Local authority swaps

This paper forms part of the written evidence submitted by the Bank to the Treasury and Civil Service Committee in March 1991 and was published by the Committee in its report on the 1991 Budget on 25 April.

The Treasury and Civil Service Select Committee has asked the Bank to provide written evidence on a number of questions relating to local authority interest rate swaps (Mr Millar's letter of 19 February). This note seeks to describe local authorities' use of swaps within the context of the wider swaps market and outlines possible options identified by the Bank of England for bringing about a satisfactory resolution of the situation that has arisen.

Section 1 describes what a swap is, and gives an overview of the international swap market. Section 2 describes the involvement of local authorities in the sterling interest rate swaps market. Technical detail has deliberately been kept to a minimum for this paper, but a more detailed account of the instruments and workings of the markets can be found in the attached appendix. Finally, section 3 describes the role played by the Bank of England.

1 Description of swap instruments

1.1 Swaps are a valuable technique for managing financial flows and as such are widely used by many types of institution. Perhaps the most common use of swaps is to enable a borrower to change the basis of interest payments on a particular debt without disturbing the underlying debt.

1.2 By entering into an interest rate swap a borrower can, for example, effectively transform a floating-rate obligation into a fixed-rate obligation. The underlying obligation to make floating-rate payments will be unaffected, but the borrower will receive a series of exactly compensating floating-rate payments from its swap counterparty. In return it will have to pay to its swap counterparty a stream of fixed-rate payments calculated on the same notional principal amount.

1.3 Since its inception in 1981, the swap market has grown rapidly and stands today at around US$2 trillion in outstanding contracts (Source: International Swap Dealers' Association). The market is global, with participants drawn from all sectors including sovereign governments and their agencies, financial institutions and industrial and commercial companies. In addition to participants who use swaps to manage their own financial positions, a large number of banks and other financial firms act as intermediaries in the market, using their financial expertise and position in the market to arrange deals for end users.

1.4 The global swap market is a highly sophisticated one, which exerts a major influence on the composition and volume of funds in domestic and international capital markets. In addition to the basic interest rate swap, a number of similar instruments have been developed; the most important of these are described in the appendix. The importance of the market has been recognised by both practitioners and regulators. In the 1980s the British Bankers' Association and the International Swap Dealers' Association introduced market-wide standards, procedures and documentation. In working to cover the risks in traditional lending business, supervisory authorities have extended their regulatory framework to cover similar risks in swaps business. For its part the Bank of England worked with the supervisory authorities in the other G10 countries to agree a common regulatory approach to credit risk which embraced the use of swaps by banks.

1.5 Strictly speaking it is not instruments or markets as such which are supervised by the Bank but participants in the markets, notably banks (as provided for in the Banking Acts 1979 and 1987), and, since the implementation of the Financial Services Act in 1986, the supervision of, for example, brokers has a statutory under-pinning. Nevertheless the Bank has a clear interest in the efficiency, health and robustness of markets as a whole and in the competitiveness of London as a financial centre.

2 The use of swaps by local authorities

2.1 Local authorities have been important participants in the sterling money markets during the last 45 years. They first became involved in the sterling interest rate swaps market in the early 1980s. By the time the market for local authority swaps closed in February 1989, some 130 authorities had participated in swap dealings with some 80 bank counterparties.

2.2 The financial management issues facing local authorities are in many respects similar to those facing other major participants in the financial markets. This is apparent from the size of some local authority budgets, the complexity of the cash flows which they receive and dispense in carrying on their day to day activities, and the fact that local authorities undertake capital expenditures which must be funded on a long-term basis. It is therefore not surprising

that local authorities were attracted to the sterling interest rate swap market.

2.3 Like other market participants, and provided they acted prudently and subject to effective management control, local authorities could potentially benefit from using swaps in three ways: to exploit the comparative advantage which they might enjoy in particular markets; to manage the exposures to interest rate movements which they are likely to incur (whether willingly or unwillingly); and to transform pre-determined cash inflows and outflows so that they are better matched over time.

2.4 A particular feature of local authorities' financial management is their access to financing from the Public Works Loan Board (PWLB), which accounts for a substantial share of local authority borrowing. The PWLB offers long-term loans (with a minimum borrowing period of one year) at both fixed and variable rates. The rate of interest charged to a local authority is linked to the Government's own cost of funds, and may not be lower than the Government's own cost of funds. One consequence of Government's decision to pass on to the local authorities some of the benefit of its own ability to borrow in the fixed interest rate markets on the finest terms is that local authorities have over a period of years enjoyed a comparative advantage in fixed-rate borrowing.

2.5 While access to PWLB facilities has enabled local authorities to raise fixed-rate funds directly on extremely fine terms, local authorities have at times also wished to obtain variable-rate funds. One possible reason for this is that local authorities' income and expenditure are linked to the level of inflation and will therefore tend to move in line with nominal interest rates. Local authorities could therefore reasonably take the view that they should avoid overdependence on fixed-interest debt.

2.6 Interest rate swaps enabled a local authority to acquire variable-rate liabilities on the finest terms. Rather than borrowing floating-rate funds from the market or from the PWLB directly, a local authority wishing to raise floating-rate debt could exploit its comparative advantage in fixed-rate borrowing. This could be done by taking out a fixed-rate loan from the PWLB and simultaneously entering into an interest rate swap with a bank to transform its obligations from those based on a fixed-interest rate to those based on a variable rate to achieve a lower overall cost of borrowing.

2.7 Despite the widespread activity of local authorities in the interest rate swaps market, no doubts about their powers to engage in these transactions were expressed until 1987. Thus there was a period of some five years during which not only the banks and local authorities directly involved in the market, but also their legal advisors, had accepted the local authorities' involvement in sterling interest rate swaps.

3 Options for resolving the situation

3.1 Since the legal uncertainty surrounding local authorities' transactions in swaps and related instruments came to light, the Bank's primary concern has been to see legal clarity restored as quickly as possible. It was hoped that this would contain the damage to the United Kingdom's reputation as a safe place to do business and secure order in a number of markets which were threatened by the uncertainty.

3.2 At the outset, the Government took the view that the right course of action was for local authorities' powers to undertake swap transactions under the existing legislation to be tested in the courts. The first case to come to court was that of Hammersmith & Fulham which, in contrast to most local authorities, had engaged in swap transactions on a very large scale indeed relative to the amount of its outstanding debt.

3.3 This case began to make its way through the courts following Hammersmith & Fulham's suspension of payments on its swap transactions in February 1989. The process turned out to be both lengthy and uncertain. As the case proceeded from the Divisional Court to the Appeal Court and then to the House of Lords, the interpretation given to the existing legislation varied significantly. In October last year, the Lords' Committee, in their provisional view, reversed the Appeal Court ruling and concluded that *all* swaps and related instruments undertaken by local authorities were *ultra vires*. This was confirmed in the Lords' full judgment published on 24 January.

3.4 The time taken to establish this legal position has caused considerable damage to the reputation of the City of London among counterparties who entered into swap transactions with local authorities in good faith during the period.

3.5 As regards the implications for outstanding transactions, their Lordships stated that the consequences of any *ultra vires* transaction would depend upon the facts of each case. The legal opinions available suggest that, in the absence of any legislative action, further court proceedings are likely to result in the two-way restitution of all past payments on both completed and uncompleted swap transactions entered into by local authorities. Although the first case which would have tested that opinion—between Citicorp and Ogwr District Council—was settled out of court by agreement between the parties, those closely involved in the legal arguments believe that there still is scope for considerable and prolonged litigation.

3.6 The present position is clearly unsatisfactory from the point of view of the reputation of the City of London. Not only is there a prospect of further uncertainty and delay as a new round of litigation gets under way, with further damage to markets and to the United Kingdom's reputation abroad for allowing this state of affairs to continue, but the probable eventual outcome—some form of restitution—is itself unattractive.

3.7 Restitution produces an outcome very different from that envisaged by the parties to the original transaction. It takes no account of the concern that contracts freely entered into should be honoured. The principle of 'my word is my bond'

is central to the reputation not just of London, but of the United Kingdom as a whole.

3.8 In addition, restitution is arbitrary in its effect, involving the unwinding of transactions already settled to the satisfaction of both parties and totally undoing the contribution to risk management which was originally intended. For example, those local authorities which had successfully identified a prudent contribution from swaps towards the management of their financial affairs would face substantial costs in returning to their counterparties the net amount they had received under those deals. Similarly, certain banks which had used swap transactions with local authorities as a means of hedging risks arising elsewhere in their business would find that they had unmatched and potentially costly positions—despite having sought and obtained assurances from their local authority counterparts that they could validly undertake the swap transactions.

3.9 The Bank has participated in extensive discussions with the banks and other parties in order to determine what alternative there might be to the prospect of lengthy litigation leading eventually to some form of restitution.

3.10 Through these consultations it became clear that there were essentially two possible types of response involving some kind of retrospective legislation. The first would seek to clarify the uncertainties which currently surround the basis on which *restitution* takes place. The second would seek to *validate* some or all of the transactions now ruled to be *ultra vires*, while perhaps incorporating a mechanism to limit the burden on local authorities to a reasonable level.

3.11 While the first of these approaches would restore legal certainty and enable the affair to be brought to a conclusion, it would clearly do nothing to address the disadvantages of restitution referred to in paragraphs 3.7 and 3.8 above.

3.12 The alternative approach would go at least some way to restoring the principle of contracts being honoured and so reduce the damage to London's reputation by requiring participants in the local authority swaps market—both local authorities and banks—to perform the transactions according to their original terms, as many of those involved appear to wish to do.

3.13 The possible costs for local authority charge-payers and the wider implications of any such legislation for the principle of 'ultra vires' and the protection that affords to charge-payers, must also be considered by the Government, and the Bank is participating in continuing discussions with the Treasury, the Department of the Environment and the Audit Commission.

Appendix

1 Introduction

1.1 The activity of borrowing invariably involves incurring an obligation to pay interest on the principal sum borrowed as well as to repay the principal sum itself. While the *timing* of interest and principal payments will be fixed in advance, the *amount* of interest payable need not be and can vary (or 'float') over the life of the borrowing. In such cases, though the 'basis' on which the amount of interest payable is to be calculated will be known in advance, the actual amount itself will not.

1.2 The initial decision whether to borrow at a fixed or floating rate of interest will depend on a variety of factors, including the pattern of an entity's receipts or payments of interest, and of its other income and expenditure, and the degree of risk it wishes to run in leaving any mismatch between the two. However, the choice as to which method it prefers may be constrained either by the relative cost involved in the financing route it wishes to follow or because of the relative inaccessibility of that route (which will be influenced by lenders' general perceptions of the borrower, the borrower's reputation in the particular market in which it wishes to borrow, its previous use of that market, and the skills and sophistication of the market concerned). Equally, the initial decision may need to be changed in the light of new circumstances. Again, the freedom to do this may be constrained by the factors mentioned above.

1.3 Swaps and related off-balance-sheet instruments provide a mechanism by which many of the above constraints—and those relating to more complex financial transactions such as borrowing in foreign currencies—can be overcome.

2 Description of swaps and related instruments

Interest rate swaps

2.1 An interest rate swap is an agreement between two parties by which each agrees to pay the other on a specified date or dates an amount calculated by reference to the interest which would have accrued over a given period on the same notional principal sum assuming different rates of interest are payable in each case. For example, one rate may be fixed at 13% and the other rate may be equivalent to the six-month London Interbank Offered Rate (LIBOR). If the Libor rate over the period of the swap is higher than 13% then the party agreeing to receive 'interest' in accordance with Libor will receive more than the party entitled to receive the 13%. Normally neither party will in fact pay the gross sums which it has agreed to pay over the period of the swap but instead will make a settlement on a 'net payment basis' under which the party owing the greater amount on any day simply pays to the other the difference between the two amounts due.

Currency swaps

2.2 A currency swap is similar to an interest rate swap except that the reference interest rates and notional principal amounts for the two parties to the agreement are denominated in different currencies.

Swap options

2.3 A swap option (or swaption) is an agreement by which one party (the seller) agrees in return for a premium that the other party (the purchaser) shall have the right to require the seller to enter into a swap on agreed terms at a later date. The option may be European or American. The former can only be exercised on a specified future date while the latter can be exercised over a specified period. The agreement may provide for cash settlement under which the purchaser receives if he exercises his option the sum equivalent to the profit he might expect to receive under the swap discounted to reflect its accelerated receipt.

Caps, floors and collars

2.4 A cap is a transaction in which the seller of the cap will make a payment or payments to the buyer if interest rates rise above a rate specified in the agreement (the cap rate). The payment to be made will be calculated by reference to the amount by which the current variable rate exceeds the cap rate applied to a notional principal sum specified in the agreement for an agreed period of time. In return the purchaser pays the seller a premium fee for entering into the cap. The transaction thus enables the purchaser in return for a premium to insure against the consequences of interest rates rising above a predetermined level. An interest rate floor is the reverse of a cap. A collar is an agreement in which both a cap and a floor are sold in the same transaction. In this transaction, if the rate falls below the lowest specified fixed rate of interest or rises above the highest specified fixed rate of interest during the lifetime of the transaction, the seller is obliged to make payments to the buyer. By the transaction the buyer ensures that if the rates of interest move outside an agreed range he will receive payment from the seller.[1]

Forward rate agreements (FRA)

2.5 An FRA is an agreement under which one party undertakes to make to the other party payments calculated by reference to a specified rate on a notional principal sum in respect of a period in the future and the other party agrees to make a payment calculated by reference to a variable rate on the same notional principal over the same future period.

Deep discount swaps

2.6 It is sometimes necessary, in order to match cash flows, for example where a subsequent swap is entered into to

(1) This definition of a collar was used in the Divisional Court judgment. Another definition of a collar, more commonly used in the market, is an agreement containing the sale of a floor and the purchase of a cap, or vice versa. [This explanatory footnote has been added to the original evidence.]

negate the effect of an earlier one, for the interest rate by reference to which the swap payments are calculated to be significantly different from interest rates prevailing in the market at the time. Such swaps are known as deep discount swaps, with an initial payment representing the amount of periodic payments equal to the difference between the market rate and the swap rate, but discounted to take account of the immediate receipt.

3 Characteristics of the international swap market

3.1 While there are isolated examples of swap agreements dating back to the mid-1970s, the foundation of today's market was laid in 1981 with a currency swap transaction between the World Bank and IBM. The instrument then grew rapidly in popularity. A wide range of end-users from the industrialised economies began to participate in the market, including sovereign governments and their agencies, multinational institutions, banks, and non-financial corporations ('corporates'). In addition a large number of banks and investment firms in the major international financial centres became intermediaries in the market, either as principals or as arrangers.

3.2 The growing volume of transactions, the increasing number of end-users, and the increasing willingness of financial intermediaries to act as principals in the course of warehousing or making markets in swaps led to growing liquidity and falling costs of using the instrument. This in turn encouraged more users and further deepening of the market to the point where it now exerts a major influence on the composition and volume of funds in domestic and international credit and capital markets.

3.3 As the swap market has grown it has become highly sophisticated. This in large part reflects the work of trade associations such as the International Swap Dealers' Association (ISDA)—a trade association with members drawn from North America, Europe and Japan and including virtually all the major financial institutions active in the swaps market—and the British Bankers' Association. These associations have sought to address swap practitioners' concerns that the future growth of their market might be impeded by a lack of conventions on documentation, trading and accounting as well as an inadequate understanding of the nature of the credit exposure on swaps. The ISDA Master Agreement and the BBAIRS terms which provide standard contractual frameworks for swaps and related instruments are products of this effort.

3.4 Data compiled from an ISDA survey of most major swap intermediaries throughout the world show that at end-1989 there were some 90,000 interest rate and currency swaps outstanding and the total US dollar value of the outstanding notional principal was approaching $2 trillion. During the second half of 1989 alone some 25,000 currency and interest rate swaps were transacted with a notional principal value of over $500 billion.

3.5 Interest rate swaps accounted for roughly three quarters of the value of all swaps outstanding at end 1989 and had an average notional principal size of $20 million. Transactions in 13 currencies were recorded in the ISDA survey with outstanding sterling interest rate swaps accounting for 6.7% ($100 billion) of the total. Over 60% of all interest rate swaps involved an ISDA member and a non-ISDA member (ie an end-user) counterparty.

3.6 The ISDA survey also identified some 12,000 outstanding transactions in instruments related to interest rate swaps (ie caps, floors, collars and swap options) at end 1989 with a notional principal value of over $500 billion.

3.7 The swaps market has also become closely integrated with other international and domestic capital markets. Market estimates suggest that 75% to 85% of all new issues on the international bond market are linked to swap transactions of one kind or another. Swap intermediaries make extensive use of exchange-traded futures and options in hedging the risks associated with market making in swaps.

3.8 In view of the above it is not surprising that the swaps market has achieved a high degree of recognition among various supervisory and monetary authorities around the world. There are numerous examples of this. A report produced by a group of experts from the G10 Central Banks in 1986 (*Recent Innovations in International Banking*, Bank for International Settlements, April 1986) contained a detailed analysis of the swap instrument and the risks associated with its use. The 1988 Convergence Agreement on Capital Adequacy, agreed by supervisory authorities from the G10 countries, incorporated a framework specifically designed to determine an appropriate capital requirement against the credit risk incurred through swap transactions. The supervisory regime introduced by the Bank of England in 1988 with the implementation of the Financial Services Act included the 'London Code', a guide to accepted best practice in the London wholesale markets which explicitly covered the swaps market. Following lobbying from ISDA and other practitioner bodies, the United States recently passed amendments to its bankruptcy code designed to eliminate concerns over the treatment of multiple swap transactions between two parties in the event of a default by one of those parties.

4 The uses of swaps

4.1 There are three main reasons for the rapid growth in the use of swaps.

(i) Swaps provide a very effective means for borrowers to exploit their *comparative advantage* in particular markets while maintaining their preferred exposure profile to interest rate and currency movements.

4.2 A corporate wishing to borrow at a fixed rate of interest might have no direct access to the fixed-rate capital market or limited access such that it can borrow only on relatively poor terms. It may, however, be able readily to borrow from banks as they retain information and expertise on individual corporates which tends to make them more willing to lend to

corporates than are investors in the public debt markets. However, banks are normally willing to lend only at floating rates. The corporate may nonetheless be able to obtain funds effectively at a fixed rate of interest by first borrowing at a floating rate from a bank and then initiating an interest rate swap which has the effect of converting its floating-rate payments into fixed-rate payments. The counterparty to this swap might be an organisation with ready or privileged access to fixed-rate borrowing but which had a need for floating-rate funds. Such a deal will typically be intermediated by a bank and may well be broked by a broker.

4.3 Another example is provided by an international financial institution which prefers to fund itself in low interest rate currencies, such as Swiss francs. The institution might find that it had issued so much debt in the Swiss franc debt market that the market was becoming saturated and, despite its continued good name, its funding cost was rising. In this situation the institution could issue debt in US dollars, and then transform its interest payments and principal repayment to Swiss francs by means of a Swiss franc/US dollar currency swap.

4.4 On the other side of this transaction one might find a well known US corporate which, while seeking to borrow funds denominated in US dollars, found that the highly favourable perceptions of Swiss investors gave it a comparative advantage in the Swiss franc market. It could take advantage of this by issuing debt in Swiss francs in the first instance and then transforming the resulting obligations into US dollars by being the counterparty to the international institution in the Swiss franc/US dollar currency swap.

(ii) Swaps enable borrowers rapidly and cheaply to manage their *position risk*, that is to alter their overall exposure to particular currencies or interest rates without having to engage in early repayments of outstanding debt or new issues.

4.5 In practice it is very hard for a borrower to put itself in a position where it can be indifferent to interest rate movements. In particular, it cannot necessarily be assumed that a borrower that has taken on fixed-rate debt is less exposed to risk from movements in interest rates than one that has taken on variable-rate debt. Indeed, if the borrower's revenues are variable and in some way linked to the nominal rate of interest, for example as a result of inflation or because its revenues are mostly derived from floating-rate assets, then incurring floating-rate obligations may better protect it against loss than incurring fixed-rate obligations.

4.6 Any borrower that is affected by interest rate movements would be wise to consider the future course of interest rates and the steps it should take to protect itself in the light of its view being confirmed. Thus, even a borrower which is trying as far as possible to minimise its exposure to interest rate movements might find swaps a useful tool not only to minimise its exposure—particularly in a fast moving environment—but also to position itself for any residual interest rate risk that it may be forced to take on.

4.7 It is of course also possible to position oneself deliberately to take advantage of a prospective beneficial change in interest rates. Swaps and related instruments can enable this to be done. For example, an entity with fixed-rate borrowing funding a capital project on which, as a result of a recession, the margin has been eroded could anticipate a fall in interest rates by swapping into floating-rate debt. If the fall occurs, it could then swap back into fixed-rate borrowing to lock in the lower level of rates and thus protect itself against a subsequent rise. It could also, by the acquisition at the outset of a cap, ensure that if rates unexpectedly rose it would not suffer the full effect. Other such strategies can be and are regularly constructed.

4.8 Finally, those participants, typically financial intermediaries such as banks, which deliberately seek to profit by trading in financial instruments and taking positions on the future movement of interest or exchange rates find swaps a useful vehicle owing to their liquidity and flexibility. A further attraction is that on some occasions a certain type of position (eg a very long position in the currency markets) may only be achievable through the swap market.

(iii) Swaps facilitate *cash flow management*.

4.9 There are many entities which need to restructure expected future cash flows in the normal course of their business and hence may make use of a swap. For example, a corporate with a long-term investment which will not be generating revenue for some years could use a swap to transform its distant revenues into a series of regular current and future payments suitable for servicing the debt that it has used to fund the investment. Other entities with a requirement to restructure future cash inflows and outflows might include pension funds, which have very long-term obligations on specific dates, or life insurance companies.