

The supplementary special deposits scheme

This article reviews the supplementary special deposits scheme, known as the 'corset', as an instrument of monetary control.

The scheme was introduced in response to the growth of 'liability management', which made it difficult for the authorities to restrict the growth of the broad monetary aggregates in the face of strong demand for credit. It was designed to have the minimum impact on the structure of financial markets.

The scheme was largely effective in containing the growth of wholesale deposits. But it tended to encourage the diversion of banking business into other channels.

The scheme exemplifies the difficulties of relying excessively on direct controls on the banking system as a means of influencing monetary developments.

I Introduction

The supplementary special deposits (SSD) scheme was a system of direct controls on the sterling operations of banks (and deposit-taking finance houses) in the United Kingdom. It imposed penalties on individual institutions whose interest-bearing eligible liabilities (IBELs — essentially their interest-bearing sterling deposits) grew faster than a prescribed rate. The penalties became increasingly severe, the greater the excess over the prescribed growth in IBELs. The scheme was activated three times—from December 1973 to February 1975, from November 1976 to August 1977, and from June 1978 to June 1980.⁽¹⁾

Part II of this article outlines the developments which led to the adoption of the scheme as a supplement to the then existing arrangements, known as *Competition and credit control* (which had been implemented in September 1971). The reasons for modifying *Competition and credit control* in this way, rather than adopting one of a number of other possibilities, are also considered. For example, the authorities could have reverted to a system of ceilings on bank lending; other options would have been to introduce incremental controls on bank lending, or interest rate ceilings.

Part III describes the way in which the scheme operated in practice. The scheme was intended as a simple adjunct to existing arrangements. It was hoped that it would directly tackle the unhelpful response (for monetary control purposes) of the banking system to reserve asset shortages, without requiring any radical, and unintended, changes to the structure of financial markets. In many respects the scheme achieved these objectives, but the practical operation of the scheme—in particular, its interaction with the reserve asset ratio—became quite complicated.

After the adoption of published monetary targets in 1976, difficulties were also encountered in relating the aggregate on which the SSD scheme was based, interest-bearing eligible liabilities, to the target monetary aggregate, sterling M_3 .

Part IV assesses the impact of the scheme on monetary developments. Such an assessment is difficult, not only because the scheme may have had a direct effect by discouraging the banks from competing for business, but also because the announcement of the scheme may itself have created an environment conducive to sales of gilt-edged stocks, thereby influencing the money supply indirectly. On the other hand, the direct effect of the scheme on the recorded monetary aggregates may, at least in an economic sense, have been partially offset by the tendency for borrowers and lenders to circumvent the controls by redirecting funds through uncontrolled, parallel markets (a device known as disintermediation).

The relaxation of exchange controls in June 1979 and their abolition in October 1979 enabled UK residents to place deposits with, and borrow from, banks overseas. The possibility of large-scale offshore disintermediation further undermined the effectiveness of the scheme, and in June 1980 it was abolished.

In Part V the contribution of the scheme to the maintenance of monetary control is assessed in the light of the circumstances which prevailed at the time, in particular the prior existence of *Competition and credit control* and exchange controls.

The glossary on page 76 explains some of the key terms used in this article.

(1) Because a period of grace was allowed before the banks became liable to pay penalties, the scheme could have been a direct constraint on the banks only from April 1974 to February 1975, February 1977 to August 1977, and August 1978 to June 1980.

II Historical background and the design of the scheme

In 1973, the UK economy appeared to be nearing the limits of its capacity. In the fourth quarter, unemployment fell to 2.2% and unfilled vacancies rose to 1.6%, both of which subsequently proved to be turning points. The current account of the balance of payments deteriorated throughout 1973, with a deficit of £400 million in the fourth quarter.

The pressures on the economy were also apparent in financial developments. The banks were faced with a strong demand for credit and, unconstrained by quantitative ceilings (which had been abandoned in 1971), bank lending to the private sector grew by 33% during 1973. The banks funded this increased lending by bidding aggressively for deposits in the wholesale money markets. As a result, the broad monetary aggregates, which include (UK residents') large denomination deposits and certificates of deposit, grew rapidly: M_3 , for example, grew by 28% during 1973. In contrast, the narrow monetary aggregate, M_1 , grew by only $5\frac{1}{2}\%$, probably reflecting a switch from non-interest-bearing to interest-bearing accounts prompted by the rise in short-term interest rates. (During 1973 bank base rates rose from $8\frac{1}{2}\%$ to 13%.)

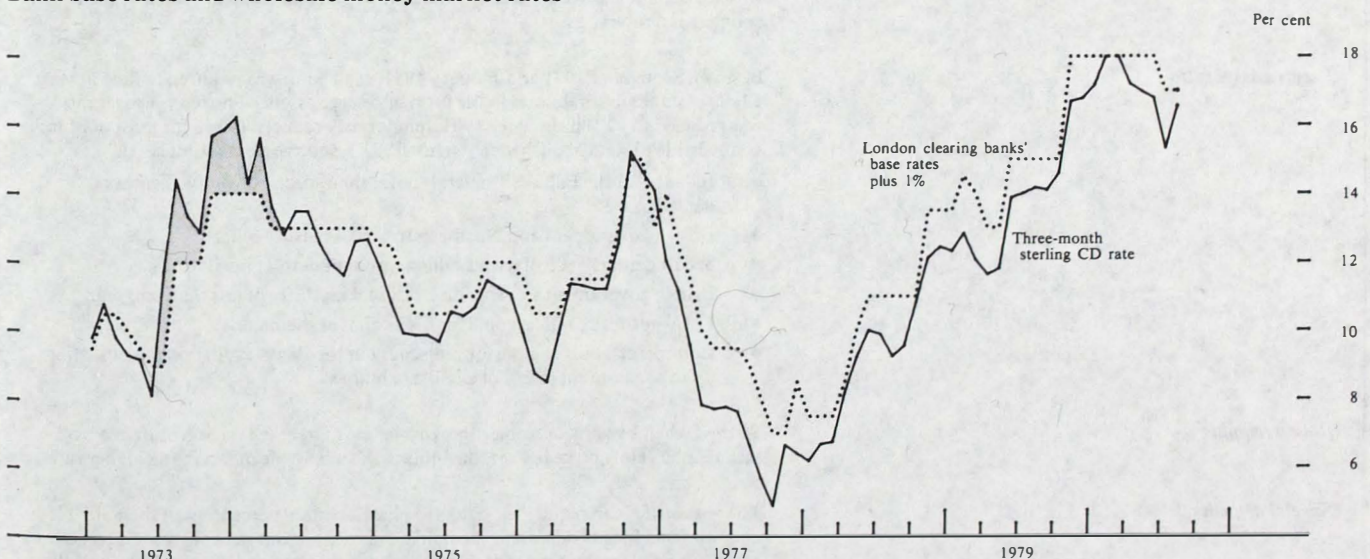
Liability management

The importance of the demand for credit in the determination of the overall size of the banks' balance sheets, at least in the short run, arises in part because of an asymmetry in the flexibility of interest rates on each side of the banks' balance sheets. The overdraft system has the general effect of enabling customers to increase their borrowing, effectively at their own discretion, at rates which have tended to be relatively inflexible in the short

run. This inflexibility was enhanced because the banks used to tie their base rates—to which ordinary overdraft rates were related—to Bank rate (later minimum lending rate—MLR).⁽¹⁾ Changes in MLR involved an administrative decision, with the delays that that entailed, and for a time an increase in the demand for credit did not provoke a rise in lending rates.⁽²⁾ In contrast, wholesale deposit rates have been highly flexible in the short run, and the banks have tended to accommodate the demand for credit by bidding whatever rate is necessary in the wholesale markets to attract sufficient funds to meet their lending commitments. This behaviour is known as liability management.

Some have argued that control of the broad monetary aggregates is virtually unattainable if liability management is allowed. Further, it has been suggested that in order to control the broad aggregates the authorities should induce the banks to react to unexpected shortages or surpluses of funds by adjusting their assets rather than their liabilities. It would appear, however, that private sector demand for bank credit has been insensitive—at least in the short run—to changes in the absolute level of interest rates. Indeed, the immediate effect of a rise in interest rates may, on occasion, have been to raise the demand for bank credit, in order to pay the increased interest charges. Attempts by the banks to stem sudden changes in the demand for credit by varying their lending rates might therefore have involved sizable fluctuations in short-term rates, if not an unstable interest rate spiral. If the banks had been induced to manage their assets by rationing the supply of credit, parallel markets would doubtless have developed to provide the services which the banks would no longer be offering.

Chart 1
Bank base rates and wholesale money market rates^(a)



(a) Probable opportunities for three-month round tripping are indicated by shading.

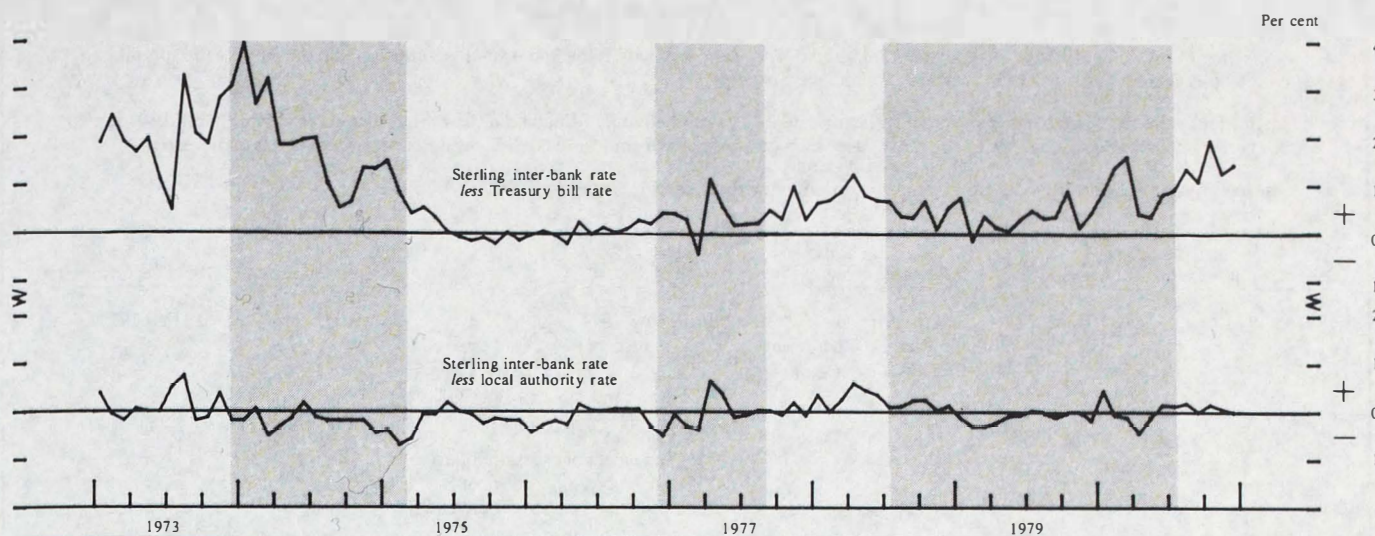
(1) Throughout the 1970s, an increasing proportion of bank lending was undertaken by means of three-month roll-over credits, rather than by overdraft lending. Whereas the interest rate charged on overdrafts was set at a margin over the banks' administratively determined base rates, roll-over credits tended to be charged at a margin over the London inter-bank offered rate (LIBOR)—a market-determined rate. However, the actual rate charged on roll-over credits was still inflexible in the short run because the rate was adjusted only every three months.

(2) In October 1972 Bank rate was replaced by MLR. MLR was to be determined in an automatic manner at $\frac{1}{4}\%$ above the average rate of discount for Treasury bills at the weekly tender, rounded to the nearest $\frac{1}{4}\%$ above. However, the Bank retained the right to override the normal formula. In May 1978 it was announced that MLR would in future be determined by administrative decision. Since mid-August 1981, MLR has been suspended.

Glossary of terms

Bank bill	A commercial bill on which a reputable bank has placed its name, thus accepting the obligation to honour the bill on the due date.
Bill leak	Bank bills held outside the banking sector.
Commercial bill	A bill of exchange drawn by a commercial firm to finance a short-term self-liquidating transaction such as the export of goods.
Competition and credit control	A package of measures implemented in September 1971, following the abolition of direct controls on bank lending. It involved, among other things, the introduction of a common reserve asset ratio requirement, which applied to all banks.
Disintermediation	The process whereby business that is essentially banking business is conducted in such a way that it does not appear in the banks' balance sheets. Cosmetic disintermediation is encouraged by the imposition of controls on the banking system.
Eligible liabilities	<p>Essentially the sterling resources available to a bank for on-lending to other sectors of the economy. Between 1971 and 1980, these mainly comprised:</p> <ul style="list-style-type: none">• All sterling deposits, of an original maturity of two years or under, from UK residents (other than banks) and from overseas residents (other than overseas offices).• All sterling deposits, of whatever term, from the UK banking sector <i>net</i> of sterling claims (including non-reserve asset lending to listed discount market institutions).• All sterling certificates of deposit issued, of whatever term, <i>less</i> any holdings of such certificates.• The bank's net deposit liability, if any, in sterling to its overseas offices.• The bank's net liability, if any, in currencies other than sterling. <p>Suspense accounts were also included, as were 60% of net debit items in transit.</p>
Interest-bearing eligible liabilities	The interest-bearing element of eligible liabilities.
Liability management	Process whereby the banks adjust the volume of their deposits by operations in the wholesale money markets so that the liability side of their balance sheet accommodates changes in the demand for loans. (Asset management is the process whereby loans granted or marketable instruments held are adjusted to equal the supply of deposits.)
Money at call	Typically, a deposit with a discount market institution which is placed on a day-to-day basis and which can be withdrawn any day before noon. When placed with a discount market institution, and both at call and secured, such a deposit counted as a reserve asset.
Reserve asset ratio	<p>Between September 1971 and January 1981, each bank was required to hold at least 12½% of its eligible liabilities in the form of reserve assets. (The reserve asset ratio was reduced to 10% in January 1981, temporarily reduced to 8% for most of March and April 1981, and abolished in August 1981.) Reserve assets comprised:</p> <ul style="list-style-type: none">• Balances at the Bank of England (other than special or supplementary deposits).• British government and Northern Ireland Treasury bills.• Secured money at call with London discount market institutions.• British government stocks with a residual maturity of less than one year.• Local authority bills eligible for rediscount at the Bank.• Commercial bills eligible for rediscount at the Bank (ie eligible bank bills), up to a maximum of 2% of eligible liabilities.
Round tripping	Process whereby bank customers borrow in one market (eg on overdraft at a base rate-related rate) and redeposit the funds in the wholesale markets at a higher rate.
Special deposits	The authorities can require the banks to place a certain percentage of their eligible liabilities in a special deposit at the Bank. This deposit did not constitute a reserve asset. Special deposits bear an interest rate broadly equivalent to the Treasury bill rate.
Trade bills	A commercial bill which has not been accepted by a bank.
Wholesale deposits	Large deposits, bearing an interest rate in line with market rates (rather than base rates). Includes certificates of deposit.

Chart 2
Three-month interest-rate differentials



As a result of these limitations, the authorities have found it difficult to restrict the growth of the broad monetary aggregates in the face of strong demand for credit, as in 1973. Moreover, increases in wholesale deposit rates have tended to have perverse effects on the broad aggregates because of changes in relative interest rates. Since base rates have been less flexible than wholesale deposit rates, rises in short-term rates have generally led to base rates falling temporarily behind wholesale deposit rates. On occasion, prime borrowers have been able to make a profit by borrowing on overdraft at a base rate-related rate, and relending these funds at a wholesale deposit rate (see Chart 1). This 'round tripping' has artificially inflated the banks' balance sheets and thereby the broad monetary aggregates.

In 1973 liability management and round tripping may have become more widespread because of the authorities' attempts to curb monetary growth by applying increasing reserve asset pressure to the banks. In December 1972 a $\frac{1}{2}\%$ special deposit call was made, and by December 1973 special deposit calls had risen to 5%. This had the effect of reducing the banks' reserve asset ratios towards their $12\frac{1}{2}\%$ minimum.⁽¹⁾ Rather than curb their lending (ie asset manage), the banks tended to bid more aggressively for deposits (ie liability manage) in order to finance their increased holdings of reserve assets. Thus, yields on reserve assets such as Treasury bills and money at call tended to fall relative to inter-bank and other non-reserve asset yields (see Chart 2). In the short run, the banks seemed prepared to absorb the increased cost of funding; later they began to include explicitly in their margins the cost of acquiring reserve assets, perhaps with little short-run impact on the demand for credit. Moreover, while the 'formula' for setting

MLR was in operation, the relative decline in Treasury bill yields tended to reduce the pressure to raise MLR.

The authorities responded to these difficulties by announcing the SSD scheme for the first time on 17 December 1973. Under the scheme, banks (and finance houses⁽²⁾) agreed individually to place non-interest-bearing supplementary special deposits with the Bank if their interest-bearing eligible liabilities grew faster than a specified rate. Since the banks did not, and presumably could not, vary their non-interest-bearing deposits to accommodate changes in the demand for credit, non-interest-bearing liabilities were excluded from the system of controls.⁽³⁾ The size of the deposits required to be placed with the Bank varied progressively according to the excess growth of IBELs. The details of how the penalties were calculated are outlined in the box (on next page).

The scheme therefore forced the banks either to accept lower profits (or even large losses) on additional lending, or else to widen the margins they quoted to customers. The cost of placing non-interest-bearing SSDs with the Bank was considerably greater than the (opportunity) cost of acquiring reserve assets, particularly in the second and third penalty zone (see box on next page), so the financial incentive to widen margins was greatly increased. To the extent that they widened their margins, a 'wedge' was driven between their deposit and loan rates. Even if higher lending rates had only a small short-run impact on the demand for credit, lower wholesale deposit rates relative to base rates were expected to reduce the opportunities for profitable round tripping. There was also some hope that the reduced profitability of marginal business might deter the banks from expanding their balance sheets either by

(1) Between September 1971 and January 1981, each bank was required to hold an amount equivalent to at least $12\frac{1}{2}\%$ of its eligible liabilities as reserve assets. The reserve asset ratio was reduced to 10% in January 1981, temporarily lowered to 8% for most of March and April 1981, and abolished in August 1981. In broad terms, reserve assets comprised certain types of deposit with the discount market and some short-term public sector debt. A more detailed definition can be found in the glossary.

(2) Certain of the larger deposit-taking finance houses were subject to the provisions of *Competition and credit control*. But the aggregate size of their business was small in relation to that of the banks, and they are not discussed further in this article.

(3) The relative inflexibility of the implicit yield on non-interest-bearing deposits (including the value of transmission services less bank charges) suggests that these deposits are largely determined by non-bank demand for them, rather than by the demand for credit. The residual between non-bank demand for credit and demand for non-interest-bearing deposits has to be met by the banks bidding for wholesale deposits.

How the scheme worked

- The scheme applied in principle to all 'listed' banks and deposit-taking finance houses; but small institutions and (because of the special circumstances there) institutions in Northern Ireland were exempt.
- Institutions were required to lodge non-interest-bearing deposits with the Bank of England if their interest-bearing eligible liabilities (see next box) grew faster than a specified rate. The rate of deposit was progressive from 5% to 50% as the amount of excess growth increased.
- The liability to pay SSDs was calculated monthly, on a moving three-month average of IBELs.
- The precise details which applied to each activation of the scheme are shown below.

Scheme announced	Base period ^(a)	Allowable growth	Rate of deposit	Exemption ^(b)	Scheme terminated
17 Dec. 1973	Oct.-Dec. 1973	8% over first six months; 1½% per month thereafter	<i>Until Nov. 1974</i> 5% in respect of excess of up to 1% 25% " " " " of 1%-3% 50% " " " " of over 3% <i>From Nov. 1974</i> 5% in respect of excess of up to 3% 25% " " " " of 3%-5% 50% " " " " of over 5%	£3 million	28 Feb. 1975
18 Nov. 1976	Aug.-Oct. 1976	3% over first six months; ½% per month thereafter	As above	£5 million	11 Aug. 1977
8 June 1978	Nov. 1977- Apr. 1978	4% over period to Aug.-Oct. 1978; 1% per month thereafter	As above	£10 million	18 June 1980 ^(c)

(a) The base level was the average level of IBELs over the period shown.

(b) The scheme did not apply to institutions with IBELs below the amount shown.

(c) The announcement of the termination of the scheme was made on 26 March; final deposits were repaid in August.

pursuing innovative lending policies, or by making loans with a higher default risk. The ability of the SSD scheme to encourage such non-price rationing by the banks might have been important because of the interest insensitivity, at least in the short run, of the demand for credit.

Alternatives to the scheme

In constructing a direct control in 1973, designed for intermittent use, the authorities had to have regard to the structural changes that had occurred since 1971, and to the longer-run objectives of *Competition and credit control*. Although the SSD scheme limited the extent to which the market share of the individual banks could change, the scheme was intended to operate for short periods only. During periods when the scheme was in abeyance, the competitive pressures introduced under *Competition and credit control* could reassert themselves. A system of financial penalties rather than absolute ceilings (which had been used in the pre-1971 controls) was also preferred because of the greater flexibility it afforded the banks.

A temporary system of controls with financial penalties could have been applied to changes on either side of the banks' balance sheets. A system of controls on bank lending, like the French *Encadrement du credit*, could have been tried, but it was thought that there were a number of advantages in favour of applying the controls to the liability side of the banks' balance sheets. In fact, an individual bank's eligible liabilities (ELs), of which IBELs are the

major component over which the bank has some control, consist essentially of the sterling funds available to the bank for on-lending to non-bank customers. As well as including all sterling deposits (including net sterling deposits from other banks) with an original maturity of less than two years, ELs also include net sterling funds acquired by switching foreign currencies into sterling.⁽¹⁾ In consequence, and in contrast to the pre-1971 controls, the SSD scheme did not discriminate between bank lending to the public and private sectors.

It might have been possible to inhibit liability management by imposing an interest rate ceiling on deposits. Indeed, between September 1973 and February 1975 the banks were asked not to pay more than 9½% on deposits of up to £10,000. In the United States, *Regulation Q* has been applied more widely, but not (since 1973) to certificates of deposit; partly as a result, most wholesale business has been conducted in marketable instruments. In practice, it would be difficult to impose an interest rate ceiling on marketable instruments, and, because of the ease of substitution between non-marketable large denomination deposits and certificates of deposit, the use of a ceiling similar to *Regulation Q* would have been unlikely to contain liability management. Moreover, interest rate ceilings tend either to be binding, causing dramatic flows out of the controlled institutions (as with the 'credit crunch' in the United States in 1966), or to have no effect. The switch from not being binding to being a major restriction can be abrupt and far from smooth.

(1) Switching out of sterling into foreign currencies was not allowed as an offset. See glossary.

III The SSD scheme in practice

The scheme was designed to have as little impact as possible on the structure of financial markets. This objective was pursued not because of any particular commitment to the *status quo* by the authorities, but because it was felt that changes in financial markets should not be initiated as a, possibly unexpected, by-product of an intermittently used system of monetary control. As a result, the SSD scheme was designed to operate in tandem with, rather than independently of, the $12\frac{1}{2}\%$ reserve asset ratio adhered to by the banks.

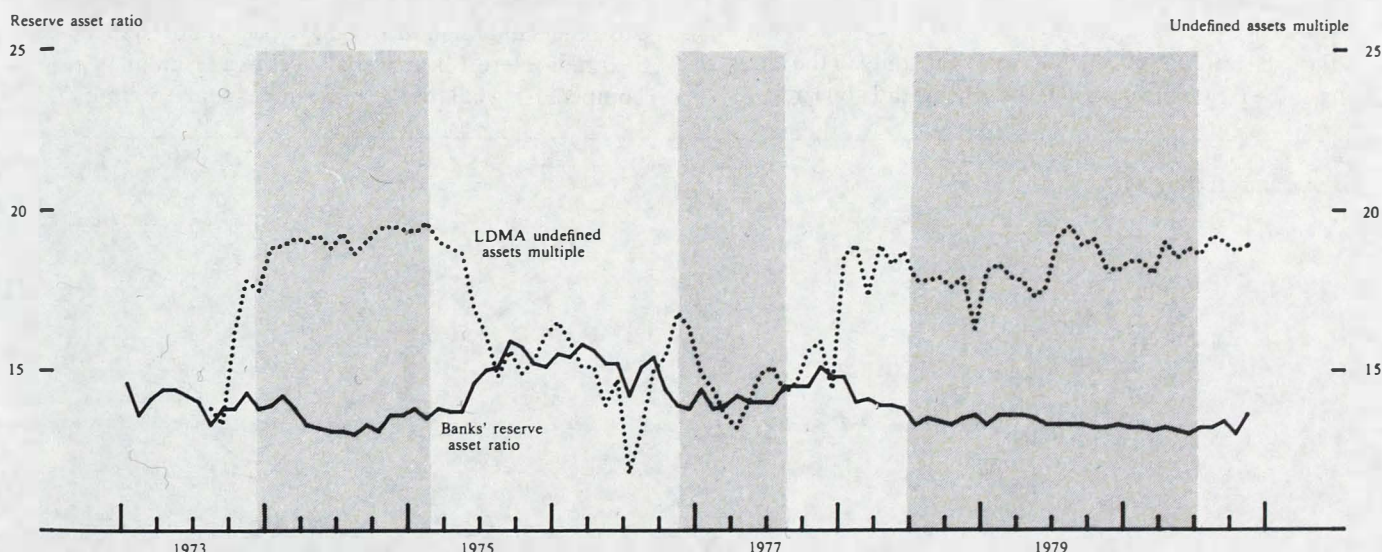
IBELs were chosen as the variable to be controlled, in some large part because ELs were already used as the base for calculating the reserve asset ratio and calls for special deposits. Banks were allowed to offset not only funds placed with other banks (since these funds would be included in the recipient bank's IBELs), but also funds placed with the discount market, if these funds did not have reserve asset status.⁽¹⁾

Since the discount houses were not subject to the SSD scheme, money at call held by the banks with the houses (a reserve asset) could be redesignated as money not at call (not a reserve asset) thereby reducing the total IBELs of the banks. These transactions for reducing IBELs could continue until the banks' excess reserve assets were exhausted. The banks could increase their non-reserve asset lending to discount houses, and the funds could then

be used by the houses to purchase commercial bills or other assets from the banks. In this way, a fall in IBELs could be arranged without falls in reserve assets, in non-bank deposits with the banking sector, or in lending to the non-banks by the banking sector. In effect, lending to non-banks could be shifted from the banks to the discount houses. Ultimately, these transactions were constrained by the undefined assets multiple. (Undefined assets,⁽²⁾ which included lending to the non-bank private sector, could not exceed twenty times the capital and reserves of each discount house.) But, if the houses were below their limit, the imposition of the SSD scheme might have made it profitable for them to increase the size of their balance sheets up to that point.

It was therefore not surprising that significant SSD penalties were paid only when the banking system as a whole was under reserve asset pressure and the discount houses were close to their undefined assets limit (see Chart 3). In the first SSD period, some penalties were paid, mainly because of operational errors by a few banks, but on the whole the banks were able to run down their excess reserve assets, and through this, and other means, avoid penalties. In particular, the undefined assets multiple rose sharply after the announcement of the scheme. Had the demand for credit continued to grow at a rapid rate in the first half of 1974 the banks might have incurred significant penalties; but in the event the economy began to turn down and the demand for credit slackened.

Chart 3
Pressure on the banks and the discount market



Supplementary special deposits^(a)

£ millions

1974		1975		1977		1978		1979		1980	
July	6	Jan.	2	May	1	Nov.	1	Jan.	2	Jan.	28
Aug.	1			July	1	Dec.	2	Feb.	3	Feb.	104
Sept.	2							Mar.	2	Mar.	132
Oct.	1							Apr.	1	Apr.	216
Nov.	2							May	5	May	219
Dec.	1							June	9	June	242
								July	2	July	456
								Aug.	10		
								Sept.	4		
								Oct.	1		
								Nov.	3		
								Dec.	19		

(a) A more detailed analysis of deposits can be found in the appendix: this shows the number of banks incurring penalties and the size of deposits in each tranche

(1) To qualify as a reserve asset, money placed with the discount market institutions had to be secured and immediately callable.

(2) All assets other than certain public sector assets, such as balances at the Bank, Treasury bills, and government stock with a residual maturity of less than five years.

The SSD scheme was activated for the second time in November 1976, when there was concern to constrain the growth of domestic credit in order to try to protect a weak exchange rate. As it turned out, the exchange rate soon recovered dramatically, mostly for reasons unconnected with the scheme, and this was followed by very heavy sales of public sector debt and reduced demand for credit. Throughout this period the banks continued to hold excess reserve assets, and there was also considerable scope for increasing the size of the discount houses' balance sheets. Since no attempt was made to make full use of these 'loopholes', it is perhaps not surprising that very few SSD penalties were paid, even though the penalty-free rate of growth of IBELs appeared to be tighter than under the first scheme.

In the third SSD period, only minimal penalties were paid between November 1978 and late 1979, but the banks' combined reserve asset ratio fell from around 13.5% towards its minimum operational level of between 13.1% and 13.2% by the summer of 1979. The undefined assets multiple remained above 18 once both the reserve asset ratio and the SSD ceilings became effectively restrictive. By February 1980, twenty-two banks had placed £104 million as SSDs, and the demand for credit continued to grow rapidly. Indeed, after February 1980 the number of banks in the second and third penalty tranches increased dramatically.⁽¹⁾ In these higher tranches the cost of undertaking additional lending became onerous, in contrast to the first penalty tranche which imposed only a modest marginal cost.

Although sizable SSD penalties were paid only in the latter part of the third corset period, the scheme did appear to

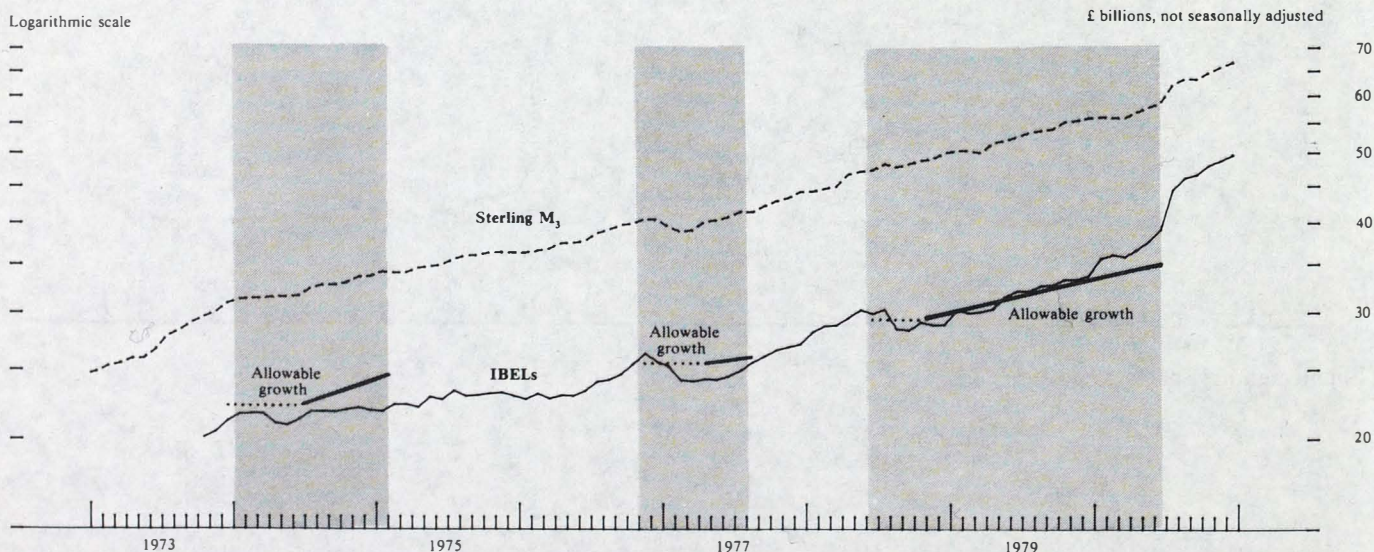
reduce the aggressiveness with which the banks bid for wholesale deposits. In all three episodes, wholesale deposit rates tended to fall relative to both base rates and yields on other liquid assets (see Chart 2). At its inception this was the main purpose of the scheme—to curb the growth of wholesale bank deposits. Since December 1976, however, formal target ranges had been announced for sterling M_3 ,⁽²⁾ and although any restraint on the growth of wholesale deposits was likely to have contributed towards the attainment of these targets, the scheme had not been designed for that purpose.

The relationship with monetary targets

In translating a sterling M_3 target into prescribed IBELs growth, adjustments had to be made for items included in IBELs, but not in sterling M_3 , and *vice versa*. In particular, IBELs included overseas sterling deposits, which are not in sterling M_3 , while sterling M_3 includes notes and coin held by the public and non-interest-bearing deposits, all of which were excluded from IBELs.⁽³⁾ As a result, even if the prescribed IBELs path was achieved, errors in forecasting the other components could lead to the overshooting or undershooting of the sterling M_3 target.

In general, sterling M_3 tended to grow faster than IBELs when the corset was in operation, and this divergence tended to unwind when the scheme was in abeyance (see Chart 4). This discrepancy arose mainly as a result of the transactions with the discount houses described above, but other factors might have been the increased use of non-interest-bearing deposits or over-two-year deposits. Customers might, in theory, have been induced to increase their non-interest-bearing balances as a result of 'compensating balance' arrangements for corporate

Chart 4
IBELs and sterling M_3



- (1) In the March 1980 Budget it was announced that the scheme would lapse with effect from June 1980. Some banks may have been prepared to incur penalties in the higher tranches for this limited period in order to maintain or even increase their market share.
- (2) The April 1976 Budget set guidelines for M_3 in line with money gross domestic product. In July 1976 it was announced that M_3 should grow by 12% in the financial year 1976/77. M_3 comprises UK residents' sterling and foreign currency deposits with UK banks (including discount houses), and notes and coin held by the public. In December 1976, the Letter of Intent to the IMF included a commitment to ceilings for domestic credit expansion: £9 billion for 1976/77, £7.7 billion for 1977/78, and £6 billion for 1978/79. In the same month, the Chancellor announced a 9%–13% target range for sterling M_3 (which comprises UK residents' sterling deposits with UK banks—including discount houses—and notes and coin held by the public).
- (3) UK residents' sterling deposits with an original maturity of over two years and UK residents' sterling deposits with the discount houses are also included in sterling M_3 , but excluded from IBELs.

customers or 'free banking' for personal customers, but there is no evidence of this having occurred on any large scale.⁽¹⁾ The banks apparently did not attempt to attract longer-term deposits, possibly because the higher rates required on such business rendered it unprofitable.

In principle, the SSD scheme could have been redesigned so that the controlled aggregate bore a closer relationship to sterling M_3 . However, if the scheme had discriminated between resident and non-resident deposits it might have induced artificial switching of resident deposits into balances which nominally belonged to non-residents, but which would have been at the disposal of residents. Also, because of the secondary market in certificates of deposit, it would have been impossible to distinguish between certificates of deposit of individual banks held within the banking sector and those held outside. (It is, however, possible to estimate the total of certificates of deposit held by UK residents outside the banking sector and these are included in sterling M_3 .)

Finally, even if the scheme could have been specified in terms of sterling M_3 , a discrepancy would still have arisen because the monetary targets have been specified in seasonally adjusted terms. In practice, it would have been difficult to require individual banks to keep within an SSD ceiling in seasonally adjusted terms, in part because seasonal adjustments tend to be revised as more information becomes available.⁽²⁾

Impact on different types of bank

Although the SSD scheme applied to nearly all banks above a certain size (see below) it may, nevertheless, have had a differential impact on the various types of bank within the banking sector. Banks with a potential for rapid growth were constrained to the same penalty-free rate of growth from an arbitrarily set base level of IBELs. Also, the corset penalties were calculated for each bank individually and not on a consolidated basis for each banking group. As a result it was argued that the scheme discriminated against the smaller and more specialised non-clearing banks, which started from a low base and could not switch business within a group of banks in order to avoid or reduce penalties.

Partly for this reason, small banks were excluded from the scheme. Initially, banks with IBELs of less than £3 million were exempt, but the *de minimis* limit was later raised to £5 million and then to £10 million. As a result of the *de minimis* limit and various other adjustments, 'operational' IBELs, ie IBELs on which SSD penalties were calculated, tended to be lower than 'statistical' IBELs, ie IBELs as published in the *Bulletin* and elsewhere. In the first two corset periods, this discrepancy was not large, but in the third period the *de minimis* banks grew at a disproportionate rate, creating another leakage. Indeed, there appears to have been some scope for intra-group switching between banks included in the scheme and the *de minimis* banks.

On the other hand, some of the non-clearing banks may have been able to maintain a high level of lending within each banking month, while persuading some of their customers to switch to overdraft borrowing from the clearing banks over the monthly make-up day. This sort of 'window dressing' may have redistributed the liability to pay penalties, and allowed effectively higher lending by the non-clearers at the expense of the clearers.

IV Impact on monetary developments

Any assessment of the impact of the SSD scheme on monetary developments is complicated by three factors. First, the activation of the scheme was in each case announced as part of a package of economic measures, so it is difficult to disentangle the effect of the scheme from the impact of other instruments of government policy.

On 13 November 1973, MLR was raised from 11½% to 13% and a further 2% call was made for special deposits, primarily in response to adverse domestic monetary developments and the general overheating of the economy. As well as introducing the SSD scheme on 17 December, the Chancellor announced a £1,200 million cut in previously planned government expenditure for 1974/75 (amounting to 2% of GNP).

The fall in the effective exchange rate index from 73 in January 1976 to 57 in October 1976 resulted in a similar package. In September 1976, MLR was raised from 11½% to 13%, and the rate of call for special deposits was increased by 1%. In October, MLR was raised to a then record 15%, and a further 2% call for special deposits was made. In November 1976 exchange controls were tightened on the sterling finance of third-country trade and the SSD scheme was re-imposed. In January 1977 agreement with the IMF was reached on a borrowing facility, the markets having confidently expected such an agreement for some time.

Fears about the Government's resolve to control the public sector borrowing requirement, and worries about the buoyancy of loan demand and the possibility of overshooting the monetary target, led to a gilt-edged funding pause in the early summer of 1978. The authorities' inability to sell debt aggravated the problems caused for monetary control by the strength of loan demand, and precipitated the re-imposition of the corset and a number of other measures in June 1978. MLR was raised from 9% to 10% and a package of fiscal measures was announced, including a 1½% surcharge on employers' national insurance contributions, to offset the forecast loss of revenue arising from opposition amendments to the Budget proposals.

In all three cases it is impossible to know what would have happened to monetary developments if the corset had not been imposed.

(1) 'Compensating balances' and 'free banking' are arrangements whereby customers pay for their financial services by holding an agreed level of non-interest-bearing balances.

(2) An element of seasonal adjustment was allowed in calculating IBELs for operational purposes: banks were allowed to 'smooth' the interest credited to seven-day deposit accounts.

The second problem associated with assessing the scheme's usefulness relates to its indirect impact on the monetary aggregates. Sizable SSD penalties were paid only in the latter part of the third corset period, but on all three occasions the announcement of the scheme may have indicated to the markets that the banks were likely to moderate the aggressiveness with which they would bid for wholesale deposits. Although the imposition of the scheme did not guarantee that the authorities would not have to raise interest rates further, it may have reduced the chance of this happening. Certainly, if the markets believed that interest rates had reached their peak, gilt-edged stocks became easier to sell and this tended to reduce the money supply.

The third problem in assessing the impact of the scheme is to evaluate the extent to which the improved control of the recorded aggregates, in particular sterling M_3 , was undermined by offsetting developments elsewhere. While it would appear that the imposition of the scheme retarded the rate of growth of IBELs, they may have grown faster than otherwise would have been the case during 'corset-off' periods. The re-imposition of the corset was widely anticipated prior to November 1976 and June 1978, and the banks may have been encouraged to raise their IBELs so that they started from a higher base level.

The re-imposition of the corset was expected in the spring of 1976, and the banks' ineligible (non-reserve asset) lending to the discount houses, an offset to IBELs, fell quite markedly during that period. Prior to the second and third corset periods, the banks also appear to have raised their IBELs by issuing more sterling certificates of deposit and using these funds, at least in part, to purchase bills from the discount houses; during the 'corset-off' period between July 1977 and June 1978, IBELs grew by 21%, whereas sterling M_3 grew by 14%. Thus, there may have been a tendency for the corset merely to redistribute the rate of growth of IBELs over time. The authorities responded to this by backdating the base level: the base for the third corset period, announced in June 1978, was the average of IBELs between November 1977 and April 1978. Nevertheless, the redistribution of wholesale deposit growth over time may be an inherent feature of any temporary system of control.

Disintermediation

The efficacy of the SSD scheme was also undermined by disintermediation of a purely cosmetic nature. Even though the scheme restrained wholesale deposit taking, and therefore lending by the banks, frustrated lenders and borrowers could often be brought together in parallel markets. For example, some corporate customers could be induced, at minimal cost, to borrow by means of an acceptance, rather than an advances facility. Under this arrangement, a bank would agree to accept (ie guarantee) bills issued by a customer up to a specified limit. Accepted bills, known as bank bills, would be almost identical in terms of marketability and default risk to certificates of deposit, and as such could be sold at a similar price to holders other than banks. Thus, although bank bills held outside the banking sector are regarded as close substitutes for, and as liquid as, certificates of deposit, they are only a

contingent liability of the accepting bank, and therefore an off-balance sheet item excluded from IBELs and sterling M_3 .

The growth of bank bills held outside the banking system (known as the 'bill leak') when the corset was in operation was widely known and measurable. Before the first activation of the corset in the fourth quarter of 1973, bills held outside the banking system stood at an estimated £350 million, but by the end of that corset period they had grown to £500 million. During the second corset period, the bill leak grew from £320 million in the fourth quarter of 1976 to a peak of £430 million in the second quarter of 1977. Thereafter bills outstanding fell to £150 million in the first quarter of 1978. After the third corset was announced the bill leak grew to £710 million in the third quarter of 1978, and reached a peak of nearly £2,700 million in the second quarter of 1980. After the corset had been abolished bills held outside the banking system fell back to less than £500 million.

The authorities could have included this leakage in the corset controls, and even in the official definition of money. In the event, market participants were able to make reasonably accurate estimates of changes in the bill leak from published figures and thereby calculate changes in 'adjusted sterling M_3 '. These adjustments were widely quoted and understood. From September 1979, figures for the bill leak were published as a component of the private sector liquidity series (Table 12 in the statistical annex). Including the bill leak in the system of controls would not, however, have curbed the problem of disintermediation. Indeed, without such a safety valve, less measurable forms of disintermediation might have grown more rapidly. The inter-company market might have expanded, by-passing the banking sector altogether, and large, creditworthy companies might have issued trade bills of similar marketability and default risk as bank bills. The funds acquired by issuing trade bills could have been used to extend trade and other forms of credit to less well-placed suppliers and customers. Some large industrial and commercial companies might therefore have become quasi-banks.

Once exchange controls were abolished in October 1979, UK residents could place deposits with, and borrow from banks located outside the United Kingdom. Since the corset could be applied only to banks in the United Kingdom, there was a possibility that all wholesale deposits in excess of the penalty-free amount would be booked offshore. Whereas it might have been possible to maintain precise control over the recorded aggregates, such control would have been largely cosmetic. Some restrictions could perhaps have been placed on offshore subsidiaries of branches of UK banks, but little or no control could have been exercised over the sterling business of offshore banks whose parent bank was not located in the United Kingdom. In the event, the Governor of the Bank of England asked UK banks not to evade the corset by booking business offshore, but it was recognised that this request, which did not and could not cover foreign banks, could not provide a lasting solution to the problem.

It is doubtful whether there is any definition of money for which close substitutes could not be developed in the event of direct restrictions being placed on the growth of such money balances; this is perhaps particularly so in the case of wholesale deposits. Disintermediation is likely to undermine most permanent or semi-permanent systems of direct control. A temporary scheme, however, may have a (non-cosmetic) effect because it takes time for parallel markets to emerge; set up costs have to be incurred and there is a learning process. In fact, it is possible to argue that systems of direct control have to be changed every few years in order to be effective. On the other hand, if schemes have to be suspended from time to time, the problems of reintermediation and anticipatory behaviour by the banks have to be faced.

Post-corset reintermediation

The rapid growth of IBELs and sterling M_3 after the abolition of the SSD scheme in June 1980 illustrates the problems of an on/off system of direct controls. In banking July 1980,⁽¹⁾ the bill leak fell by £1,000 million, while private sector deposits rose by £3,000 million, sterling lending to the private sector by £2,200 million, and sterling lending to overseas by £700 million, suggesting some reintermediation of sterling business driven offshore by the corset. Banks tended to rebuild their holdings of public sector debt, which had been run down during the corset period; in particular, non-reserve asset lending by banks to the local authorities rose by 11% in banking July alone. IBELs rose by some 14% in the month and total ELs by around 9%.

Although the size of the bill leak was known, the extent and speed with which it would unwind were unpredictable. Also, after a long period in which the corset had operated there was considerable uncertainty over how many acceptances would continue to be held outside the banking system when the corset was abolished. The split between UK residents' and overseas holdings of acceptances could not be ascertained, and the implications of the unwinding of the bill leak for sterling M_3 were therefore to some extent a matter of conjecture. On top of this, the size and speed of the unwinding of other forms of disintermediation, both offshore and domestic, were largely unknown.

In the event, sterling M_3 grew by $7\frac{3}{4}\%$ in the three banking months (July to September) following the abolition of the corset and by $5\frac{1}{4}\%$ in banking July alone. This was more than had been expected, and the authorities had considerable difficulty in distinguishing between the effects of reintermediation and an increase in the underlying rate of growth of the broad monetary aggregates. The narrower definition of private sector liquidity (PSL_1) grew at the somewhat slower rate of $4\frac{1}{4}\%$ in the three months. This may have been because PSL_1 includes bills held outside the banking sector as well as other liquid assets, some of which tended to contract as funds were reintermediated back into the banking system. But all the broad monetary aggregates

may have been inflated during this period as a result of reintermediation from the eurosterling market and other largely unmeasurable domestic markets.

The question arose as to whether an allowance ought to be made for reintermediation in interpreting the monetary target. If sizable reintermediation had indeed occurred, keeping to the existing target would have represented an unintended tightening of policy. On the other hand, estimating the size of the reintermediation involved a considerable element of judgment, and, if an *ex post* adjustment was to be made for the removal of the corset, consistency would presumably require adjustments for its imposition and also for the relaxation of exchange controls. When the quarterly eurosterling figures became available, the evidence for adjusting the targets upwards to allow for reintermediation from offshore sources appeared to be slight. In the event, no explicit adjustment was made, but implicit judgments about reintermediation and other factors still had to be made when the target was rebased in the spring of 1981.

As might have been expected, borrowing from, and lending to, the eurosterling market by UK non-banks rose—by around £0.6 billion—in the period after the relaxation of exchange controls. It might have been reasonable to suppose that this rise was largely at the expense of domestic deposits and lending because of the ease of substitutability between the two markets. In the quarter following the abolition of the corset, eurosterling deposits from, and lending to, UK non-bank residents fell by £0.2 billion, but in subsequent quarters this fall was reversed. Since the abolition of exchange controls, the ratio of UK residents' eurosterling deposits to domestic deposits has risen from around 1% to 2%. This shift may have occurred largely at the expense of sterling deposits with UK banks.⁽²⁾

Longer-term effects

As well as encouraging the temporary redirection of conventional bank business through parallel markets, the SSD scheme itself, or the threat of its reimposition, may have had a longer-term influence on the structure of UK financial markets. The periodic imposition of restrictions on the growth of sterling deposits may have encouraged some UK banks to promote other types of business. Exchange controls severely limited the extent to which UK banks could take deposits from, and lend to, UK residents in foreign currencies. The UK authorities did not, however, attempt to restrict UK banks from taking deposits, or from lending to overseas residents, in foreign currencies. Between 1973 and 1980, overseas residents' foreign currency deposits at UK banks grew, on average, by 25% per annum, whereas UK residents' sterling deposits grew by 13% per annum.

Other factors may have affected the UK banks' overseas business. The growth of international trade may have increased the need for overseas residents to hold balances in London. Not only were foreign currency deposits exempt

(1) That is, the month to mid-July.

(2) Until August 1981, when the reserve asset ratio was abolished, there were periods in which the banking sector was short of reserve assets, and the yields on reserve assets fell relative to the yields on non-reserve assets (see Chart 2). This interest rate differential effectively constituted an implicit tax on the UK banks, and an incentive arose for funds to be redirected offshore. On occasion there was an incentive for eurosterling round tripping to occur, which had complicated effects on the broad monetary aggregates.

from the SSD scheme (provided that the banks did not use them to acquire sterling resources), but they were also excluded from the reserve asset ratio. In contrast, the United States and West Germany have imposed relatively onerous reserve requirements on their domestic banks, without there being exchange controls on their residents. This has given rise to disintermediation from these countries, and some of these funds may have been channelled through UK banks.

During the 1973–80 period, the banks' share of UK personal sector savings declined in relation to that of the building societies. In 1973, the building societies and the banks each had deposits of around £17 billion from the personal sector. By 1980, the banks' deposits had risen to £30 billion, whereas those of the building societies had reached £42 billion. During the 'corset-off' period in 1977–78, some banks sought to promote lending to the personal sector for house purchase, but total bank lending for house purchase remained small. Excess demand for mortgage finance tended to be met by 'topping-up' loans from insurance companies, rather than from the banks.

The growth of the building societies' share of the personal savings market during this period may have been due to a number of factors other than the inhibiting effect of the corset. Share accounts attracted large numbers of small savers and the composite tax rate may have helped the societies. Nevertheless, since the abolition of the SSD scheme, the banks have expanded their lending for house purchase, as well as their share of personal sector savings. Between May 1980 and November 1981, bank lending for house purchase rose from £2.5 billion to £4.7 billion, an

annualised rate of growth of 52%. Thus the imposition and removal of the corset may have contributed to these changes in the banks' market share and hence changes in the growth of sterling M_3 in relation to the wider measures of liquidity.

V Conclusions

The SSD scheme was introduced in response to monetary developments in 1973. The scheme was largely effective in inhibiting round tripping and containing the growth of wholesale deposits. During the first, second, and early part of the third corset periods, few SSD penalties were paid, and the scheme does appear to have restrained the aggressiveness with which the banks bid for wholesale deposits. The scheme may also have helped to improve sentiment in the gilt-edged market, thereby influencing the monetary aggregates indirectly.

But the extended use of direct controls raises its own problems. Permanent or semi-permanent controls almost inevitably give rise to domestic and, if allowed, offshore disintermediation. Such controls can compensate to only a limited extent for the weaknesses in the use of conventional instruments of policy—interest rates, debt sales and budgetary adjustments. Temporary controls may be less likely to induce disintermediation, but they suffer from anticipatory behaviour by the banks which distorts the interpretation of the recorded aggregates. Perhaps the greatest danger arises if an ostensibly temporary scheme is retained for an excessively long period because of fears about the consequences of suspending it.

Appendix

Payment of supplementary special deposits

£ millions; number of banks in italics (a)

	Total	1st tranche	2nd tranche	3rd tranche
First period				
1974 July 17	6	<i>14</i>	2	6
Aug. 21	1	<i>7</i>	2	1
Sept. 18	2	<i>5</i>	1	2
Oct. 16	1	<i>6</i>	1	1
Nov. 20	2	<i>6</i>	—	2
Dec. 16	1	<i>5</i>	3	1
1975 Jan. 15	2	<i>4</i>	—	3
Feb. 19	—	<i>3</i>	—	1
Second period				
1977 May 18	1	<i>5</i>	3	1
June 15	—	<i>5</i>	4	—
July 20	1	<i>4</i>	2	—
Third period				
1978 Nov. 15	1	<i>7</i>	5	1
Dec. 13	2	<i>5</i>	3	1
1979 Jan. 17	2	<i>4</i>	1	2
Feb. 21	3	<i>5</i>	1	2
Mar. 21	2	<i>3</i>	1	2
Apr. 18	1	<i>4</i>	2	—
May 16	5	<i>4</i>	1	1
June 20	9	<i>6</i>	3	7
July 18	2	<i>6</i>	5	1
Aug. 15	10	<i>14</i>	9	3
Sept. 19	4	<i>10</i>	8	1
Oct. 17	1	<i>12</i>	10	2
Nov. 21	3	<i>8</i>	4	3
Dec. 17	19	<i>20</i>	13	8
1980 Jan. 16	28	<i>14</i>	9	9
Feb. 20	104	<i>22</i>	15	31
Mar. 19	132	<i>23</i>	12	31
Apr. 16	216	<i>27</i>	14	31
May 21	219	<i>28</i>	13	31
June 18	242	<i>30</i>	19	37
July 16	456	<i>47</i>	27	63

(a) For each tranche, the amount of deposits records the *total paid* in that tranche, whereas the number of banks measures those whose *maximum penalty* fell within that tranche.