

INFLOWS AND OUTFLOWS OF FOREIGN FUNDS

Large movements of private capital funds from one country to another may affect the liquidity of the banks in those countries, and the credit conditions, to an extent that is significant for domestic monetary policy. This article discusses the forms now taken by some of these movements into and out of the United Kingdom, and examines some of the effects they have on the banks and others in this country.

Scope of the discussion Sterling is widely held by firms abroad as working balances for international payments on current account; it is widely held abroad also for investment, both short-term and long-term. There is available in London an exceptionally broad range of opportunities for the employment of funds, overnight or for any longer period, and frequently offering yields that are higher than those readily obtainable in financial markets abroad. In consequence, overseas residents often find it profitable to hold sterling assets in London, either themselves investing in a security that suits them, or placing sterling on deposit at interest with a bank in London. They may also place foreign currency, in practice most commonly U.S. dollars, on deposit with a bank in London; the bank may employ these funds abroad in foreign currency assets, for example by re-lending them in the Euro-dollar market, or may itself exchange them for sterling and employ them in London. If the foreign currency funds are re-lent in foreign currency, as the bulk of them are at present, there is no 'inflow' to the United Kingdom in the sense used here, because at no point are the funds converted into sterling. This discussion is concerned with inflows of what is often described as short-term capital, whether it is turned into sterling by the foreign owner himself, or by a bank in London with which he has deposited foreign currency. The effects of an outflow are not discussed in detail, because these are generally apparent from what is said about the inflow.

The expression "short-term capital" in this context is, however, full of ambiguity. All financial assets are "capital", even if they are liquid funds held as working balances for meeting current payments. "Short-term" as used here is a description of the nature of the funds and of their role in the owner's finances, not of the type of asset in which they are invested. For the purposes of this article, the significant characteristic of an inflow is that the funds are moved into sterling not because they are needed in sterling, as for instance working balances are needed, but specifically for gain. This is a question of the owner's motive; and of how quickly, and in what circumstances, he will withdraw the money. He himself may have no very definite ideas about this; or if he has, his views may change, so that the likelihood of his withdrawing the money may change even though the form in which he holds it does not. Thus, the evidence that it is invested in short-dated or long-dated securities is not a good guide as to whether the money is or is not short-term capital. Working balances held on deposit may all be thought of by the holders as short-term, but there is in practice no likelihood that all working balances in sterling would be withdrawn. On the other hand, because many British securities, including company shares, are readily marketable in this country, foreign capital that is really short-term may seek temporary investment in medium-dated and long-dated securities, even though, if such funds are withdrawn again, other than as the proceeds of a normal redemption, they may be repatriated only through the market for security sterling. Specifically, a foreign purchaser may buy and intend to hold long-dated British government stocks to maturity, and then to reinvest the proceeds; or the holding may be, or become, as much a short-term investment in his mind as a deposit with a bank in London might be.

There is therefore no prospect of identifying and accurately recording inflows and outflows of funds that are short-term rather than long-term capital, in the sense that they can come and go suddenly and will move in and

out in response to changes either in yield differentials, or in expectations about exchange rates, or for other reasons of gain. And the statistical evidence of the effects of these flows on the banks, even when, as in 1960 and 1961, there were large movements, is only circumstantial. Notwithstanding, it is useful to consider the immediate effects within the U.K. monetary system of private (meaning non-official) foreign funds moving into and out of this or that type of financial asset offering a prospect of gain.

Finance of E.E.A. This is not a historical article; but some preliminary exposition is needed of the mechanics of government finance, specifically in relation to the finance of purchases and sales of foreign exchange for the Exchange Equalisation Account.

Following the abandonment of the gold standard in 1931, appropriate new means had to be found whereby official operations in the gold and foreign exchange markets could be conducted; and the E.E.A. was established as a government account financed directly by the Exchequer. With the establishment of the E.E.A., part of the official exchange reserves was transferred from the Bank of England to the Government; and in time, particularly from 1939, the E.E.A. came to hold almost the whole of the United Kingdom's operational reserves of gold and foreign exchange.

In the day-to-day conduct of Exchequer finance and debt management, the sterling requirements of the E.E.A. arising from an inflow of foreign exchange to be bought, or its receipts arising from sales of exchange to meet an outflow, become part of the Exchequer's total deficit or surplus; and individual official purchases and sales of Treasury Bills and government stocks cannot usually be attributed to particular payments or receipts of the E.E.A. What happens in practice is that, for example, a bank in London receives a deposit of foreign currency from a customer abroad with instructions to sell it for sterling, for his account. Nearly all deals in foreign currencies in London are married off daily between banks; but when a resultant surplus in foreign currency is sold to the E.E.A., payment in sterling on behalf of the E.E.A. is made by

the Bank of England. Up to this point, therefore, ignoring all other transactions here and throughout the exposition, the effect on the banks is an increase in their total deposit liabilities in sterling to foreigners, matched by an equal increase in their total cash at the Bank of England. The banks retain in cash only a small part of any increase in their deposits and employ surplus cash when it first arises in call money with the discount market, or in Treasury Bills. The net result of a sale of foreign currency by the banks to the E.E.A. will therefore generally be an addition the same day of exactly the same amount, counting their cash, call money and Treasury Bills, to their total liquid assets. And since most of the increase is in call money and Treasury Bills, the increase in the total of Treasury Bills held by the banks and the discount market taken together will be nearly as big as the increase in deposits.

The Exchequer, however, because it keeps only a minimum cash balance, has to borrow on the same day the full amount of the payment made by the E.E.A.; this is slightly more than it has borrowed on additional Treasury Bills, in this example, from the banks and discount houses, by the amount that the banks have retained as cash at the Bank of England. The Banking Department of the Bank of England, however, holding this slightly greater deposit liability to the banks, will also need more Treasury Bills to employ the deposit; and this will exactly match the small balance of the Exchequer's borrowing requirement, which is therefore fully met.

In this example the inflow has caused a sale of foreign currency, by a bank to the E.E.A., for sterling which will be held on deposit for a customer abroad; and the Exchequer, to finance the E.E.A.'s payment in sterling, has sold an equal amount of Treasury Bills to the banks, including the discount market and the Banking Department. In practice Treasury Bills are not often sold for the Exchequer, because, except on rare occasions, the weight of other day-to-day transactions between the Exchequer Group as a whole and the market more often leads to a purchase of Bills; and the same result is achieved by reducing the total of Bills bought from the discount market and banks during the day for account of the

Exchequer. The banks may, of course, react to the increase in deposits and in liquid assets by buying more investments or making more advances, with secondary effects on the bank deposits of U.K. residents.

If the customer abroad, however, when holding a deposit in sterling, sends instructions for investing it on his behalf, then the primary effect described above will be modified; and the various possibilities in this case are described in later paragraphs. It is enough at this stage to note that, whatever else happens, the Exchequer must borrow the sterling equivalent of the inflow. There must therefore be, one way or another, a roughly equal increase in the total of government debt held in the market, which may be in any form; but, if in no other form, then it will be in Treasury Bills held by the banks or discount houses. This is true however big the inflow; and the converse is true of an outflow.

The Exchequer has a theoretically limitless capacity to finance an inflow through its everyday borrowing procedures; and the volume and variety of government debt continuously traded in highly developed markets that are accustomed to substantial daily official operations offer a mechanism through which the foreign holder himself often provides the finance by taking up additional government debt. The main attraction of London as a centre for international investment is the wide choice of marketable securities it offers, both government debt and other forms of debt; the range and depth of these markets is such that foreign balances, even if they are purely speculative balances, can always be profitably employed. The importance of this for domestic monetary policy is that inflows of funds that are invested have potentially less effect on domestic credit and expenditure than funds that are left on deposit with banks.

Analysis of flows

The rest of the argument may be summarised thus. To finance the E.E.A. during an inflow, the Exchequer may find itself borrowing the whole amount of the inflow at current rates from the foreign owner of the sterling; the inflow is then self-financing for the Exchequer, and is without any direct effect on the banks or on the

liquidity of the general public, although there may be secondary effects on both.

If the Exchequer does not borrow from the foreign owner of the sterling, there is a range of possibilities. If the customer abroad invests his sterling himself, transferring his deposit to some domestic deposit-holder in exchange for a security, there is no further change in the total of deposits, but a reduction in foreign-owned deposits and an equal increase in domestic deposits. From this may follow a chain of consequential shifts in the preferences of other, largely domestic, investors, the total effect of which it would be impossible to summarise. For the present purpose what matters is whether—or, more often, to what extent—there is eventually a consequential shift in these domestic preferences towards a bigger holding of government debt. If there is, then to that extent the inflow is financed, from the Exchequer's point of view, by borrowing from domestic investors, whose bank deposits fall again as they buy the government debt, producing a corresponding fall in the banks' liquid assets. The net result up to this point is that someone other than a bank or the Exchequer has acquired a liability in sterling to a foreigner; and someone—someone else, probably—holds more government debt. If there is no such shift of other holders' preferences in favour of government debt, then the Exchequer has to finance the inflow by borrowing on Treasury Bills from the banks and discount houses; and to that extent the roughly equal increases in the total of the banks' deposits and liquid assets caused by the original inflow will remain with the banks, but the increase will now be in domestic deposits rather than foreign-owned deposits.

If, instead of the customer abroad investing his funds, he leaves them on deposit with the bank, the bank can employ them—after switching them into sterling if the deposit is in foreign currency. Broadly there are two possibilities. Either the bank can shift out of Treasury Bills and call money into government stocks; or it can lend more to local authorities or the private sector, and this may lead as in the earlier case to a sequence of reactions in the preferences of domestic investors for one security against another, with the same kind of consequences. In both cases, however, foreign-

owned bank deposits will remain higher by the amount of the inflow; and in the second case only there may be an increase also in domestic deposits.

These possibilities are now considered in relation to the various types of U.K. asset in which the customer abroad may invest his sterling, or in which his bank in London may invest the funds he deposits with it.

Treasury Bills As already explained, inflows and outflows direct into and out of U.K. Treasury Bills are largely self-contained and cause no changes in the banks' deposits and liquid assets; for the foreign holder, in effect, merely exchanges with the E.E.A. and the Exchequer, but through market channels, foreign currency for Treasury Bills, and the market procedures are such that both transactions can normally be completed within the day. Even where, in an outflow, the foreign holder is selling Bills, and the Bills being taken off the market by official purchases are of a different maturity, the effect on rates will be negligible as the discount market's Bill portfolio is large and the pattern of rates for Bills of different maturities is relatively stable.

Government stocks An inflow into government stocks is also largely self-contained; but there may in this case be some effect on the gilt-edged market because some stocks are more attractive than others to foreign buyers, and the buyer's choice may not be among those stocks which are being sold at that time from official portfolios. Changes may therefore be induced in the pattern of interest rates for different maturities. The flexibility of the gilt-edged market, however, in which there is large-scale switching between stocks, is such that no undue disturbance would normally be caused; which means in practice that, if the demand from abroad is not met directly from official portfolios, it is most likely to be met from professionally managed private holdings as part of a switch, or chain of switches, in government stocks, probably concluding in a sale from the official portfolios. So the ultimate effect on interest rates is likely to be small and diffused.

Local authority debt Local authorities have recently been able to borrow on a substantial scale funds that in origin are foreign-owned; but a relatively small part is placed direct with the local authority by the foreign holder. This is largely because the forms of local authority debt that might be suitable for this type of money are not in fact marketable. Whether the foreign funds reach the local authority direct from abroad or from a bank in London that has taken a sterling deposit from abroad or switched a foreign currency deposit into sterling, the effect on the local authorities is much the same; but the initial effect on the banks is different.

A change in the availability or cost of money from any particular source is unlikely to have much effect on local authorities' total borrowing except over a long period, because most of their spending is determined by considerations of long-term policy. An inflow of money into local authority debt, whether into mortgages or temporary money, may therefore be presumed to change the pattern of local authority financing, and perhaps its timing, but not its total amount. The immediate impact may fall on the local authorities' cash with banks, or their overdrafts; but in the end an inflow of funds from one source will mean lower borrowing from other investors, at home or abroad. This is achieved by the local authorities lowering the rates of interest they offer relative to the rates on other, comparable, assets such as Treasury Bills. When this happens and an inflow from abroad is met by diverting other funds, home funds or foreign funds or both, elsewhere, it becomes impossible, and unnecessary, for the analysis to pursue the consequential shifts of funds step by step. The material question is, again, how far in the end there has been a shift of diverted funds, somewhere down the line, into government debt.

No positive or simple answer to this can be given; but it seems unlikely that funds which on the evidence are invested for preference in high-yielding assets, as are loans to local authorities, would be employed as an alternative in assets offering a very much lower return, such as bank deposits, unless the funds were available for investment for only the shortest period. The more plausible alterna-

tives fall into two groups; investment in Treasury Bills or government stocks, which would have the effects, described above, of a direct foreign inflow into government debt; alternatively, investment in loans to finance houses, in deposits with or shares in building societies, or conceivably in equities, with the quite different consequences explained in the next paragraph. The result, therefore, will probably be a compound effect, depending, as regards the proportion shifted into government debt rather than non-government debt, very much on market circumstances at the time and whether the prevailing sentiment is in favour of investment in gilt-edged securities or in equities. Funds diverted into government debt will finance the inflow for the E.E.A.; funds diverted anywhere else will cause the inflow to be financed by the Exchequer borrowing from the banks.

The inflow causes an immediate increase in the banks' foreign-owned deposits and their liquid assets. If the foreign depositor then transfers his deposit himself to the local authorities, and by increasing the supply of funds to them causes them to lower their rates, this is quite likely, sooner or later in the chain of consequential shifts, to result in other funds being shifted out of local authority debt into government debt. To the extent that this happens the increases in deposits and liquid assets will be reversed; but a shift of funds out of local authority debt into other forms of non-government debt will leave the increases unaffected. More frequently, however, the funds will be foreign currency deposits switched by the banks into sterling and lent by them to the local authorities; the effects of this are described later.

Finance house and building society debt The finance houses probably receive some foreign money placed direct with them by foreign holders as well as some re-lent to them by banks; the building societies probably receive none in either way. But the finance houses and the building societies both offer alternative investments, so far as the domestic investor is concerned, for funds diverted by lower rates from the other or from the local authorities; and both types of institution finance personal expenditure. In both cases

the level of their business is governed partly by the availability of funds and partly by the terms they are able to offer to borrowers. For hire purchase, the regulations prescribing minimum cash payments and maximum duration of credit, and requests from the authorities for restraint in lending, have in the past been more influential on the level of business than the rate of interest charged; but an inflow of funds at lower rates of interest would probably induce the finance houses, in the absence of restraints, to compete for business at lower rates. For building societies, an increase of funds relieves them of the need to ration borrowers. An increase of funds for either, therefore, whether overseas funds, or home funds diverted from elsewhere by an inflow from abroad, may provoke an increase in personal spending on credit, perhaps with lower credit charges; there will at the same time be an increase, equal to the inflow from abroad, in the banks' domestic deposits and liquid assets. If, however, the finance houses and building societies have more money than they are able at once to lend, they may repay bank overdrafts, or lower their borrowing rates, or both. From the close relationships that exist between the rates offered for three months' money by local authorities and leading finance houses, and the taxed rate offered on building society shares, it may be supposed that these uses are fairly close substitutes in lenders' eyes, so that small relative changes in rates are likely to result in diversions of domestic funds from one to the other. In the end there may be some diversion of funds into government debt.

Sterling bank deposits

1. *Domestic banks*

The London clearing banks, whose deposits are largely domestic, pay the same rate of interest on all their deposits, whether domestic or foreign-owned; so also do most other mainly domestic banks and the discount houses. This rate is lower than the rate offered on foreign-owned deposits by most of the overseas and foreign banks in London and the accepting houses. Foreign-owned sterling deposits with the mainly domestic banks are therefore likely, with one exception, to be working balances, wanted for liquidity, rather than investments; they may fluctuate for seasonal reasons but probably not otherwise. The exception relates to those

deposits that are balances of banking offices overseas, placed with their London correspondents for employment in the United Kingdom. The domestic banks are unlikely to hold big balances of this kind; and it is primarily through the overseas and foreign banks and accepting houses that foreign-held sterling will flow in and out as short-term capital.

2. *Overseas and foreign banks in London and accepting houses*

Discussion of the effects of inflows and outflows in the form of sterling bank deposits centres on the role played by the overseas and foreign banks and the accepting houses in the deployment of such funds in the United Kingdom. An article in the September 1961 issue of this Bulletin commented on the part played by the overseas and foreign banks in this business, and drew what conclusions are possible from the available statistics. Although the extent of the foreign business done by these banks and the accepting houses leads them to maintain a high degree of liquidity, they do not have conventional minimum liquidity ratios for their business in this country. They have been employing a greater proportion of their sterling resources in loans to local authorities than the domestic banks, and have lent substantial sums to the finance houses. They are able to compete for foreign-owned deposits by offering generally higher rates than a foreign depositor is likely to get from a domestic bank.

An inflow causes an increase in the foreign-owned deposits of these banks and accepting houses and an initial increase in their cash—which they keep mostly in the form of balances with the clearing banks—call money and Treasury Bills. They will have to employ this accretion of liquidity in ways that offer them a good return, since they are paying a relatively high rate on the foreign deposit. They are likely, therefore, to increase their loans to local authorities and finance houses, and to other domestic customers; and this will increase the total of domestic deposits. But because most domestic deposits are held at other, mainly domestic, banks, the process of lending to domestic borrowers will cause some of the liquidity to be transferred to these other banks. Thus at this stage the inflow to the overseas and foreign banks and the accepting houses

causes an increase in domestic deposits and a similar increase in the domestic banks' liquidity. Since they work largely to conventional liquidity ratios, the domestic banks are likely to react, in the absence of other restraints, by increasing their domestic lending, with probable encouragement to domestic expenditure. How far this can be carried depends on how much of their newly acquired liquid assets the banks lose again through shifts of domestic investors into government debt.

Foreign currency deposits Banks in the United Kingdom may also accept deposits in currencies other than sterling, and either hold foreign currency assets against such liabilities, or 'switch' the foreign currency deposited into sterling for use in sterling assets. An increase in foreign currency deposits leads to a net inflow only if the currency is switched into sterling. The considerations that lead banks to switch foreign currency into sterling are not all connected with the rates of interest obtainable in London; and no simple statement of the possibilities will be complete and accurate. Broadly, all switching is normally covered by forward purchases of currency; and, allowing for the cost of forward cover, there is unlikely to be scope for interest arbitrage unless the sterling is used in one of the higher yielding assets, such as loans to local authorities or to finance houses. The initial effect of taking and switching foreign currency deposits, both on the banks' deposits and liquid assets in the United Kingdom and on the sterling financing of E.E.A., is the same as if foreign-owned sterling had been deposited with the banks.

Other company securities There have been from time to time inflows of foreign money into company securities, and some part of these inflows is probably short-term in character. Since the foreign purchaser of the securities will buy them from a domestic holder, the effect on the banks is to increase their domestic deposits and liquid assets by the amount of the purchases; if the purchases are big enough and well spread, there may be a

tendency for prices to rise. To the extent that, at this or some later stage in the chain of consequences, there is a shift of invested funds from non-government debt into government debt, the increase in bank deposits and liquid assets will be reversed. There is unlikely to be much direct effect on company spending, unless and until new issues are stimulated by the inflow.

Commercial credit Because the amount of commercial credit in sterling outstanding at any time between the United Kingdom and other countries is large and is continuously turning over, there is considerable scope for variations in the total by the displacement from normal of the timing of trade payments. This may simply mean deferring or advancing the date of a payment between a domestic and a foreign-owned bank deposit in the United Kingdom; and movements in this form have no direct effect on the total of bank deposits and liquid assets. But U.K. companies may find a source of temporary finance from an 'inflow', in this sense, of funds from foreign-owned working balances. There may also be an inflow for speculative reasons or to obtain the benefit of higher interest rates as foreign traders transfer new funds into sterling in advance of their normal needs.

Secondary effects Most types of inflow have secondary consequences on interest rates and on the lending, borrowing and spending of the private sector. Consideration of these has been largely omitted from the analysis for the sake of simplicity in the exposition, but some are too important to be ignored.

Movements of overseas money into or out of U.K. securities may well have substantial indirect effects on the banking system by influencing domestic investors' expectations about future movements of interest rates caused by official policy action. For example, belief may grow that a large inflow of funds will lead to a policy of lowering interest rates; and investors may anticipate such action, drawing down their bank deposits to buy gilt-edged stocks. Thus an inflow, which may or

may not have a direct easing effect on bank credit, may also have a secondary restrictive effect; and this secondary effect may be the stronger.

A rather similar development, but having the opposite effect, might occur if there were an inflow into equities because the expectation that this inflow would drive up equity prices might encourage a temporarily greater preference for equities among domestic investors seeking capital appreciation. This can only affect the total of bank deposits when it reaches the point of attracting investors away from investment in government debt; but at that point the inflow causes a secondary easing in the position of the banks.

Thirdly, in a number of the cases examined above, the effect of an inflow for the banks has been a roughly equal increase in deposits and liquid assets, or a repayment of bank advances by the recipient of incoming funds. The most likely consequence of this, unless the banks are under official restraint in their lending, is an increase in their advances, and so also a further increase in their deposits. This, in turn, will have further consequences for spending and the desire to hold deposits.

Experience in 1960 and 1961 The figures available for recent years to support the preceding arguments are, as already mentioned, inconclusive for the purpose; they do, however, give some perspective to the discussion. Three of the series shown in the Statistical Annex are relevant.

The figures of overseas sterling holdings (shown in Table 19 of the Statistical Annex) include all sterling deposits by overseas holders with U.K. banks and discount houses and all overseas holdings of Treasury Bills, but include other British government securities (at nominal value) only when they are held for the account of banks overseas and, so far as known, overseas official bodies. The figures are net of sterling claims on overseas residents, mainly in the form of bank advances, and bills drawn on overseas residents.

The item "Other (including miscellaneous capital)", under the heading of "Monetary Movements" in Table 18, includes changes in net foreign currency balances held outside the

reserves, for example by banks which hold foreign currency deposits, changes in sterling acceptances outstanding, identified trade credit, and identified direct lending from abroad to local authorities and finance houses. In 1961 the item also includes the provision and repayment of Basle assistance, in the form of currencies other than sterling.

Besides these recorded monetary movements there are certain unidentified movements in overseas short-term assets and liabilities, including fluctuations in the net total of unidentified trade credit. These fall into the balancing item, together with all errors and omissions in the current and long-term capital accounts. The composition of the balancing item was the subject of an article in the March 1962 issue of this Bulletin, and of comment in the Command Paper "United Kingdom Balance of Payments 1959 to 1961" (Cmnd. 1671), where it was suggested that unrecorded capital movements may have been strongly inward in 1960 and were probably outward over 1961 as a whole.

The total of changes in overseas sterling holdings and "Other (including miscellaneous capital)" shows recorded inflows of £361 million in 1960 and £12 million in 1961; but some irrelevant items can be removed before these figures are studied. First, there has been a large contribution from changes in official

sterling holdings—the large increase in the third quarter of 1961, for example, was more than accounted for by indebtedness incurred to the International Monetary Fund as a result of the assistance it gave to the United Kingdom. Official overseas sterling holdings are nearly all invested directly in marketable government debt, except the holdings of the I.M.F. which are held in non-interest-bearing non-marketable notes;^(a) so that flows into or out of these holdings effectively match the changes they cause, through the E.E.A., in the supply of marketable government debt.

Secondly, the figures for 1960 and 1961 are affected by the purchase of sterling by the Ford Motor Company of America in the fourth quarter of 1960 for use in acquiring the minority share-holding in its U.K. subsidiary in the first half of 1961. Finally, that part of the short-term assistance given to the United Kingdom under the Basle arrangements which is not included in official sterling holdings needs to be deducted.

These official and long-term capital items have been removed from the following figures for 1960 and 1961, which show the total of other recorded flows of "short-term" capital, and the balancing item. Adjusted in this way, they show a recorded inflow of £348 million in 1960 and a recorded outflow of £275 million in 1961.

£ millions

Inflow + / Outflow -

	1960			1961		
	January- June	July- December	Year	January- June	July- December	Year
Non-official overseas sterling holdings (net)	+ 56	+ 153	+ 209	- 245	+ 39	- 206
Other monetary movements ...	+ 52	+ 87	+ 139	- 56	- 13	- 69
Total recorded flow	+ 108	+ 240	+ 348	- 301	+ 26	- 275
Balancing item	+ 137	+ 169	+ 306	+ 27	+ 54	+ 81

^(a) The issue and redemption of non-interest-bearing notes held by the I.M.F. are shown in the table of Exchequer financing as "Other external items" rather than as changes in marketable debt.

The largest component of the inflow in 1960, as measured in this table, is thought to have been an increase in direct overseas holdings of government debt. It is estimated that residents of countries outside the sterling area increased by over £200 million their holdings of Treasury Bills and stocks recorded in the overseas sterling holdings series. No similar estimate can be made for the holdings of sterling area residents, which probably fell somewhat.

Of the remainder of the recorded inflow in 1960, £26 million is identifiable as a fall in sterling acceptances outstanding; and part of the rest can be observed in the figures of the overseas and foreign banks and the accepting houses (Tables 11 and 12 of the Statistical Annex). Their total foreign-owned deposit liabilities, in sterling and in foreign currencies, rose, so far as can be seen in the figures, by £125 million more than their claims on overseas residents.

The largest component of the total in 1961, as measured in the table, is thought to have been a decrease of about £150 million in holdings of government debt by residents of countries outside the sterling area; holdings of residents in the overseas sterling area were probably little changed. Sterling acceptances rose by £54 million, representing an outflow. The identified net overseas liabilities of the overseas and foreign banks and the accepting houses fell by £40 million.

In U.K. statistics other portfolio investment is treated as a flow of long-term capital, and is therefore not included in the table. But portfolio investment can certainly be the vehicle for fairly short-term movements of capital; and the effects of inflows into government debt and company share capital are the same whether the investment is for a long or a short period. There was a marked increase in inward portfolio investment in 1961, especially in the second half-year. In the year as a whole about half of the investment went into government stocks.

The figures of recorded short-term capital movements suggest that something like one half of the recorded totals in 1960 and 1961 represented changes in government debt held abroad. Whether the inflow into government

debt in 1960 diverted much other money actually out of government into non-government debt, which seems unlikely, or the outflow in 1961 caused other funds to shift from non-government into government debt, is indeterminate. It is reasonable as a first approximation to suppose that any funds displaced from particular securities by the inflow remained wholly invested in government debt, and any funds attracted into the securities being sold during the outflow were attracted from other government debt; and that there was therefore little consequential change on this account in bank deposits and liquid assets.

Lending to local authorities by the overseas and foreign banks and the accepting houses rose by £75 million in 1960; and some diversion of other funds into government debt may have resulted. There was also probably some increase in their lending to finance houses, and, in both cases, some concurrent increase in lending to other domestic borrowers, which perhaps added eventually to expenditure. There is also a possibility that some foreign funds may have gone, unrecorded, direct to the finance houses and local authorities in 1960, when the size of the balancing item suggested a large inward unrecorded capital movement. Also within the balancing item there may have been a net receipt of trade credit, partly associated with the large rise in imports unmatched by a correspondingly large rise in exports, partly through the effects of higher interest rates or tighter credit in the United Kingdom than elsewhere, and perhaps partly through deliberate 'leading and lagging' as a result of currency hedging or speculation. If so, there must have resulted some increase on that account in home expenditure and in bank liquidity.

The figures for Exchequer borrowing and for the banks provide little evidence, even circumstantial, as to whether monetary conditions were made any easier in 1960 as an ultimate consequence of part of the inflow going into non-government debt. But whatever the effect of the inflow, it was not such as to prevent a tightening of credit during the year. Short-term interest rates were raised and calls for Special Deposits were made during the summer. In the September banking quarter, when the inflow was heaviest, the

Exchequer borrowed only £23 million from the London clearing banks, the Scottish banks and the Banking Department (including indirect holdings through the discount market, as shown in Table 2C of the Statistical Annex), a considerably smaller increase in borrowing from the banks than was to be expected on seasonal grounds. The total Treasury Bill holdings of the London clearing banks, Scottish banks and discount market fell by £31 million. Over the calendar year 1960 the Exchequer was able to reduce market Treasury Bills by £42 million; the clearing banks' holdings fell by £198 million, the discount market's by £61 million, while other holdings rose by £217 million, reflecting the substantial increase which must have taken place in overseas non-official holdings in that period. But all banks were rapidly increasing their advances during the year and domestic deposits did not seem to be rising so fast, as a result of which, and of the increase in Special Deposits, there was greater stringency at the end of the year than at the beginning.

Most of the outflow of 1961 occurred between March and July; so far from reducing its borrowing from the banking system, the Exchequer had to borrow £108 million during the June banking quarter, £51 million more than its total financing requirement. This does not prove that the outflow had no effect in tightening liquidity; but if the outflow did have such an effect it was clearly outweighed by other factors, notably, perhaps, the secondary effect on domestic investors, described on page 99, of the sales of government debt by foreign holders.

This article has led to no simple conclusion. It may however be said that, in a period of restrictive credit policy such as 1960 and 1961, a substantial part of an inflow or outflow is likely to occur in ways that directly cause no change in bank deposits and domestic spending. Nevertheless some parts are likely to be in forms that do cause changes in the liquidity of banks and other credit-giving institutions.