit expansion has (or is likely to) become an important monetary factor. The macro and micro aspects of the dynamics of the process of this expansion and the relation to the US balance of payments deficit are analysed. Some general remarks are made with respect to the need for intensified international monetary cooperation.

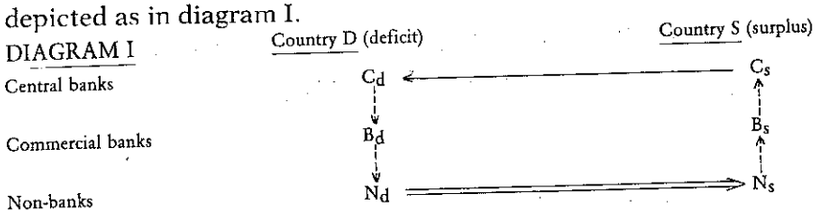
Foreign Bank Credit Expansion as a Source of Global Money Creation

1. In a world in which neither international bank lending nor international depositing would play a role, and in which, therefore, the national banking systems would be fully separated, balance of payments' disequilibria on current and non-bank capital accounts could only be "financed" by official transactions: transfer of reserves by the deficit country to the surplus country; and/or monetary credit extended by the monetary authorities (central bank) of the surplus country to the monetary authorities of the deficit country. In such a world, in which banks do not take part — either as lenders or as borrowers — in international capital transactions, the liquidity outflow from deficit countries is equal to the liquidity inflow into surplus countries. From a global point of view money creation is the sole result of the sum total of *domestic* credit expansions. Balance of payments' disequilibria influence the national location, but not the global amount. Furthermore, since money is held with *domestic* banks only, the national banking

statistics give a complete picture of the national money supplies. The *domestic* transactions of the banks are the sole concern of monetary management and monetary statistics.

Schematically, the situation described in this paragraph can be depicted as in diagram I.

DIAGRAM I



$N_d\ N_s$ – deficit of D = surplus of S on current and non-bank capital accounts.
$B_d\ N_d$ – domestic credit expansion in D and/or reduction of money supply in D.
$N_s\ B_s$ – increase of money supply in S and/or domestic credit contraction in S.
$C_d\ B_d$ – domestic central bank assistance to (and/or reduction of free reserves of) B_d.
$B_s\ C_s$ – increase in free reserves of (and/or domestic open market transactions with) B_s.
$C_s\ C_d$ – official settlements between central banks (monetary credit from C_s to C_d and/or transfer of reseves from C_d to C_s).

2. From a monetary point of view the situation does not alter fundamentally, if it is assumed that commercial banks engage in international inter-bank depositing. In diagram I this would e.g. open up the possibility of banks in surplus countries making deposits (or money market investments) with banks in deficit countries. If this were the only type of international transactions of commercial banks, it still would remain true that domestic credit expansion is the sole source of money creation and that monetary statistics can adequately be computed from national banking data. Of course, compared with the situation in paragraph 1, there would in one respect be an important difference: the commercial banks in the deficit country, by attracting deposits from banks in the surplus country, become less dependent on their central bank. The latter, therefore, is in a technically weaker position to reduce domestic credit expansion in order to eliminate the balance of payments deficit.

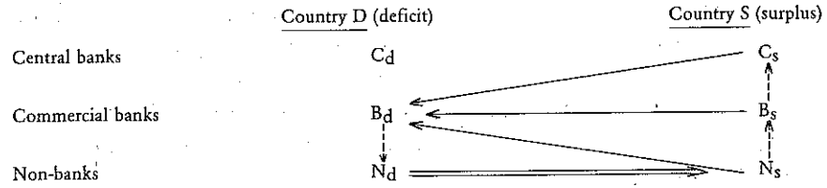
This position is further weakened to the extent that the commercial banks of the deficit country would also be able to attract deposits from foreign *central* banks and from foreign *non*-banks. This, typically, is the situation of the American banking system. In these circumstances the liquidity base deficit becomes a more relevant concept than the official settlement deficit.

3. Meanwhile, it has to be noted that from a *statistical* point of view it does make a difference when commercial banks attract

deposits from foreign *non*-banks. The equality between liquidity outflow from the deficit country and liquidity inflow into the surplus country is impaired *unless* the liquidity (money) concept is widened so as to include deposits of residents held *abroad*. This, indeed, is a necessary and logical extension. From a monetary point of view deposits of residents held with domestic banks and those held with foreign banks should be treated on an equal footing. If this is done (implying that the national money statistics have to be supplemented with data from foreign banks), the symmetry between liquidity outflow and liquidity inflow is upheld and it furthermore remains true that — *as long as commercial banks do not engage in international lending to non-banks* — money creation is the outcome of *domestic* credit expansions. The latter, therefore, remain the logical object of monetary control.

The situation described in paragraphs 2 and 3 can be presented in the following diagram:

DIAGRAM II



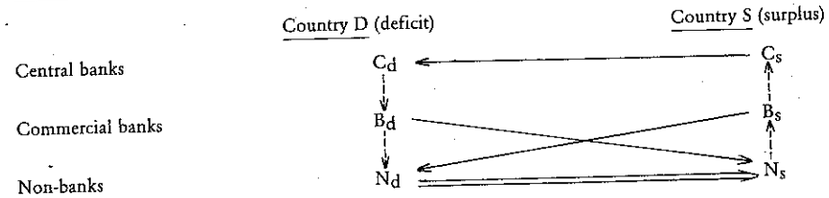
(Excessive) domestic credit expansion $B_d\ N_d$ in the deficit country D discharges itself in a deficit and liquidity outflow $N_d\ N_s$; the result for country S is an equal surplus and liquidity inflow, showing up in an accrual of "internal" deposits $N_s\ B_s$ held with domestic banks and of "external" deposits $N_s\ B_d$ held with foreign banks.

4. A fundamental change in the global functioning of the process of money creation takes place if and when commercial banks engage in international lending to non-banks.[1] As a result of such lending the symmetry between liquidity outflows and inflows is disturbed; furthermore, money creation (in the extended sense of including the creation of externally held deposits) no longer derives

[1] Throughout this paper, lending should be interpreted as *net* lending, viz. after deduction of any recourse to foreign *long* term funds. To the extent that banks would finance their foreign activities in this way they simply re-channel international capital without monetization. However, the foreign liabilities of G 10 commercial banks almost entirely have the character of *short* term liabilities.

from *domestic* credit expansion alone, but also rests with international lending activity. Diagram III, in which for the sake of simplicity international depositing has been assumed to be non-existent, depicts the new situation.

DIAGRAM III



If B_d N_s and B_s N_d denote respectively international lending by commercial banks of country D and international lending by commercial banks of country S, the net liquidity outflow from non-banks in D is equal to N_d N_s *minus* B_s N_d. However, the net liquidity inflow to non-banks in S is equal to N_d N_s *plus* B_d N_s. The asymmetry, therefore, equals the sum total of international bank lending. This lending gives rise to capital imports by non-banks that have no counterpart in non-bank capital exports. As a result, global money creation exceeds the sum total of domestic credit expansions by the same amount. It is the *total* of bank credit expansion (both domestic and foreign) that adds to the global money supply.

If B_d N_d denotes domestic credit expansion by commercial banks of D, whilst domestic credit expansion by commercial banks of S is assumed to be nil, the rise in the global money supply shows up in N_s B_s, being equal to the sum total of B_d N_d, B_d N_s and B_s N_d. Monetary management has to pay regard to domestic *and foreign* bank credit expansion.

Rough Estimates with Respect to the Foreign Transactions of Eurobanks and US Banks

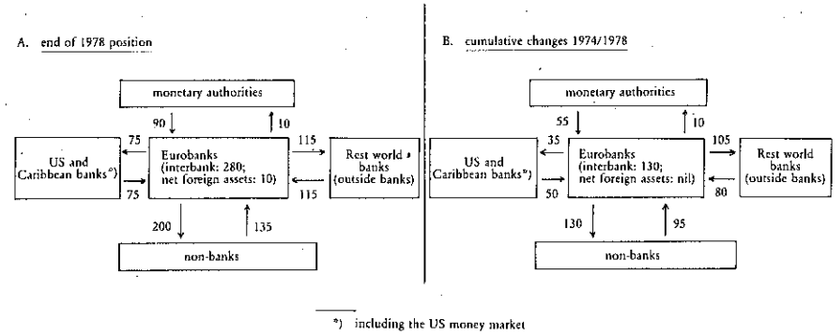
5. Lending to foreign non-banks has become a very important activity of commercial banks of G 10 countries.[2] In view of the

[2] In this paper the expression G 10 includes Switzerland.

special position of the United States as a reserve currency country and — more in general — as an important source of short term claims denominated in US dollars, it is customary and analytically useful to distinguish between on the one hand the US banking system (in this paper including the branches of US banks in the Caribbean off-shore centre) and on the other hand the combined banking systems of other G 10 countries, briefly — but not very accurately — commonly referred to as Eurobanks.

Diagram IV gives a picture of the foreign asset and liability position of Eurobanks at the end of 1978 and of the changes that have occurred in that position in the five years' period 1974/1978.

Diagram IV: Foreign assets and liabilities of Eurobanks
(in bln US $)

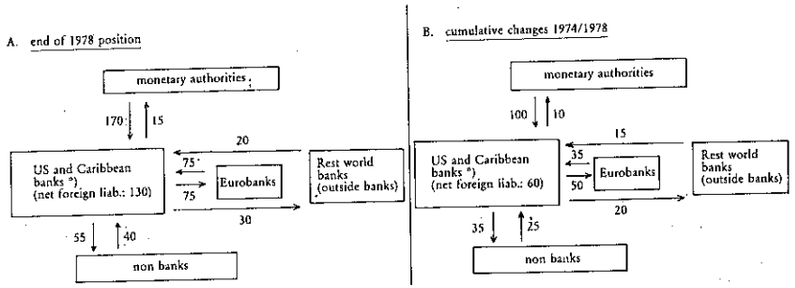


*) including the US money market

Eurobanks appear to have expanded their outstanding credits to non-banks during the five years' period by $130 billion to a total of $ 200 billion (i.e. at a rate of nearly 25% per year). In addition they expanded their credits (and/or deposits) in favour of banks and authorities outside G 10 countries by an amount in the same order of magnitude ($ 115 billion), part of which undoubtedly has led to additional domestic credit expansion (and, therefore, money creation) in the countries concerned. They were able to finance these operations by attracting deposits from non-banks and "outside" banks to an amount of $ 175 billion, thus covering more than 70% of their asset expansion. The remainder of $ 70 billion was financed by attracting deposits from monetary authorities — mainly outside the Group of 10 — and, to a small extent, by *net* borrowing from US and Caribbean banks.

Apart from thus aiding Eurobanks to expand their foreign activities, US and Caribbean banks participated on a considerable scale in direct lending to foreign non-banks and outside banks. According to the rough estimates contained in Diagram V they expanded their assets in these fields by an amount of $ 55 billion during the last five years, i.e. at a rate of nearly 25% per year. The return flow in the form of deposits (and US money market investments) made by foreign non-officials was somewhat smaller (in the order of $ 40 billion). However, foreign *officials* expanded their deposits and US money market investments at a rate that was far in excess of the gap vis-à-vis non-officials. The result was that the net monetary indebtedness of the United States in five years' time grew with an amount of approximately $ 60 billion. This, of course, was the reflection of the large cumulative balance of payments deficits of the United States on account of current transactions and non-monetary capital transactions.

Diagram V: Foreign assets and liabilities of US and Caribbean banks *)
(in bln US $)



*) including the US money market

The typical feature of the international monetary functioning of the US was and is that *both* via international bank lending *and* via balance of payments deficits short-term claims on US banks and on the US money market — representing "liquidity" of foreign non-banks, foreign banks and/or foreign monetary authorities — are almost constantly being created. The sum total of this liquidity base deficit of the United States during the last five years was, as can be seen from the diagram, in the order of $ 175 billion.

6. In the five years' period 1974/1978 foreign credit expansion by G 10 banks in favour of non-banks and outside banks amounted to more than 30% of net[3] domestic credit expansion by G 10 banks. This was the outcome of a yearly expansion *rate* that, on the average, was more than double the rate of expansion in the domestic sector. And since the latter, by and large, kept pace with the rate of expansion of nominal GNP and did not show a slow-down compared to years when foreign credit expansion was less buoyant, there is a strong suggestion that the foreign activity of G 10 banks has to be regarded as an inflationary factor of quite some importance.

Of course, for a proper evaluation of the global monetary impact of this activity much more analysis is needed. Monetary developments in G 10 countries *and in the rest of the world* have to be taken into account. An important question in this respect is to what extent the foreign activity of G 10 banks has, in recent years, performed a useful or even indispensable function in the process of recycling oil export surpluses. I shall revert to this function later on. The purpose of this paper, however, is not to evaluate past developments, but to look at what may happen in the future and, more in particular, to stress that the dynamics of the process of foreign credit expansion are such that the necessity of some kind of control can certainly not be ruled out.

Macro-Economic Aspects of the Dynamics of the Process of Foreign Bank Credit Expansion

7. At the end of 1978 non-banks of G 10 countries held nearly 4% of their liquid monetary claims with *foreign* banks. For non-banks of other countries this proportion probably was somewhat higher, viz. in the order of 6%. If it is assumed that this propensity of non-banks to hold part of their liquid monetary claims with *foreign* banks remains constant, the return flow to G 10 banks, as a group, induced by their foreign lending to non-banks, will, on the average, not be bigger than, say, 5%. Even disregarding any desire of G 10 banks to maintain their own cash or liquidity ratios, the multiplier of foreign lending, as opposed to domestic

[3] Viz. after deduction of the rise in *long* term domestic liabilities.

lending, according to this reckoning would be very small indeed. This, of course, does not rule out a process of continuous foreign credit expansion; this expansion, however, could not indefinitely go on at a rate that would be higher than the rate of domestic credit expansion.

The situation already becomes different if it is assumed that the propensity of non-banks to keep part of their liquid holdings with foreign banks is gradually rising. This, indeed has been the case in recent years. In the five years' period 1974/78 deposits of foreign non-banks entrusted to G 10 banks have been growing at an average rate of more than 25% per year, which considerably exceeded the rate of increase of the domestically held world money supply.[4] It is clear that such a more rapid increase of foreign deposits can, as long as it continues, sustain a rate of foreign credit expansion that exceeds the rate of domestic credit expansion.

8. The dynamics of foreign credit expansion are, actually or potentially, reinforced by other "return flows". Diagrams VI A, B, C and D give a picture of what may happen.

In the first place it is conceivable that simultaneous foreign lending by G 10 banks to non-banks in the partner country results in reciprocal "internal" return flows (VI A). On this account each G 10 bank — and, therefore, also the G 10 banks as a group — would gradually acquire a net foreign asset position. Although simultaneous foreign lending to partner non-banks certainly has taken place, external return flows and other factors have, however, been such that the net foreign asset position of Eurobanks showed practically no change during the five years' period 1974/78 (see diagram IV B).

With respect to these external return flows two other possibilities than external deposit making by non-banks are depicted in diagram VI B.

Diagram VIA

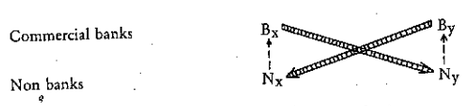
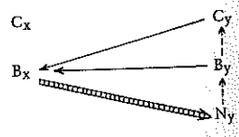


Diagram VI B



To the extent that the recipient non-banks or their beneficiaries make deposits with *domestic* banks (B_y), these domestic banks — if not themselves engaged in the business of foreign lending — may find it profitable to enter the interbank deposit market, thereby enabling the G 10 banks that have extended loans (B_x) to refund.

It is important to note that, irrespective of the currency in which the foreign transactions are denominated, there will be an almost automatic tendency for the circuit to be closed as long as all parties concerned cover their exchange risks. Under these circumstances it has to be expected that any reduction in the spot rate of X currency in terms of Y currency will be matched by a rise in the forward premium (or fall in the forward discount). Even without any rise of interest rates in country X in comparison with interest rates in country Y, money market investments in country X, therefore, become more attractive to non-banks and banks of country Y. This will tend to induce return flows that at the same time contribute to a stabilization of the exchange rate on the spot market. If necessary, the central banks of country X and/or Y can, of course, stimulate the return flows by allowing or bringing about changes in interest rates.

An alternative course to stabilize the exchange rate on the spot market is intervention.[5] In a world in which settlements between central banks in financial reserve assets (SDR's) play no role of importance, changes in foreign exchange reserves of central banks often again boil down to changes in deposits held with G 10 commercial banks. Thus, another external return flow may come into being.

Non-monetary international transactions can also play an important role in sustaining the process of foreign credit expansion (diagram VI C). The recipient country (Y) may have a balance of payments deficit on account of current and/or non-monetary capital transactions (indeed, the deficit may be caused or at least conditioned by the inflow of foreign bank credit), of which the counterpart either is a surplus of the lending country X — thus giving rise to an internal return flow — or a surplus of third countries (Z) whose non-banks, banks or central banks make foreign deposits closing the circuit.

[4] Converted into dollars at the going exchange rate.

[5] If "spontaneous" stabilization of exchange rates does not take place, authorities, of course, can also opt for (some degree of) free floating. As long as they thus abstain from intervention, bank or non-bank capital transactions will — almost by definition — in some way or another give rise to accommodating return flows.

Diagram VI C

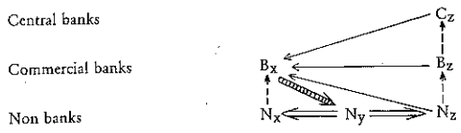
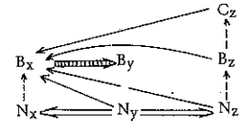


Diagram VI D



This latter phenomenon has attained great importance in the process of recycling oil export surpluses of OPEC countries. To the extent that these surpluses and the concomitant deficits of oil importing countries had to be accepted as a fact of life and the financing, because of liquidity preference of OPEC countries, could not be completely achieved by way of non-monetary capital transactions, the intermediation by Eurobanks was useful or even indispensable.

After what has been said about return flows to G 10 banks engaged in foreign lending to non-banks, little has to be added with respect to return flows sustaining foreign lending (or deposit making) in favour of "outside" banks. Diagram VI D, in which B_x represents the group of G 10 banks and B_y and B_z refer to outside banks, shows that essentially the same channels that have been discussed may play a role.

9. Summing up, it appears that there are many ways in which the "external circuit" of G 10 commercial banks — taken as a whole — can function as a closed system. Monetary leakages and constraints to which this circuit nevertheless may be exposed, fall under four categories. In addition there is a fifth circumstantial factor that rather may work as a stimulus.

(1) To the extent that return flows are of an *internal* nature (symbolized in the N_x B_x flows of diagrams VI A, C and D) there is the possibility — notably if the rate of domestic credit expansion would not be reduced — of an additional rise in the money supply and, therefore, in the banknote circulation, impairing the cash position of commercial banks.

(2) To the extent that return flows depend on the "intermediation" of central banks (symbolized in C_y B_x and C_z B_x in diagrams VI B, C and D), there is the possibility that the circuit gets stuck because of asset settlements (nowadays not very important), monetary credits between central banks or the use of other

alternatives to deposit making with commercial banks (such as investments in Treasury Bills).

(3) The monetary authorities, of course, are free to take action to influence the cash position of their commercial banks. They can — and often will — compensate the constraints resulting from the leakages listed under (1) and (2). On the other hand, they may either in a discretionary way or in a more institutional way put up additional constraints, e.g. via open market operations or via the imposition of cash reserve obligations, possibly also with respect to commercial banks' foreign liabilities.

(4) The functioning of the external circuit of G 10 commercial banks may also be subject to "distributional" effects. Depending on preferences and market conditions, external return flows may be "unevenly" distributed among G 10 commercial banks. Shifts between groups of these banks may take place. Just because institutional factors and reactions of monetary authorities in the countries concerned may be asymmetrical and because commercial banks may be reluctant to accept the inter-bank deposit market as a redistributional channel to any amount, it is necessary to subdivide the G 10 commercial banking system. For the purpose of this paper it suffices to make the subdivision that was already contained in diagrams IV and V, viz. between the US banking system (including branches of US banks in the Caribbean off-shore centre) and the combined systems of so-called Eurobanks.

(5) As explained, non-monetary international transactions can play an important role in closing the external circuit (diagrams VI C and D). However, balance of payments deficits and surpluses on account of non-monetary international transactions can also be of a more autonomous nature (although no doubt heavily influenced by *domestic* monetary policies in the countries concerned). In that case they may act as a stimulus to foreign lending by commercial banks of surplus countries or by other intermediating banks. US balance of payments deficits have played a very important role in this respect.

The Special Position of the US Balance of Payments in the Process of External Liquidity Creation; Policy Implications

10. Since the decline of Sterling after world war II, the position of the US$ as the main reserve currency and trading

currency naturally led central banks, commercial banks and non-banks to have a strong preference to keep their foreign deposits in that currency. Before the Eurodollar market had acquired importance the outcome of this preference was that the bulk of international depositing was directed toward the United States, where a well-equipped money market and an efficient banking system could gradually replace London. In those days foreign lending by G 10 commercial banks already was a monetary factor of some importance, but, international banking mainly being conducted in *domestic* currencies, the scope for this activity obviously was much bigger for banks located in the United States than for other G 10 banks.

It was in this way that the United States could perform a useful function of creating international liquidity to meet the demand of foreign authorities, foreign banks and foreign non-banks. International lending by US banks or, more in general, a *liquidity base* deficit of the US balance of payments — which also includes the possibility of a deficit on account of non-monetary (capital) transactions — was the prerequisite of this process of liquidity creation. Provided that the deficit was indeed not larger than the genuine (viz. non-inflationary) rise in world demand for liquidity and that the authorities of the accumulating surplus countries succeeded in reducing the rate of domestic credit expansion, there was, from a monetary point of view, nothing wrong with this system (however, as we know, these conditions were, alas, not fulfilled).

The rise and development of the Eurodollar market and, more in general, of the Euro*currency* market, considerably changed the scenario and potentiality of international liquidity creation. Commercial banks outside the United States, more and more engaging in transactions in *foreign* currencies, were able to get hold of a sizable part of the dollar liquidity creating circuit of foreign lending and deposit taking. In addition there was, in recent years, a tendency of foreign holders of deposits to switch or diversify in favour of other currencies (notably DM) than the US$. This, however, did not necessarily result in countries like Germany getting — be it on a modest scale — into the technical position of an international banker. The rise of international banking in *foreign* currencies meant that the business of international liquidity creation to some extent was cut loose from the home country of the currency. As a result, London could regain part of its position as international financial centre, whilst other centres came up, partly located in countries of which the currency has no international importance whatsoever.

A further development, closely connected with the changes just indicated, is that the willingness of non-banks to hold deposits with foreign banks has increased considerably. Given the possibility of making deposits in the national currency of the holder, so-called "circular flows" have come into being. But also apart from that phenomenon the international activity of G 10 banks now can benefit from a very responsive foreign deposit market.

The monetary implications of the aforementioned developments are twofold:

(1) From a global point of view the widening of the scope for external liquidity creation has in principle to find a counterpart in a relative slowdown of the process of domestic credit expansion. As already pointed out (see paragraph 6), there is a strong suggestion that this domestic condition was not met in the five years' period of which figures were given. However this may be, as to the future there can be little disagreement that for world monetary stability to be regained and sustained, the rate of domestic credit expansion will somehow have to be in "harmony" (viz. negatively correlated) with the rate of external liquidity creation.

(2) It is furthermore clear that there is little chance to arrive at such a non-inflationary "harmonized" global monetary development, unless external liquidity creation — although the scope for it has widened — is kept within certain limits. And since external liquidity creation has become a very important activity of Eurobanks, an obvious condition to be met — apart from some kind of control of that activity — is that external liquidity creation by the United States is considerably reduced. What has happened in recent years was the very reverse. In spite of a high rate of foreign lending by US (and Caribbean) banks, the US balance of payments on account of both current and non-monetary capital transactions, after nearby equilibrium in 1974 and 1975, went again into huge deficits, of which the liquidity effects, moreover, were a strong stimulus to external lending by Eurobanks (see table 1).

It is the impact of the US balance of payments deficit, which in part also depends on the "behaviour" of the authorities of other countries, to which closer attention now has to be given.

TABLE 1

SURVEY OF EXTERNAL LIQUIDITY CREATION

in % of GDP of G10 countries	1964/68	1969/73	1974/75	1976/78
	annual average			
1. lending by US banks[1] to foreign non-banks and outside-banks	0,1	0,2	0,4	0,3
2. US balance of payments deficit on account of non-monetary transactions	0,3	0,4	0,0	0,4
(1) + (2)	0,3	0,6	0,5	0,7
3. lending by Euro banks to foreign non-banks and outside-banks	0,3	0,5	0,9	1,3
(1) + (2) + (3)	0,7	1,1	1,3	2,0

[1] and *Caribbean banks*

11. Balance of payments deficits of the United States on account of current transactions, non-monetary capital transactions and foreign bank lending imply a liquidity inflow into the rest of the world. The same, of course, holds for balance of payments deficits of other countries.[6] However, from a global monetary point of view the position of the US balance of payments has a strategic significance that differs from the balance of payments position of other countries. The reasons are twofold.

In the first place the US$ is the main international trading and reserve currency. About two thirds of liquid foreign claims of non-banks, commercial banks and monetary authorities is held in US dollars, of which nearly one third in the form of claims on the United States. As a consequence of the preponderant position of the

[6] See diagram III, where the liquidity inflow into country S equals Nd Ns plus Bd Ns.

US$ the foreign transactions of the United States are to a very high degree conducted in this currency. The prime impact of a balance of payments deficit of the United States, therefore, is that dollar balances of "non officials" of other countries rise by almost the same amount.

Under present-day circumstances there is a second reason why the position of the US balance of payments has a significance that cannot be compared with the payments position of other countries. The fact that since the collapse of the Bretton Woods system there no longer exist intervention obligations on the part of the authorities of the United States and their main trading partners to keep the dollar exchange rate within narrowly confined limits implies that — unless authorities intervene all the same — the US dollars "created" by the US deficit somehow are "caught" in the non-official circuit.

As long as the demand of non-banks and banks for externally held dollar balances shows a spontaneous rise, disturbances need not occur. Indeed, the US deficit to that extent may well have to be regarded as a welcome[7] compensation of distributional leakages on account of "return flows" to the United States. US deficits in excess of this accommodating amount — as they have occurred massively in the past — may, however, in more than one respect have a disruptive effect on international monetary developments.

If the authorities refrain from intervention in the foreign exchange markets, these markets are bound to exhibit a tendency for the dollar to depreciate whether or not such a depreciation is justified from a point of view of fundamental adjustment. The depreciation will have to go on until at a lower rate expectations become such that non-official dollar holders become willing to absorb the excess supply. Under these circumstances overshooting, of course, is very likely.

In their endeavours to prevent or minimize an undesirable appreciation of their currencies, the authorities of the surplus countries — not wanting to intervene — may each individually feel induced to embark upon the road of warding off the threatening influx of foreign exchange by lowering moneymarket rates. From the point of view of stabilization of exchange rates this, indeed,

[7] Assuming "harmony" between external liquidity creation and domestic credit expansion [see paragraph 10 under (1) and (2)].

may to some extent be successful. However, this policy reaction accentuates the liquidity ease of commercial banks which anyway tends to be the result of the excess supply of US dollars. Eurobanks, seeing their covered interest rates on the additional dollar holdings — and on their money market investments in general — reduced, get, each individually, a strong incentive to expand their foreign lending. This foreign credit expansion — unless in favour of US residents — does, however, not lead to a reduction of the short term claims on the United States. The incentive, therefore, may continue to exist until leakages on account of an induced rise in direct US dollar holdings of non-banks and outside banks and/or the expansion of balance sheets would have taken away the (relative) liquidity ease.

In the meantime it is clear that the possible "wave" of additional foreign lending by Eurobanks to which an "excessive" US deficit may give rise — the more so if authorities of surplus countries lower money market rates — means that the global monetary effects of the deficit tend to become magnified.

These "secondary" effects need not occur to the extent that the authorities intervene in the foreign exchange markets. By taking away exchange risks, such interventions may, of course, be helpful to stabilize exchange rates. With respect to incentives to foreign lending much depends on the character of the official transactions. In the absence of asset settlements a rise in deposits or money-market investments of central banks *held in the United States* may, indeed, be expected not to lead to additional foreign lending incentives; there may even be some liquidity squeeze of US commercial banks, viz. to the extent that Euro central banks buy Treasury Bills and US authorities do not take compensatory action. If, however, central banks would try to take advantage of the Euromarket and entrust their deposits to Eurobanks, the counterpart of the US deficit would simply be re-channelled to these banks, thus possibly still producing a rise in liquidity ease.

It thus appears that, apart from the monetary "behaviour" of the United States, the policies of other countries may also influence supply conditions of foreign lending. The extent to which central banks keep their dollar reserves with Eurobanks and not with the United States forms an important distributional factor (see paragraph 9). Switches in favour of Eurobanks can exert a significant expansionary influence, since the liquidity ease of

Eurobanks augments, whereas the liquidity ease of US banks is not reduced or may even increase as well.*

Similar expansionary distributional effects on supply conditions may obtain in case of asymmetrical behaviour of surplus countries and deficit countries: the latter running down central reserves held in the United States, the former making deposits with Eurobanks. If, on the other hand, deficit countries, wishing to protect their reserves, turn to the Euromarket for external borrowing, it is rather from the *demand* side that an expansionary influence on foreign bank lending may be exerted.

12. It should be clear from the foregoing that the size of the US balance of payments deficit and the external "financing behaviour" of the authorities of other countries may strongly influence the extent of global external liquidity creation. Endeavours to keep this creation within such limits that a non-inflationary harmonized global monetary development becomes possible will, therefore, need the backing of balance of payments adjustment on the part of the United States and of "reserve holding discipline" on the part of the monetary authorities of other countries.

With respect to the former it should be stressed that it is the US balance on account of current transactions, non-monetary capital transactions and foreign bank lending, therefore the US liquidity base balance, of which the deficit has to be reduced to what from a global monetary point of view can be deemed to be acceptable. As long as extensive deficits exist, asset settlement may be helpful to speed up adjustment and to contain the secondary effects. Such containment may also result from relatively tight US moneymarket conditions; these conditions may in addition be indispensable to stabilize exchange rates. In the end, however, bridging operations are not enough: it is adjustment that matters.

With respect to reserve holding discipline of central banks it is true that it may be hard to convince authorities of non-G 10 countries that for the sake of global monetary stability they should abstain from making deposits with Eurobanks. It is also true that there could in principle be no monetary objection against the "acceptable amount" of external liquidity creation to a greater

* Viz. to the extent that central banks sell Treasury Bills and the US authorities do not take compensatory action.

extent being achieved by foreign lending by Eurobanks, as long as foreign lending by US banks would be reduced commensurately.

However, in the present-day's situation in which both the US payments deficit and the foreign lending activity of Eurobanks tend to be bigger than what from a global monetary point of view can be brought in harmony with domestic liquidity creation, an agreement among G 10 central banks — although not comprising all central banks in the world — to abstain from giving extension to deposits held with Eurobanks, must be considered of great value. Such a holding operation, which in fact was concluded already in 1971 and which was re-confirmed last year, also underlines that the G 10 authorities recognize that they have a special responsibility for the restoration and maintenance of monetary stability in the world.

Micro-Economic Aspects of the Dynamics of the Process of Foreign Bank Credit Expansion

13. The emphasis that has been put on the "magnifying" character of the foreign lending activity of Eurobanks in relation to the US balance of payments deficit should, however, not distract from the fact that external liquidity creation by G 10 commercial banks also has a momentum of its own that may be highly responsive to credit demands.

The external circuit may be exposed to leakages and distributional effects, but pulls to close the circuit may be very strong. More important, perhaps, there is no evidence of an external base ratio that would govern the process of external liquidity creation. Claims of Eurobanks on US banks (and on the US money market), which possibly could have been expected to perform such a base function, showed an almost continuous decline both in relation to dollar liabilities and in relation to the total of external liabilities.

Liquidity considerations certainly influence the conduct of G 10 commercial banks. These considerations apply, however, to the aggregate of their activities; a distinction between domestic activities and foreign activities — important as it is from a macro-economic point of view — is almost completely irrelevant for the purpose of observing prudential safeguards.

The relative liquidity position of Eurobanks that may influence their lending activities is a *micro*-economic concept. As long as the banks, in view of the non-existence of exchange restrictions[9] are confident that they can use domestic funds for the repayment of foreign debts and/or foreign funds for the repayment of domestic debts, they have no reason to distinguish between a domestic and a foreign "department" of their activities. It is true that under a system of free floating there is no guarantee that the banks collectively will be able to convert. This consideration, however, loses much of its relevancy for each bank *individually*; moreover, experience has taught that even in the absence of intervention obligations authorities will step in to smooth extreme exchange rate fluctuations (managed floating).

It is in full agreement with this situation that prudential liquidity requirements prescribed by commercial banks' supervising authorities often apply to domestic and foreign balance sheet items on the same footing.[10]

Of course, apart from prudential liquidity requirements, liquidity in the more technical sense of readily available cash may also influence (or rather: be a constraint for) commercial banks' activities. But here again, this *cash* position (comprising free reserves and unused re-discount facilities) is relevant for the *totality* of the banks' activities.[11]

If foreign transactions of Eurobanks — due to an "insufficient" foreign "return flow" — are in deficit, the banks can make use of domestic funds. From the point of view of *national* objectives there is certainly no reason for the authorities concerned to resist this as long as the balance of payments is in surplus. But even in the absence of a surplus the resulting shift of central reserves to a net foreign asset position of commercial banks may be of little concern to the national authorities. It should be added that since foreign lending by commercial banks in favour of non-banks results in an

[9] The principle of freedom of international money market movements is well established in the Western world.

[10] It may be interesting to note that in case of the Netherlands the foreign balance sheet items of Dutch banks contribute to an important *surplus* of liquidity above the prudential norm; this surplus compensates a shortage of liquidity on account of domestic balance sheet items.

[11] It is possible that international interbank overdraft facilities, although from a macro point of view not adding to the *net* liquidity of G 10 banks, do contribute to their aggregate liquidity in a micro-economic sense.

excess of liquidity inflows over liquidity outflows (see paragraph 4), this in itself may cause a prevailing illusion of balance of payments surplusses and may thus lead to a bias of authorities not to be concerned about the process of foreign lending from a national point of view.

G 10 commercial banks will meet foreign credit demands to the fullest extent possible in as far as they do not feel constrained by micro-economic considerations of liquidity, solvency and profitability. The same considerations, however, apply to their domestic lending activities. It follows that as long as domestic credit expansion almost everywhere keeps pace with — or exceeds — the liquidity requirements of the economy, it is not likely that the banks' foreign lending activities, even without the stimulus of excessive US deficits, will be much hampered by lack of liquidity. And with respect to the other micro-economic considerations international banking may for more than one reason have *advantages* over domestic banking both for the lending banks and for the borrowers.

14. In the extensive literature on the Euromarket much attention has been given to these advantages. It is not the purpose of this paper to spell them out in detail. They include the fact that the Euromarket essentially has the character of a wholesale market with important economies of scale. They may also spring from the anonymous character of the market, which may attract foreign borrowers who, furthermore, may find the capacity of their domestic banks inadequate to meet their credit demands. Fiscal advantages may play an important role, especially for banks located in off-shore centres. These may also have the "advantage" that prudential supervision is less severe than elsewhere. Last but not least, existing differentiations in monetary control may strongly work in favour of foreign lending. Apart from the fact that in most countries guidelines with respect to lending, if in use, refer to domestic lending only, the most important monetary differentiation concerns the application of cash reserve requirements, foreign liabilities and/or liabilities in foreign currencies often (in off-shore centres: always) wholly or partly being exempted.[12]

[12] Historically, interest rate ceilings on domestic deposits (regulation Q in the United States) have also played an important role.

15. The dynamics of foreign credit expansion are clearly reflected in the swings in the average spreads between the Libor-rate[13] and the interest rate that foreign borrowers have to pay to Eurobanks. These spreads were small (7/8% before 1974), when the US payments deficits — especially in 1971 and 1972 — were big; they widened in 1974 and 1975, when credit demands on the part of some OECD countries and of non-oil-producing LDC's heavily affected by the oil price increase, were very high, whilst in spite of the oil price increase the US balance of payments showed a sharp improvement;[14] they came down again in 1976, to reach low or even very low levels in 1977 (5/8%) and 1978/79 (½% or less), when the balance of payments of the United States returned to heavy deficits (see table 2).

TABLE 2

	1971	1972	1973	1974	1975	1976	1977	1978
1. Average spread in the Euro market	—	—	7/8	1	1¼	1	5/8	½
2. US balance of payments deficit [1]	1,2	0,7	0,4	0,7	0,2	0,6	0,8	0,8
3. Current account deficit of non-oil Ldc's and "other" [2] OECD countries [3]	0,5	0,2	0,2	1,1	1,3	1,0	0,9	0,7
4. Foreign lending by Eurobanks [4]	15	68	29	35	19	23	24	36

[1] Deficit on account of non-monetary transactions and foreign lending to non-banks and "outside" banks in % of GDP of G10 countries.
[2] OECD-countries minus G10 countries and Switzerland.
[3] In % of GDP of G10 countries.
[4] To non-banks and "outside" banks in % of amounts outstanding at the beginning of the year.

As to the expansion rate of foreign lending by Eurobanks it is interesting to note that in spite of the changes of the international scenario this rate has continued to fluctuate around a high average

[13] The London interbank borrowing rate.

[14] Other factors, of course, also played a role, such as the increased awareness of risks brought about by some bank failures.

of nearly 30% per year. This, indeed, strongly suggests that although a sharp reduction in the US balance of payments deficit clearly is a prerequisite for keeping external liquidity creation within monetarily "acceptable" limits, specific measures may also be needed to ensure that the rate of foreign lending by commercial banks does not run counter to the requirements for the restoration and maintenance of some degree of global monetary stability.

It is not the purpose of this paper to make concrete proposals with respect to these specific measures. It is clear that they would require an intense effort of international monetary cooperation on an almost worldwide scale and in an almost completely new domain. Some general remarks may be in order.

International Monetary Cooperation and Monetary Management with Respect to Foreign Bank Credit Expansion

16. In the first place, international cooperative efforts may be called for to take away advantages of international banking over domestic banking that spring from differentiations in existing supervisory or monetary regulations.

In the field of prudential supervision important headway is already in sight. The adoption of the principle of solvency supervision on a consolidated basis — implying that head offices and parent banks have to accept integrated responsibility for their foreign branches, subsidiaries and (majority) participations — and the clearly expressed willingness of authorities of important off-shore centres to cooperate are big steps forward. Some harmonization of the supervisory norms — both with respect to solvency and with respect to liquidity — will, of course, also be important.

In the domain of monetary regulations a possible restructuring and coordination of national cash reserve requirements is a very difficult but significant subject, which in some respects already has become an object of study of cooperating central banks.

But even if international banking would no longer benefit from important relative advantages due to differential government regulations[15] — fiscal advantages also fall in this category — it

[15] It has to be noted that acceptance of the proposal of the New York Clearing House to create an "International Banking Facility" would imply that advantages would be perpetuated rather than eliminated.

cannot be taken for granted that the international lending activity of commercial banks would spontaneously remain within such limits that it would never create a problem for monetary management. Intensified prudential supervision may reduce the risk of micro-economic overexpansion. The dynamics of international banking in a world in which banks and non-banks tend to become more and more internationally orientated, make it however very doubtful that from a macro-economic point of view monetary authorities can continue to be more concerned about domestic liquidity creation than about liquidity creation via external bank lending.

17. The idea, sometimes put forward, that the national authorities, by not allowing their residents to have recourse to foreign bank credit can effectively protect their economies against unwanted inflows is — apart from the long-run feasibility of these exchange restrictions — an inadequate answer to the problem of external liquidity creation. As should be clear from the analysis in this paper, there are many channels through which the liquidity created by international bank lending may spread to other countries. The residents of the recipient country may augment their imports of goods and services and their exports of capital. The monetary effects, therefore, cannot effectively be warded off by exchange restrictions on the *direct* inflow of foreign banking funds. As long as the process of (excessive) foreign bank lending continues — and it is not to be expected that worldwide controls on foreign *borrowing* by non-banks could ever become an instrument to control the lending — the disturbing monetary effects will somewhere come up and tend to spread to all countries. Certainly from the point of view of global monetary management other measures, therefore, have to be taken into consideration.

18. In principle there are three approaches: authorities may treat domestic and foreign bank lending as one whole; they may concentrate — as they do now — on the control of domestic credit creation, thereby trying to achieve some kind of (negatively correlated) harmonization with liquidity creation via foreign bank lending; or else they may try to influence these liquidity creating activities separately.

The first approach would imply that the sum total of domestic *and foreign* credit expansion is made the relevant target variable of

monetary policy. If each of the monetary authorities were to keep *total* credit expansion of their banks within acceptable limits, excessive capital imports could never become a general source of monetary inflation. On the contrary, international capital flows (including flows of banking funds) could and should generally be left free, as they would have the important function of preventing regional discrepancies in the provision of liquidity. It is evident that this method of dealing with the problem of foreign credit expansion can only be envisaged between countries that have already travelled a long way toward an effective coordination and harmonization of economic and monetary policies. It is possible that the European Community will, in due course, become ready to pursue this line of action.

Under the second approach the authorities could conceivably aim at a reduction of the rate of domestic credit expansion so as to ensure that the sum total of domestic and foreign credit expansion — the rate of the latter being left free — would not be excessive. For such a system to work, fluctuations in the rate of foreign credit expansion should be small enough to make estimates reasonably possible and cooperation between countries should be close enough to reach agreement about the "deductions" to be applied to the target rate of domestic credit expansion. These deductions, of course, would have to be bigger, the larger the anticipated amount of foreign bank lending. Achievement of a "harmonized" rate of domestic liquidity creation may then become more difficult.

Another possibility under the second approach would be that authorities, in setting a goal for domestic credit expansion, would systematically take into account the estimated liquidity inflow into their economy on account of monetary balance of payments surpluses, including the direct and indirect effects of foreign bank lending. To some extent this is the present way in which authorities try to avoid an excessive rise of the domestic money supply. Of course, to be consistent, the money concept should be widened so as to include deposits of residents held *abroad* (see paragraph 3). It is furthermore evident that a prerequisite for arriving at some degree of global monetary stability along this route, again is that foreign credit expansion is not too rapid and volatile.

Since it cannot be taken for granted that this will be the case, the third approach — viz. some kind of monetary control of foreign bank lending in addition to monetary management with respect to

domestic credit expansion — has to be envisaged. As with respect to domestic credit expansion one could think of either indirect controls — working via manipulation of liquidity and/or profitability constraints — or more direct controls based on quantitative guidelines that one way or another (moral suasion; financial incentives) are made effective. Since domestic lending and foreign lending in many respects depend on the same "pool of finance", one of the questions with respect to techniques of indirect control may well be whether these techniques, unaided by elements of direct control, could really help to slow down foreign lending without exerting an unwanted influence on domestic lending. Central banks, as lenders of last resort, have the power — e.g. by raising cash reserve requirements — to make their money dear. This, no doubt, may slow down the rate of foreign lending in those currencies all over the Euromarket. However, foreign lending in other currencies, of which interest rates have not been put up, remains unaffected or may even increase in response to a shift of demand to those cheaper currencies. And, which is more important, any net reduction in the rate of foreign lending is acquired at the cost of higher domestic interest rates in the countries that have made use of this indirect method of control. This may run counter to the requirements of domestic monetary management. Thus, authorities may well have to turn to more direct methods of control, if they want to influence foreign bank lending whilst retaining some freedom of action with respect to domestic monetary developments.

19. All this, of course, would have to be subject of elaborate studies and intense international consultations. As already said, measures with respect to supervision and control of international banking do require international monetary cooperation in an almost completely new domain and on an unprecedented scale. That such measures, in spite of all the efforts needed, nevertheless have to be envisaged, even assuming an important reduction in the US balance of payments deficit, is the main conclusion of this paper.

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