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EURO-DOLLAR FLOWS AND THE EFFICIENCY OF U. S. MONETARY POLICY

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EURO-DOLLAR FLOWS AND THE EFFICIENCY OF U. S. MONETARY POLICY

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The strong reliance of a small number of U. S. commercial banks on Euro-dollars as a source of funds, partly to compensate for the heavy attrition in their large denomination certificates of deposit, has raised several issues for monetary policy -- both in the United States and in Europe. Some observers have argued that the access of American banks to Euro-dollars has greatly weakened the Federal Reserve's control over monetary conditions in the United States. Others have pointed to the sharp climb in Euro-dollar interest rates mainly in response to strong bidding for such funds by U. S. banks and have emphasized that the effects on European capital markets are adverse. Both groups have concluded that the Federal Reserve should take steps to moderate the inflow of Euro-dollars. To accomplish this goal, the most frequently

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I am grateful to several members of the Board's staff for assistance in the preparation of this paper. Mr. James B. Eckert did the preliminary analysis of the asset and liability adjustments of banks during periods of large CD run-off. Miss Mary Jane Harrington was mainly responsible for compiling the banking statistics on which the analysis is based. Mr. Isaac V. Bank, Jr. was responsible for the computer programming which was necessary to study separately the behavior of the eleven large banks with London branches and which account for virtually all of the Euro-dollar inflow. Miss Mary Ann Graves, my assistant, also worked on several aspects of the paper -- especially on the compilation of the sources and uses of funds tables.

mentioned approach is the application of reserve requirements against such funds used by the head office of U. S. banks.[1/]

But, as one would expect, there are counter arguments. In the first place, the large inflow of Euro-dollars has undoubtedly been a major source of strength in the U. S. balance of payments in recent years, as measured on the official settlements basis. In the absence of vigorous bidding for such funds by U. S. banks, a substantial proportion probably would have found its way into foreign central banks -- thus increasing the potential claims on our dwindling stock of gold -- or making it necessary to draw on our swap arrangements to buy back the unwanted dollars. Moreover, it is also argued that the Euro-dollar inflow has served primarily as a safety valve that has eased the burden of U. S. banks in adjusting to the sizable attrition in large denomination certificates of deposit (CD's) which they have experienced on several occasions in recent years. Both of these arguments cite the high cost of borrowing Euro-dollars (e.g. 8-1/2 per cent for 3-month maturities on March 4) and stress that this alone will greatly dampen the willingness of U.S. banks to bid for such funds.

1/ Technically, Euro-dollar funds used by the head office of a U. S. bank are recorded as "due to foreign branches," and the books of the foreign branch show the entry as "due from head office." For the U. S. parent bank, such funds are classified as "other liabilities"; thus, they are not subject to reserves fixed by the Federal Reserve nor to payment of Federal Deposit Insurance Corporation premiums. Of course, the foreign branches record the funds initially as deposits on their own books, and these are subject to whatever reserve requirements and other conditions the foreign government may impose.

Personally, I share some of the elements in each of these contrasting positions. However, on balance, I believe the Federal Reserve should keep under close review the question of whether reserve requirements should be applied to Euro-dollars used by the head offices of U.S. banks. I recognize the important contribution Euro-dollar inflows have made to our balance of payments (although I also recognize that such flows are highly volatile and can be quickly reversed). While I appreciate the uneasiness expressed by some Europeans over the impact of higher interest rates on short-term capital flows, I am convinced that the leading European central banks have the capacity to cope with the situation in their own markets.

I am mainly concerned with the ability of the dozen or so large banks with London branches to deflect and delay the effects of monetary policy by resort to Euro-dollars. In expressing this concern, I am not endorsing the view which holds that the banks' ability to filter the effects of policy actions means the Federal Reserve's capacity to control the volume of bank reserves has been diminished. Quite the contrary, the Federal Reserve can exert any degree of restraint it wishes to offset any expansion in total loans and investments of the banking system resulting from an inflow of Euro-dollars. Through net sales of Government securities in the open market or through an increase in reserve requirements against member banks' demand or time deposits, reserve pressures on member banks' can be increased by any amount the Federal Reserve decides is desirable.

Nevertheless, the ready access to Euro-dollars by a small number of large banks raises several troublesome issues. As these banks attract funds to sustain their own lending activities against sizeable deposit attrition, the Federal Reserve might have to exert a greater degree of pressure to achieve a given target of restraint on total bank reserves. Furthermore, a disproportionate share of such overall pressure could fall on those banks without ready access to Euro-dollars. Because of the cushioning benefits of Euro-dollar inflows, some of the largest money market banks can avoid (at least for a while) some of the even more costly means (such as selling securities at sizable capital losses) of obtaining funds to meet loan commitments in the face of CD attrition. Likewise, because they can rely on their foreign branches to put them in funds (although admittedly at a high and rising cost), they have found it less urgent to adopt more restrictive current lending standards or to limit their new commitments to make business loans in the future. Of course, under conditions of substantial monetary restraint -- maintained for a significant period of time -- even the largest banks with access to Euro-dollars will eventually have to reduce the expansion of credit through loans and investments. But, for quite a while, they can postpone adopting that course through reliance on Euro-dollars.

In the meantime, the strategically placed money market banks can -- and do -- transmit to the market and their own customers an impression that the degree of monetary restraint in general is less substantial than the monetary authorities say is being exerted. In my opinion, the feeling that emerged in the market in January and early

February this year can be explained partly by the relatively comfortable position of some of the dozen or so banks with ready access to Euro-dollars. While they experienced a sizable attrition in CD's, they were also able to offset a substantial proportion of the deposit decline by a net inflow of $2.8 billion in Euro-dollars in January and February.

But, as I mentioned above, even these banks will eventually have to adjust their operations to the lessened availability and higher cost of reserves. The strategy of adjustment adopted by these institutions should be interesting and important not only to students of the monetary system but also to market participants and to the monetary authorities. To help improve understanding of this process, a detailed analysis has been made of the behavior of the nation's largest banks during periods of monetary restraint and periods of relative monetary ease since the end of 1965. In this analysis, the behavior of the dozen or so large banks with London branches -- and which have attracted virtually all of the Euro-dollars -- was contrasted with the behavior of other institutions in the commercial banking system.

The broad conclusions which follow from this analysis can be summarized briefly:

- During periods of monetary restraint, the dozen or so large money market banks with London branches have experienced a much higher rate of attrition in CD's than have banks generally.

- However, these same large banks have reduced progressively their reliance on U. S. source borrowing in adjusting to the decline in time deposits. Instead, they have relied heavily on the inflow of Euro-dollars. During periods of monetary restraint, these inflows have accounted for roughly one-fifth to one-third of their total sources of funds, compared with about one-tenth during periods of relative monetary ease.

- The expansion of businesses loans tends to be sustained relatively more at the large banks with ready access to Euro-dollars during periods of monetary restraint than at other banks. Thus, these institutions account for a larger proportion of the growth of such loans during periods of monetary restraint than during periods of relative monetary ease.

On the basis of these results, I am convinced personally that the strong bidding for Euro-dollars by the dozen or so large banks with London branches does complicate the problem of monetary management. This is especially true in the current period when the monetary authorities are attempting to employ restraint on the growth of bank credit as one phase of the attack on inflation. Since a major objective is to moderate the pace of spending by the business sector -- especially on investment in fixed equipment -- it seems to me self-evident that the bank's capacity to make new commitments to lend to businesses must also be reduced. In my opinion, one element in this strategy should be the lessened availability of Euro-dollars.

In the remainder of this paper, the pattern of banks' adjustment to the attrition in CD's is sketched more fully. Next, the legal basis available to the Federal Reserve to apply reserve requirements to Euro-dollar inflows used by the head offices of U. S. banks is summarized, and estimates are made of the possible effects of such a move on the banks' cost of funds and reserve positions. Finally, an assessment is made of the prospects for bank credit expansion in the months ahead.

Asset and Liability Adjustments of Banks During Periods of Large CD Attrition

In the last three years, there have been three periods in which monetary restraint induced a CD run-off. The first of these covered most of the last half of 1966; the second was roughly coterminous with the second quarter of 1968; and the last, which is continuing, began about mid-December of last year.1/ To throw additional light on the way various groups of banks were affected by restraint and adjusted to it, an analysis has been made of changes in major asset and liability items during the relevant CD run-off periods. The study focused on the 340 or so large banks which report weekly to the Federal Reserve System. Separate data were analyzed for the 11 major banks with London branches,2/ for other weekly reporting banks, for all weekly reporting banks, and for all nonweekly reporting banks, where the relevant dates permitted.

Recent Period: Mid-December, 1968 through Mid-February, 1969

The general nature of the impact of restraint and the resulting bank adjustments can be illustrated by reference to the data for the current period of CD attrition beginning in mid-December, as market yields rose above the maximum interest rates which the banks could pay under Regulation Q. (See Table 1, attached.) These data indicate that total

1/ Except for the most recent period, the basic data for this analysis were prepared for calendar quarters to facilitate compilation of comparable data for both nonweekly reporting and weekly reporting banks. In 1966, the CD run-off continued from August 17 to Decmeber 14 and totaled $3.2 billion, compared with a June-December decline of $2.6 billion. In early 1968, the run-off (excluding that associated with the March tax date) was from March 27 to June 19 and totaled $1.5 billion compared with $1.3 billion in the second calendar quarter.

2/ These 11 banks account for about 98 per cent of total borrowings from foreign branches. There are 12 other banks with London branches, but these were not studied separately.

deposits of the 11 banks with London branches declined $2 billion between December 11 and February 12, or $1.0 billion more than they did in the comparable period a year ago. This decline mainly reflected the loss of $2.7 billion in CD's at these banks. At other weekly reporting banks, however, total deposits increased only $300 million less during this period than in the comparable period a year earlier despite a $1.1 billion CD run-off. Their deposit growth took the form of a large increase in demand deposits. Data for non-weekly reporting banks are not available for the specific dates used for this recent period.

The 11 banks increased their use of Euro-dollars by about $0.9 billion, or about one-third of the amount of the CD run-off. They experienced a decline in total earning assets of $2.3 billion compared with $200 million a year earlier. They made an unusually large reduction in their holdings of Governments, and they also made relatively substantial reductions in nonbusiness loans and in holdings of other securities. However, their business loans rose by $0.9 billion, compared with $0.5 billion a year earlier.

Other weekly reporting banks, on the other hand, added much more to their holdings of loans (including nonbusiness loans) than they did in the comparable period a year earlier. To accomplish this, they made a small reduction in their holdings of Governments and increased their borrowings by $1.4 billion.

Earlier Periods: 1966 and 1968

The pattern of pressures and adjustments resulting from the CD run-offs in the last half of 1966 and in the second quarter of 1968 was substantially similar to recent experience. (See Tables 2 and 3.) Particularly in the last half of 1966, the downward pressure on deposits was much greater at the 11 banks than at other weekly reporters. Such pressure was least evident at nonweekly reporting banks. In fact, total deposit expansion at nonweekly reporting banks during the second quarter of 1968 was much larger than in the comparable quarter of either of the two preceding years.

In both periods, the 11 banks made greatly increased use of Euro-dollars. Yet, the pressures on them from the deposit side and from loan demands gave rise also to substantial asset adjustments and increased borrowing. Similar though less substantial adjustments also were made by the weekly reporting banks with no foreign branches. To the extent that any adjustment to monetary restraint was made at non-weekly reporting banks, it took the form of a somewhat slower rate of acquisition of U. S. Government and other securities.

Differential Adjustment Patterns

A somewhat sharper insight into the different ways the principal groups of banks have adjusted to monetary restraint and ease is provided by an analysis of their main sources and uses of funds during several periods since the end of 1965. Four periods of attrition in CD's are identified: mid-December, 1968 to mid-February, 1969; mid-December, 1967 to mid-February, 1968; first half of 1968, and the last half of 1966. (See Table 4.) Three periods of expansion in CD's are also identified: second half of 1968; the full year 1967, and the first half of 1966. (See Table 5.) In each case, the 11 major banks with London branches and which account for virtually all of the Euro-dollar inflows were identified separately.

As already mentioned, during recent periods of attrition in CD's, the 11 major banks have had to use a considerable portion of their cash flow to meet the run-off. For example, in the two months ending in mid-February of this year, attrition in CD's represented well over half of their total uses of funds. In the same period a year ago, they used just under half of their funds for the same purpose. In the first six months of last year, the ratio was slightly below one-third, and in the last six months of 1966 it was somewhat over one-quarter. In contrast, for other weekly reporting banks, CD attrition accounted for only one-quarter of their total uses of funds between mid-December and mid-February this year. In two of the remaining three periods of overall CD attrition, these other banks gained funds through the continued rise in CD's, and in the final period (last half of 1966) such attrition represented less than 2 per cent of their total uses of funds.

To meet the attrition in CD's, the 11 banks have relied heavily on the inflow of Euro-dollars. As already mentioned, the increase in these banks' liabilities to their foreign branches represented about one-third of the attrition in their CD's during the two months ending in mid-February this year. In the same period a year ago, these institutions reduced their liabilities to their foreign branches, despite the run-off of about $0.9 billion in their CD's. During the periods of CD attrition in 1966 and 1968, the net inflow of Euro-dollars to the head offices of the 11 banks represented 90 per cent and 115 per cent, respectively, of the CD run-off. Viewed more broadly, the increase in liabilities to foreign branches accounted for just under one-fifth of the 11 banks' total sources of funds in the two months ending in mid-February, 1969. In the first half of 1968 it accounted for nearly two-fifths and for one-quarter in the second half of 1966.

On the other hand, so far this year the 11 banks with ready access to Euro-dollars have relied much less on other forms of borrowing (such as federal funds, loans from Federal Reserve Banks or from correspondent banks) than have other banks. For example, such borrowings represented less than 2 per cent of the total sources of funds of the 11 banks in the two months ending in mid-February, compared with 30 per cent for other weekly reporting banks during the same period. In the first half of 1968 and in the last half of 1966, the 11 banks relied much more heavily on borrowing as a source of funds than did other banks.

So far this year, sales of U. S. Government securities have accounted for about half of the 11 banks' total sources of funds. This was an exceptionally large proportion, compared both with their own experience in other periods of CD attrition and with the experience of other banks. However, this behavior is quite understandable. In the last half of 1968, a period of substantial expansion in CD's, these 11 banks had sharply increased their holdings of Government securities (for example, the acquisition of such issues represented almost 30 per cent of their total uses of funds in the June-December months last year). Given the pressures on the banks created by the heavy CD attrition this year, one can well understand why they would reduce their holdings of short-term Government securities, especially Treasury bills on which the investment yield has been considerably below that on Federal funds.

With respect to uses of funds, other than to meet the attrition in CD's, the behavior of the 11 banks can also be differentiated from that shown by other banks. For example, the 11 banks used a somewhat smaller proportion of their funds to expand loans in the two months ending in mid-February than did other banks; however, all of the increase for the 11 banks centered in business loans while their nonbusiness loans actually shrank. In contrast, for other banks, both types of loans rose. This same pattern has prevailed for both groups of banks in each period of CD attrition.

During periods of expansion in CD's, the rise in these deposits has accounted for a somewhat larger share of total sources of funds for the 11 banks than for other institutions. The opposite has been true of other time and savings deposits. In two of these same three periods of increased liquidity, the 11 banks have used a sizable proportion of their funds to expand nonbusiness loans (in contrast to net repayment of such loans during periods of CD attrition). During the same periods, other banks have channeled a larger share of their funds into both business and nonbusiness loans. Both groups of banks have also used proportionately more of their resources to acquire securities, especially tax-exempt State and local government issues.

Finally an even better appreciation of the 11 banks' pattern of adjustment during periods of CD attrition and expansion can be gotten from an analysis of this group of banks' percentage share of selected assets and liabilities of all weekly reporting banks. These calculations are shown in Tables 6 and 7.

These 11 banks have held about 36 per cent of both the total assets and total loans outstanding at all weekly reporting banks since the end of 1965. They have also accounted for about 46 per cent of the business loans held by all weekly reporting banks. Their share of both total deposits and of time and savings deposits other than CD's has been in the neighborhood of 28 per cent. In the case of CD's, their share of the total outstanding averaged about 50 per cent during periods of monetary ease and from 43 to 46 per cent during periods of restraint in 1966 and 1968. But by mid-February this year, their share had fallen to 35 per cent.

Using these average shares of the 11 banks as points of reference, one can trace rather clearly the marginal adjustments made by these institutions during periods of monetary restraint and ease. As mentioned previously, the attrition in CD's has been particularly sharp at the 11 banks. In each of the four periods of attrition, their share of the total run-off has been from two to five times as large as their share of total outstandings when the attrition began. While they have also increased their share of total CD's during periods of expansion in such deposits, their gain relative to other banks has been much more modest.

The differential pattern of adjustment is also sketched sharply in the behavior of business loans. During each period of CD attrition, the expansion of business loans at the 11 banks was more rapid than for all reporting banks. Thus, in three of the four periods, they accounted for 53 per cent to 66 per cent of the growth of total business loans, although they held about 46 per cent of the total of such loans outstanding at the beginning of each period. Their relative shares of business loan growth were much smaller during periods of CD's expansion. Again, their reduction of nonbusiness loans during CD attrition (and the increase in such loans during periods of CD growth) stands out clearly.

The relatively heavier reliance of the 11 banks on sales of Governments to obtain funds during periods of CD run-off is much more obvious. While they have just over one-quarter of the Government securities held by all weekly reporting banks, they have accounted for two-fifths to three-quarters of the volume of such securities liquidated during periods of CD attrition.

The progressive decline in the 11 banks' relative share of borrowings (other than from foreign branches) also stands out clearly. For example, in the second half of 1966, they were responsible for three-quarters of the increase in borrowing by all weekly reporting banks, although they accounted for less than three-fifths of outstandings at the beginning of the period. In subsequent periods of CD run-off, their share of the rise in borrowings dropped steadily. In the two months ending in mid-February, 1969, their share of the increase in total borrowings was only 5 per cent; in the same period a year earlier, their share had been 15 per cent. Again, in addition to sizable liquidations of Government securities, the inflow of Euro-dollars undoubtedly enabled these 11 banks to rely less-and-less on borrowing from domestic sources in adjusting to CD attrition.

Authority to Apply Reserve Requirements to Euro-Dollars Used by Head Office Banks

At this point, it might be helpful to review briefly the Federal Reserve's authority to apply reserve requirements to Euro-dollars used by U. S. parent banks with foreign branches. It will be recalled that such funds are shown on the books of the head office as a balance "due to" the foreign branch. The Federal Reserve Board ruled in 1921 that such a balance, although recorded as a liability on the books of the parent bank, does not constitute a "deposit" liability against which reserves must be maintained.1/ The ruling rested on the ground that the parent bank and its branches are a single legal entity.

In 1918, the Board held that the reserve requirements of Section 19 of the Federal Reserve Act do not apply

1/ Federal Reserve Bulletin, 1921, p. 815.

to deposits in foreign branches of national banks.[1] Instead, the Board ruled that, under Section 25 of the Act, the Board had power to specify the reserves to be maintained against such deposits. This ruling was based solely on the ground that Section 25 authorizes the Board to allow the establishment of foreign branches of national banks "upon such conditions and under such regulations" as the Board may prescribe. Therefore, the Board, notwithstanding the reserve provisions of Section 19, may determine the amount, character and location of the reserves to be maintained against deposits received at such branches. Expressed differently, Section 25 provides an exception from the reserve requirements of Section 19 as far as foreign branches are concerned.

Behind this legal position, of course, was a point of considerable economic importance. Foreign branches are subject to the banking laws of the countries in which they operate, and they compete with other banks located in those countries. Thus, their ability to operate might be impaired by requiring them to carry the same reserves as those applicable to domestic deposits of their parent U. S. banks. The Board concluded in 1918 that it would be undesirable to prescribe any reserves for deposits in foreign branches.

However, to the extent that deposits received at foreign branches are actually channeled into the parent U.S. bank and employed for domestic extensions of credit, the rationale for exempting deposits in foreign branches from reserve requirements is weakened considerably.

1/ Bulletin, 1918, p. 1123. The Board later took the same position with respect to foreign branches of State member banks.

The courts have held and the Board has ruled that the liabilities of a foreign branch are liabilities of the parent bank.[1/] So the Board could adopt the position that reserve requirements generally applicable to member banks under Section 19 shall in the future apply to deposits in foreign branches -- but only to the extent that such deposits are utilized by the parent bank in the United States. Not all of the amounts reflected on the books of the parent bank as "due to the foreign branches" are necessarily derived from deposits in the branches. Apparently foreign branches do not segregate the funds received as deposit liabilities from other funds received at the branch, when funds are sent by the branch to the parent. Consequently, if reserve requirements were to apply to foreign branch deposits that are used by the parent bank, some formula would have to be designed for calculating the amount of deposits included in the balances due to the foreign branch.

But, from the above review, it is clear that the Board does have the authority to fix reserve requirements against Euro-dollar inflows to the U.S. banks -- if it decided such an action were desirable.

Impact on Cost of Funds and Bank Reserves

If reserve requirements were to be applied to Euro-dollars employed in the domestic business of U.S. banks, the principal effect

1/ Bulletin, 1917, p. 198.

would be on the relative cost of such funds compared with the cost of CD's. If the maximum reserve requirement (6 per cent) now applicable to time deposits were set for borrowings from foreign branches, the cost of obtaining such funds would be increased by 36 to 42 basis points -- depending on the size of the yield that would have to be foregone in covering reserve requirements. At a 6 per cent alternative investment yield, costs would rise by 36 basis points; at 7 per cent, the rise in costs would be 42 basis points. Assuming that the alternative investment yield is measured by a 7 per cent prime rate, the comparative costs of CD's and Euro-dollars (if reserve requirements were to be applied to the latter) can be summarized as follows (data are in percentages):

	1 month	3 months	6 months
A. Cost of CD's			
Ceiling interest rate	5.50	6.00	6.25
Reserve requirement	42	42	42
FDIC insurance	8	8	8
	6.00	6.50	6.75
B. Euro-dollar rate1/	8.25	8.44	8.40
C. Differential (B-A)	2.25	1.94	1.65
D. Cost of CD's measured by secondary market rate			
Average offering rate1/	6.45	6.58	6.68
Reserve requirement	42	42	42
FDIC insurance	8	8	8
	6.95	7.08	7.18
E. Euro-dollar rate1/	8.25	8.44	8.40
F. Differential (E-D)	1.30	1.36	1.22

1/ Averages for week ending March 5.

It will be noted that CD's would cost a bank from 6.00 per cent to 6.75 per cent, depending on maturity. In each case, the reserve requirement and FDIC insurance would account for about 50 basis points of the total cost. During the week ending March 5, short-term Euro-dollar interest rates averaged 8.25 per cent to 8.44 per cent, depending on maturity. Thus, Euro-dollar rates averaged 1.65 per cent to 2.25 per cent above the costs of CD's with the largest differential applying to 1 month maturities. Because the Regulation Q ceiling is a real constraint on the banks' ability to issue CD's under current circumstances, perhaps a better measure of the comparative costs of the two sources of funds is given by the average offering rate on CD's in the secondary market.[1/] In the week ending March 5, the average offering rates for CD's ranged from 6.45 per cent to 6.68 per cent, for maturities from 1 to 6 months, respectively. Using these secondary market yields, the differential costs of Euro-dollars are narrowed considerably -- by as much as 1.22 per cent to 1.36 per cent, depending on maturity.

Of course, the imposition of reserve requirements on Euro-dollars may not affect the relative costs of funds to banks as much as the above calculations might suggest. Undoubtedly, the absence of such reserve requirements is already partly reflected in the existing differentials between CD's and Euro-dollar interest rates. Now banks can bid for Euro-dollars with the knowledge that they do have 40 - 50 basis points to spare compared with the costs of CD's. Furthermore, Euro-dollar depositors are

1/ Here it should be recalled that the secondary market for CD's is quite thin, and quotations may not be very meaningful.

also aware of the situation and can be expected to take it into account in responding to bids for funds by the foreign branches of U.S. banks.

If reserve requirements were imposed on Euro-dollars channeled to the parent banks, Euro-dollar interest rates may not rise by the 40 to 50 basis points such a step might suggest. Since banks would have to add the 50 basis points to the market yield on Euro-dollars, the costs to them initially would be 8.75 per cent to 8.94 per cent, depending on maturity and using as a benchmark average yields during the week ending March 5. While banks might be prepared to offer such rates from time-to-time, their willingness to compete for Euro-dollars would undoubtedly be diminished somewhat. However, Euro-dollar inflows would probably continue -- but perhaps at a more moderate pace. Euro-dollar interest rates -- at least initially -- would not increase to the full extent of such a reserve requirement increase, although perhaps for a time such rates might range somewhat above recent levels.

If a reserve requirement of 6 per cent were to be applied to Euro-dollars employed by head offices of U.S. banks, these institutions would have to obtain roughly $540 million to meet the requirement. As of February 26, the liabilities due to foreign branches totaled $8,869 million, an increase of nearly $3 billion since the year end. Since the level has increased further since February 26, the total may now be over $9.0 billion. While $540 million may not be a large sum compared with total member bank reserves of $28 billion (of which $23 billion are held with Federal Reserve Banks), virtually the entire amount would have to be raised by about a dozen banks. Thus, the average amount per bank affected would be over $40 million. While these banks could obviously make the adjustment (especially if they were allowed considerable lead time), the total of their loans and investments would come under increased pressure.

Outlook for Credit Flows

Most observers apparently are now willing to recognize that the policy of substantial monetary restraint followed by the Federal Reserve since last December is having an impact on the money and capital markets. However, the determination and ability of the Federal Reserve to stay with the present course remain question marks in the minds of some market participants. While I obviously cannot speak for my colleagues, I would not encourage anyone (businessmen or bankers) to make his own spending or lending plans on the assumption that the current policy will be modified, as market pressures unfold, in such a way as to ensure that everyone can go forward with the expansion of whatever activity he may wish to pursue. In the face of continued inflationary pressures, the proper course of monetary policy is one of substantial restraint, maintained long enough to make real progress in the campaign to bring inflation to a halt.

Turning to credit developments, from the recently available preliminary flow-of-funds data, it is clear that private demands for credit remained quite strong through the fourth quarter of 1968. All major forms of private credit (bank loans to businesses, corporate security issues, consumer credit and mortgages) exhibited as much -- if not more -- strength as they did in the third quarter. On the other hand, the Federal Government, whose borrowing in the final three months of last year was at a less than seasonal pace, was the main source of lower credit demands.

As of now, we cannot tell whether the rapid rate of private borrowing was fully maintained into early 1969, but it may have slackened somewhat. The gradual slowing in the expansion of consumer credit which began in late 1968 appears to be continuing. Offerings of State and local government securities seem to be easing off as indicated by the volume of cancellations and postponements. In the corporate bond market, the volume of new issues has not shown a tendency to rise significantly. Actual borrowing by businesses at commercial banks has continued strong, and they apparently still have a sizable backlog of unused bank commitments available to them. Mortgage credit demands also remain high. In sum, although private credit demands at the present time are not burgeoning, apparently -- at best -- any weakening that has occurred is quite modest.

Among commercial banks, the major weekly reporting institutions have experienced a considerable decline in liquidity since the CD attrition began last December. While some of them, as shown above, have increased their reliance on Euro-dollars, they have had to make other types of adjustments as well. They have found it necessary to liquidate municipal issues and longer-term

U.S. Government securities; some have also stiffened their attitude toward mortgage lending. Moreover, they have tightened lending terms and conditions on business loans. On the other hand, this recent tightening of lending terms to business, while it may have affected some marginal borrowers, does not appear to have been severe enough to induce an acceleration in demands in corporate bond markets. It is not clear whether the failure of scheduled corporate bond offerings to rise appreciably reflects a moderation in business investment in plant and equipment -- or the ability of corporations to maintain spending through liquidation of investments. The statistical evidence available to date does not suggest that spending plans in this sector have been revised downward. However, it could be that both businesses and consumers are beginning to alter their expectations that inflation will continue indefinitely -- and the recent behavior of the leading stock market averages may be an indication that this is occurring. Again, it is possible that the public is becoming increasingly to believe that monetary policy is being effective and that a noticeable slowing in the rate of economic expansion should be expected.

In the meantime, on the basis of this brief review, it appears that -- so far -- only a modest abatement of demand from a few private sectors has occurred, and only hesitant beginnings of less exuberant market attitudes can be detected. Even so, both such developments rest on rather tenuous grounds. Under these circumstances, if we are to achieve a genuine moderation in demand for goods and services and a significant easing in expectations of continued inflation -- as is desirable -- it seems obvious to me that the present policy of monetary restraint must be kept on course for quite sometime. Later in the spring, when sizable Treasury net debt repayment will occur -- and if the pace of economic expansion continues to slow -- there may be a tendency for short-term interest rates to decline somewhat. But if such a trend in rates were to emerge, I personally hope the monetary authorities will not permit it to go so far as to create the risk of undoing progress toward reducing inflationary pressures.

Table 1

NET CHANGE IN MAJOR BALANCE SHEET ITEMS FOR WEEKLY REPORTING BANKS
(Dec. 13, 1967-Feb. 14, 1968 and Dec. 11, 1968-Feb. 12, 1969)
(In billions of dollars)

	Total		11 Major banks with London branches		Other	
	1968	1969	1968	1969	1968	1969
Total loans & investments 1/	.2	-1.8	-.2	-2.3	.3	.5
U.S. Gov't. securities	-.5	-3.1	-.3	-2.3	-.3	-.8
Other securities	.3	-.4	4/	-.6	.3	.2
Total loans 1/	.4	1.7	.2	.6	.3	1.1
Business loans	.7	1.7	.5	.9	.2	.8
Total deposits less cash items	.4	-.9	-1.1	-2.1	1.5	1.2
Demand deposits less cash items	-.6	2.1	-.2	.5	-.3	1.6
Total time and savings	1.0	3.0	-.9	-2.5	1.8	-.4
CD's ($100,000 & over)	-.3	-3.8	-.9	-2.7	.6	-1.1
Total excluding CD's	1.3	.8	.1	.1	1.2	.7
Liabilities to foreign banks 2/	3/	3/	-.2	.9	3/	3/
Total borrowings	-1.4	1.4	-.2	.1	-1.2	1.4

1/ Excluding loans to domestic commercial banks.
2/ Eleven major banks in New York, Chicago, San Francisco, and Boston, which account for 98 per cent of total borrowings from foreign branches outstanding in mid-February.
3/ Not available on consistent basis.
4/ Less than $50 million.

Table 2

Net Change in Major Balance Sheet Items for Selected Categories of Banks, Second Quarter, 1966-68 1/ 5/
(In billions of dollars)

	Nonweekly Reporting Banks 2/			Weekly Reporting Banks								
				Total			11 Major Banks with London Branches			Other		
	1966	1967	1968	1966	1967	1968	1966	1967	1968	1966	1967	1968
Total loans & investments 3/	3.4	4.6	4.2	6.7	2.8	4.5	3.9	.2	2.1	2.8	2.6	2.4
U.S. Gov't. securities	-1.5	-1.0	- .7	-1.2	-2.6	-1.5	- .3	-1.3	- .2	- .9	-1.4	-1.4
Other securities	1.1	1.4	.9	1.1	2.4	- .2	.9	.5	- .3	.1	1.9	.2
Total loans 3/	3.8	4.1	4.1	6.8	3.0	6.2	3.2	1.0	2.5	3.6	2.0	3.6
Business loans	n.a.	n.a.	n.a.	3.0	1.8	2.7	1.7	.7	1.3	1.3	1.1	1.5
Total deposits less cash items	2.5	3.8	4.6	5.9	2.6	1.4	2.7	.9	.4	3.3	1.8	1.0
Demand deposits less cash items	1.2	.7	2.6	3.6	- .1	2.7	1.7	.2	1.6	1.9	- .2	1.1
Total time & savings deposits	1.3	3.1	2.0	2.4	2.7	-1.3	1.0	.7	-1.2	1.4	2.0	- .1
CD's ($100,000 & over)	n.a.	n.a.	n.a.	.9	- .2	-1.3	.4	7/	-1.2	.5	- .2	- .1
Total excluding CD's	n.a.	n.a.	n.a.	1.5	2.9	7/	.6	.7	7/	.9	2.2	7/
Liabilities to foreign branches 4/	n.a.	n.a.	n.a.	6/	6/	6/	.1	- .2	1.3	6/	6/	6/
Total borrowings	7/	.3	.4	.9	1.3	3.0	.7	.5	1.6	.2	.9	1.5

1/ Quarterly dates used are: 1965, Dec. 29; 1966, March 30, June 29, Sept. 28, and Dec. 28; 1967, March 29, June 28, Sept. 27, and Dec. 27; and 1968, March 27, June 26, Sept. 25, and Dec. 31. Varying end-of-quarter dates affect to some extent the comparability of changes.

2/ Data are partly estimated. Details may not add to totals because of rounding in all-commercial bank series.

3/ Excluding loans to domestic commercial banks.

4/ Eleven major banks in New York, Chicago, San Francisco, and Boston which account for 98 per cent of total borrowings from foreign branches outstanding in mid-February.

5/ In the second quarter of 1966, changes in total credit, total loans, and total time and savings deposits are adjusted for the exclusion of balances accumulated for payment of personal loans on June 9, 1966, as a result of a change in Federal Reserve regulations affecting reserve requirements. Changes in loans and "other securities" are adjusted for the definitional shift of participation certificates from loans to "other securities" on June 29, 1966.

6/ Not available on consistent basis.

7/ Less than $50 million. n.a. - Not available.

Table 3

Net Change in Major Balance Sheet Items for Selected Categories of Banks, Second Half Year, 1966-68 1/ 5/*
(In billions of dollars)

	Nonweekly Reporting Banks 2/			Weekly Reporting Banks: Total			Weekly Reporting Banks: 11 Major Banks with London Branches			Weekly Reporting Banks: Other		
	1966	1967	1968	1966	1967	1968	1966	1967	1968	1966	1967	1968
Total loans & investments 3/	5.7	10.7	11.2	2.8	13.0	22.2	.5	4.0	8.0	2.3	9.0	14.2
U.S. Gov't. securities	.8	4.2	1.8	2.3	4.1	3.8	1.3	1.2	1.6	1.0	3.0	2.2
Other securities	1.1	3.0	2.5	-1.1	1.8	4.3	-1.0	.4	1.6	- .1	1.4	2.7
Total loans 3/	3.6	3.6	6.8	1.6	7.0	14.1	.2	2.4	4.7	1.4	4.6	9.4
Business Loans	n.a.	n.a.	n.a.	2.5	2.0	4.7	1.4	.6	1.7	1.1	1.5	3.0
Total deposits less cash items	6.9	12.1	14.2	1.1	14.2	24.0	-3.1	3.2	7.5	4.2	11.0	16.5
Demand deposits less cash items	3.2	7.8	8.8	1.8	10.3	15.8	- .7	2.3	4.9	2.5	8.0	10.9
Total time & savings deposits	3.7	4.3	5.5	- .7	4.0	8.2	-2.4	.9	2.6	1.7	3.1	5.6
CD's ($100,000 & over)	n.a.	n.a.	n.a.	-2.6	1.2	3.6	-2.5	.2	1.1	- .1	1.0	2.4
Total excluding CD's	n.a.	n.a.	n.a.	2.0	2.8	4.7	.2	.7	1.4	1.8	2.1	3.2
Liabilities to foreign branches 4/	n.a.	n.a.	n.a.	6/	6/	6/	2.3	1.1	- .3	6/	6/	6/
Total borrowings	- .2	.2	- .6	1.4	.5	-2.2	1.1	- .2	-1.4	.3	.7	- .8

* Footnotes are the same as shown in Table 2.

Table 4 Sources and Uses of Funds by Selected Weekly Reporting Banks During Periods of Attrition in Certificates of Deposit (Percentage Distribution)

	12/11/68 to 2/12/69		12/13/67 to 2/14/68		12/27/67 to 6/26/68		6/29/66 to 12/28/66	
	11 (1) banks	Other banks	11 (1) banks	Other banks	11 (1) banks	Other banks	11 (1) banks	Other banks
Sources of Funds:								
Increase in total deposits								
Demand	9.7	36.4						41.5
Time and savings								
CD's				25.1		9.0		
Other time and savings	2.7	15.3	3.6	50.4	2.8	24.5	1.7	29.6
Increase in liabilities to foreign branches	18.4	0.4			36.0	0.5	25.8	
Liquidation of securities								
U.S. Gov't	48.0	17.7	14.0	10.6	20.6	23.1		
Other	12.2		1.8				11.1	2.2
Repayment of nonbusiness loans	6.7		14.8		2.2		13.7	
Increase in borrowing	1.6	30.2			26.2	15.4	12.1	5.3
Other sources								
Decrease in other assets			65.8	13.8	12.2	27.5		
Increase in other liabilities	0.7						35.7	21.4
Total Sources (per cent)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Sources (millions of $)	4,751	4,487	2,062	2,446	5,453	7,222	8,940	6,082
Uses of Funds:								
Increase in loans								
Business	18.6	17.6	22.8	9.9	30.2	23.9	16.2	17.3
Other		7.5		1.3		16.7		5.9
Increase in Investments								
U.S. Gov't							14.0	16.8
Other		4.3		13.1	7.0	10.1		
Deposit Attrition								
Demand			11.0	13.3	13.3	42.6	8.2	
Time and savings								
CD's	55.8	25.0	45.2		31.3		28.5	1.6
Decline in liabilities to foreign branches			7.5	0.2				0.3
Repayment of borrowings			10.3	50.6				
Other uses								
Increase in other assets	25.6	30.0					33.2	58.0
Decrease in other liabilities		15.6	3.2	11.7	18.2	6.8		
Total Uses (per cent)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Uses (millions of $)	4,751	4,487	2,062	2,446	5,453	7,222	8,940	6,082

(1) Banks with London branches and which accounted for 98 percent of total borrowings from foreign branches outstanding in mid-February, 1969.

Table 5 Sources and Uses of Funds at Selected Weekly Reporting Banks during Periods of Expansion in Certificates of Deposit (Percentage Distribution)

	6/26/68 to 12/11/68		12/28/66 to 12/27/67		12/29/65 to 6/29/66	
	11 (1) banks	Other banks	11 (1) banks	Other banks	11 (1) banks	Other banks
Sources of Funds:						
Increase in total deposits						
Demand	3.9	22.7	19.9	24.8		
Time and savings						
CD's	24.2	21.8	22.2	13.2	20.2	15.9
Other time and savings	10.6	21.0	17.8	38.2	19.1	35.2
Increase in liabilities to foreign branches	10.9	1.3			11.5	0.2
Liquidation of securities						
U.S. Gov't					34.2	37.7
Other						
Repayment of nonbusiness loans						
Increase in borrowing	4.1	7.5		8.2	0.7	0.6
Other sources						
decrease in other assets						8.5
increase in other liabilities	46.3	25.7	40.0	15.5	14.2	1.9
Total Sources (per cent)	100.0	100.0	100.0	100.0	100.0	100.0
Total Sources (millions of $)	9,467	12,357	10,693	17,263	5,115	6,400
Uses of Funds:						
Increase in loans						
Business	6.9	14.5	20.6	16.4	49.9	40.3
Other	23.2	34.4	3.2	17.0	23.0	30.3
Increase in Investments						
U.S. Gov't	28.5	13.2	6.9	15.7		
Other	18.2	18.4	16.6	29.1	8.8	7.2
Deposit Attrition						
Demand					0.6	22.2
Time and savings						
CD's						
Decline in liabilities to foreign branches						
Repayment of borrowings			12.7			
Other uses						
Increase in other assets	23.2	19.6	40.0	21.8	17.7	
Decrease in other liabilities						
Total Uses (per cent)	100.0	100.0	100.0	100.0	100.0	
Total Uses (millions of $)	9,467	12,357	10,693	17,263	5,115	6,400

(1) Banks with London branches and which accounted for 98 percent of total borrowings from foreign branches outstanding in mid-February, 1969.

Table 6

11 Major Banks' Percentage Share of Weekly Reporting Banks' Selected Assets and Liabilities
Recent Periods of Attrition in Certificates of Deposit

	Per cent of Outstandings 12/11/68	Per cent of Outstandings 2/12/69	Per cent of Change 12/11/68 to 2/12/69	Per cent of Outstandings 12/13/67	Per cent of Change 12/13/67 to 2/14/68	Per cent of Outstandings 12/27/67	Per cent of Change 12/27/67 to 6/26/68	Per cent of Outstandings 6/29/66	Per cent of Change 6/29/66 to 12/28/66
Total Assets	36.6	36.0	-137.0	35.8	99.5	35.8	96.5	35.9	37.3
Total Loans	36.0	35.8	33.5	36.0	37.6	36.2	34.2	36.8	13.7
Business Loans	45.3	45.8	52.8	45.8	66.1	46.2	48.8	45.9	57.9
Other Loans	27.8	27.3	-1766.7	27.6	112.0	27.9	-11.0	29.8	140.8
U.S. Government Securities	31.3	26.5	74.0	26.7	52.6	27.5	40.2	25.8	55.1
Other Securities	31.1	29.8	149.1	29.5	-13.0	29.4	34.2	32.7	87.6
Total Deposits	27.8	27.0	238.0	28.3	-250.0	28.2	77.6	29.8	-282.8
Demand	24.8	24.8	22.0	24.6	41.2	25.0	19.2	25.8	-40.7
CD's ($100,000 and over)	40.1	34.6	70.5	46.5	292.5	45.1	161.0	50.8	96.5
Other Time and Savings	27.7	27.6	15.7	28.1	5.7	28.2	7.9	29.5	7.9
Liabilities to Foreign Branches	97.4	97.2	98.0	97.5	96.5	100.0	98.5	99.0	110.2
Borrowing	43.5	39.4	5.2	36.8	14.5	41.8	56.4	56.0	77.0

Table 7

11 Major Banks' Percentage Share of Weekly Reporting Banks'
Selected Assets and Liabilities
Recent Periods of Expansion in Certificates of Deposit

	Per cent of Outstanding 6/28/68	Per Cent of Change 6/28/68 to 12/11/68	Per cent of Outstanding 12/28/66	Per cent of Change 12/28/66 to 12/27/67	Per cent of Outstanding 12/29/65	Per cent of Change 12/29/65 to 6/29/66
Total Assets	35.9	43.4	36.0	35.1	35.3	62.2
Total Loans	36.1	32.1	36.6	30.7	36.0	45.2
Business Loans	46.2	26.6	46.4	43.7	45.5	49.7
Other Loans	27.2	34.1	28.5	10.6	29.1	37.8
U.S. Government Securities	26.1	62.4	28.4	21.3	28.3	42.0
Other Securities	29.5	43.2	30.3	26.1	33.0	49.2
Total Deposits	27.6	31.1	27.9	32.7	29.3	51.7
Demand	25.2	11.5	24.5	33.2	25.4	2.1
CD's ($100,000 and over)	38.7	46.0	43.3	50.9	51.1	50.4
Other Time and Savings	27.7	27.8	28.9	22.4	29.3	30.3
Liabilities to Foreign Branches	99.4	86.2	100.0	0	99.7	97.4
Borrowing	45.5	29.5	60.0	-2571.7	56.2	49.3