Ecu securities markets

All figures in this article are in Ecu unless otherwise specified. The Ecu is worth 70p at central parities.

Introduction

This article reviews recent developments in Ecu securities markets and the initiatives taken by the UK authorities to promote them. These markets are continuing to evolve from a small and rather illiquid sector of the Euromarket towards being a large and liquid market containing all the instruments to be found in the most developed national markets. This process is market-led, with financial market participants bringing expertise drawn from national markets around the world to Ecu securities markets in order to meet the rapidly-developing needs of investors worldwide. Market development is also being facilitated by the actions of the authorities in many European financial centres.

London-based participants have been instrumental in creating and developing Ecu markets, drawing on the pool of talent and expertise represented in the American, European and Japanese firms which have based their European financial operations in London, as well as on the strong domestic traditions of financial innovation and professionalism.

Liquidity and turnover in securities markets have grown very fast, in parallel with rapid growth in the deposit and foreign exchange markets. Between early 1984 and end-September 1991 liabilities in Ecu of banks in the BIS reporting area grew from 17 billion to 183 billion, and have more than doubled in the last three years; UK banks' share of the total grew sharply in 1984 and 1985 and has since ranged between 25%–30%. London emerged as the largest Ecu financial centre in 1988, and has maintained that position. There is less evidence on activity in the foreign exchange markets. In April 1989, twenty-one central banks participated in a survey of activity in their local markets covering all the major centres except those in Germany. At that time, average daily Ecu turnover worldwide was estimated at ECU 8 billion, of which half was in London. Although this is a very large absolute number, turnover in Ecu was then only 1% of total turnover in foreign exchange. There is anecdotal evidence that Ecu-associated foreign exchange activity has grown sharply since then. Central banks conducted a further co-ordinated survey of foreign exchange activity in April this year: the results, when available,[1] will provide more detailed information on Ecu activity.

The early stages

The Ecu came into being in July 1978, as successor to the European Unit of Account. (The EUA had been established in 1974 by the European Development Fund as the unit of account for internal operations, and was adopted as such by the EC in December 1977.) Its status was confirmed by the agreement of March 1979 between EC member states' central banks laying down the operating procedures for the European Monetary System. The present day Ecu is defined by Council Regulation (EEC) No. 1971/89 of 19 June 1989, and remains a basket of all EC currencies (as the EUA was), with the weight of each currency in the basket reflecting the relative economic size of each country. The currency amounts in the basket were revised in 1979, 1984 and 1989, to compensate in part for changes in relative weights resulting from exchange rate changes, as well as to take account of the accession of new members to the EC. The Maastricht Treaty of 1991 would, on ratification, provide that: 'The currency composition of the Ecu basket shall not be changed. From the start of the third stage, the value of the Ecu shall be irrevocably fixed. . .'

Most Ecu securities are issued under documentation which defines the Ecu in which they are denominated as being the same as the composition of the Ecu that is from time to time used in the EMS. This 'private sector' Ecu, which is also the unit used in the banking and foreign exchange markets, can on occasion have an observed market value (in, say, dollars) which is somewhat different from the calculated value of the official Ecu, reflecting supply and demand conditions in private markets: there is no automatic link between the official and private Ecus. Such differences have, however, typically been only a few tenths of one per cent in size.

The Ecu securities market had its origins in EUA-denominated issues of the classic Eurobond type; fixed-coupon bonds in bearer form were sold, through an international syndicate of underwriters, to international investors in order to raise finance for corporate borrowers. The EUA-denominated market was, however, rather inactive, like the markets for instruments denominated in SDRs and in currency baskets designed by the private sector.

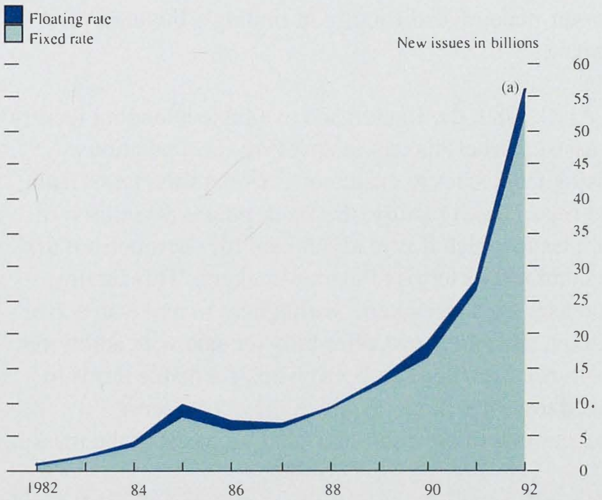
The first Ecu-denominated issue, of only 35 million, was made by an Italian telecommunications company, SOFTE in April 1981. The market developed quite rapidly, with the support of European Community institutions. These used the Ecu in their internal accounting and increasingly in their operations, and rapidly became regular issuers in Ecu. By

(1) It is intended that the results should be analysed in a special article in the November *Bulletin*.

the end of 1984, 7 billion[1] of securities had been issued, almost all fixed-rate bonds. Most of the issues were small (averaging less than 50 million), and were aimed at retail investors. There was less secondary trading than in the Eurodollar bond market because the issues were smaller and institutional investors were less active.

The market saw an upsurge in 1985–88 with annual issuance averaging 8 billion (see Chart 1). This seems to have reflected the growing attraction of the Ecu: institutional investors came to value Ecu bonds as a means of buying exposure to Europe and European currencies in general, rather than having to select one or more particular national markets. As institutional involvement rose, the liquidity of Ecu bonds increased and became more nearly comparable with that of longer-established Euromarkets. As part of this process, the first real 'benchmark' issue came to the market in June 1988, when the European Coal and Steel Community issued a 500 million six-year bond.

Chart 1
Annual Ecu bond issuance



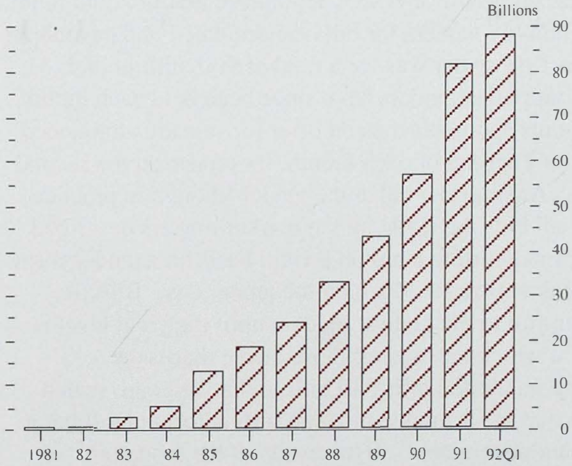
(a) Data plotted for 1992 are annualised first quarter data.

The process of development was briefly interrupted by the Ecu reweighting which took place in September 1989. Even though the reweighting process was much as the market had expected, investors seem to have been disturbed by the reminder that currency weights within the Ecu were not immutably fixed; as evidence of this, yields on Ecu bonds rose above the level available on an appropriately weighted basket of similar national currency bonds (the 'synthetic Ecu yield'), having previously been somewhat below this level. Issuance fell back to about 500 million in September and October after averaging almost 1 billion monthly in the first ten months of 1989.

The hiatus came to an end at the end of 1989, as the process of European monetary convergence led to increased interest among investors in the higher-yielding national markets, and thus also in Ecu bonds as a simple and low-cost means of participating in the performance of these markets without having to be concerned with individual countries' tax and settlement arrangements. (Issuance rebounded to 2.2 billion in the last two months of 1989, and reached 18.4 billion in 1990.) During this period a number of central banks, including the Bank of England, started to use the Ecu markets for their own reserves management operations. Issuance grew steadily, to reach 27.5 billion in 1991, and a further 14 billion was issued in the first quarter of 1992 (see Chart 1). Average issue size was 200 million in 1990 and 260 million in 1991: and at the time of writing there were 17 issues of ECU 1 billion or more. These large issues have been made principally by European sovereign borrowers, largely in the interests of market development. Reflecting their size and credit standing, liquidity in large issues has grown to the point at which it bears comparison with the most liquid domestic European markets. Monthly turnover in Ecu securities in the international clearing systems Euroclear and Cedel (where most of the activity takes place) is in excess of 150 billion, which is comparable with some domestic markets.

Amounts outstanding in the international Ecu markets have doubled since 1989 (see Chart 2). At 90 billion, the international Ecu bond market is around one third of the total size of the sterling and Canadian dollar markets, and about two thirds the size of the markets denominated in the currencies of Denmark, the Netherlands, Switzerland and Sweden.

Chart 2
Ecu bond market—volume outstanding (a)



(a) Fixed-rate euro plus domestic: excludes Italian and Greek domestic issuance amounting to 30 billion and 4 billion respectively at 31 March 1992.

At the same time, corporate issues of small sub-5 year conventional Ecu Eurobonds have continued. Most of these issuers have entered into a swap to convert their liability into another, non-Ecu form. This reflects the still low utilisation of Ecu in trade and commerce, and the swap opportunities afforded by regular issuance of domestic Italian Ecu debt (typically at 5 years but sometimes shorter) which is attractive to those intermediaries which can recover the withholding tax. (There is about 20 billion of such debt outstanding in taxable form.) There has also been steady

(1) All figures are for international issues, with French domestic issuance added.

issuance of medium-sized bonds (250 million–750 million) by European institutions and by some sovereign borrowers, some of it unswapped. The result is a healthy variation of credits and issue sizes along much of the yield curve.

Growth in the international bond market has been the most visible part of the change in the Ecu securities markets. But, in the same period, there have been significant changes in Ecu *money-market instruments*, and in associated markets for *swaps and futures*. The UK authorities have helped to facilitate these changes, and have played a leading role as issuers of debt. London has been at the forefront of the growth in these cash and derivatives markets. The rest of the article describes how this has come about.

Money markets

UK Ecu bills

The United Kingdom's first Ecu borrowing initiative was the launch of the UK Ecu Treasury bill programme in October 1988. At the time of launch there was very little activity in short-term securities although deposit markets were quite well-developed. The programme's objectives were to increase the flexibility of reserve management and to stimulate the development of a liquid market in money-market securities (in order to complement the rapid growth in volumes and liquidity of the Ecu bond and deposit markets noted above).

The Bank, on behalf of HMG, announced that it would hold regular monthly tenders for bills denominated and payable in Ecu. The first tender was for a total of 900 million of 1, 3 and 6-month bills; tenders have since been held each month. The amounts and maturities on offer for sale are announced on the first Tuesday of each month, for tender on the second Tuesday. Anyone can bid at the tender (though in practice virtually all bids are made by the market-makers described below) by submitting a bid on a yield basis on a tender form to the Bank before 10.30 am on the tender day. Bills are allotted in full to the highest bidders until the yield level is reached at which bids would more than exhaust the remaining unallotted bills; all bids at that level are scaled down so that the available bills are fully allocated (all but a small rounding element). The results of the tender are published as soon as they are available (typically at around 1pm) on wire services and in a Press Notice.

Between March 1989 and September 1990, the amount of bills outstanding increased from 2.4 billion to 3.6 billion, and has remained at that level. This total comprises 1 billion of 1-month bills, 700 million each of 2 and 3-month bills, and 400 million each of 4, 5 and 6-month bills. Each tender is currently for 400 million of 6-month bills, and 300 million each of 3 and 1-month bills.

Like sterling Treasury bills, Ecu bills are discount instruments redeemed at par. They are conventionally traded on a yield basis, using the Euromarkets convention based on a 360 day year rather than the UK domestic convention of actual days in the year. Bills can be bought in physical form, but are—like most Ecu instruments — predominantly held and traded in book-entry form in the international clearing systems, with the Bank of England holding a global bill as common depository for these systems.

The Bank has been concerned to ensure a highly liquid market in these bills. Several features of the programme contribute to this objective:

- 1 and 3-month bills sold at tender are fully fungible with 6-month bills sold at earlier tenders, thus progressively building up the size of each issue of bills.

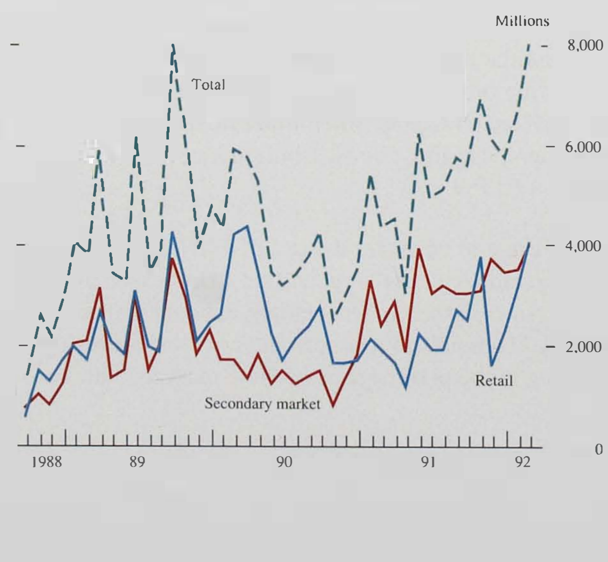
- A group of market-makers (listed in the appendix) has agreed to support the programme. There are currently 29 market-makers, who have committed themselves to participating in the tenders and to making a continuous market in each bill throughout its life.

- The Bank is willing to make a bid for bills if a market-maker has difficulty in finding a buyer in the market.

- In April 1989, the Bank made available a lending facility to assist market-makers in covering short positions arising from sales to customers. Under this 'repo' (sale and repurchase) facility, the Bank retains 50 million of each issue which it is ready to lend for short periods and on commercial terms to market-makers. This facility increases market-makers' willingness to make an active market, since they can offer bills for sale with additional assurance that they can borrow on acceptable terms to cover any short position which they consider it uneconomic to cover by outright purchases in the market.

UK Ecu bills have became established as an extremely liquid instrument product; and monthly turnover runs at between 4 and 8 billion (see Chart 3). Most market-makers will make prices with a 5 basis points spread (in yield terms) between bid and offer, in amounts of 5–10 million in trading with

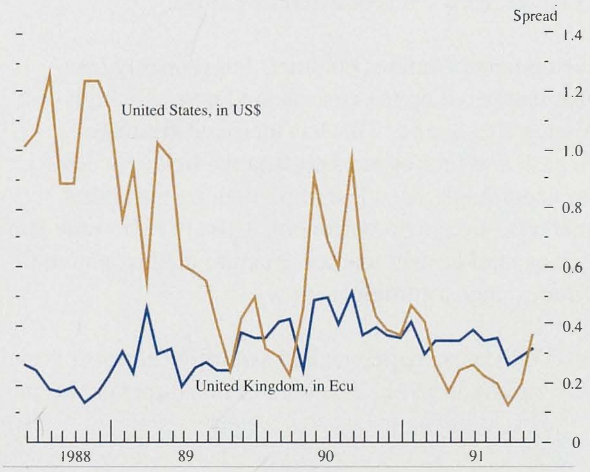
Chart 3
UK Government Ecu Treasury bill turnover



each other (often through the medium of broker screens). Tighter pricing on larger size is often available to large institutional clients.

In recognition of the liquidity of the market in bills and the credit of the UK Government, bills trade at a yield which is below interbank bid yields for deposits (Libid) at comparable maturities. Chart 4 plots the spread at 3 months at each monthly tender, with the corresponding spread between US dollar Libid and US Treasury bills. The spread

Chart 4
Treasury bill/interbank spread



of Ecu bill yields below Libid widened in the first year of the programme as buyers came to trust and value the liquidity available, and has since settled at about 30 basis points. It is now wider than the corresponding spread for US Treasury bills, which are recognised to be the most liquid money-market instrument denominated in US dollars. This demonstrates the high liquidity value placed on UK Ecu bills in world money markets.

The Bank's repo facility has contributed to the success of the programme. Use of the facility has grown steadily, in parallel with a growth in repo activity among dealers, and between dealers and investors: Bank repo turnover in the last year was around 1 billion.(1) The cost of borrowing bills in the repo market generally equates to the borrower of the bill 'lending' Ecu cash (with which he pays for the bill he borrows, and which he gets back when he sells the bill back to the original seller) at a margin of around 100 basis points below Libid. This is more expensive than in the most liquid markets, but not prohibitively so. The Bank aims to lend on somewhat more expensive terms, so as to avoid hindering the development of the private sector repo market.

Related money-market instruments

The Ecu Treasury bill programme has succeeded in creating an active market which provides liquidity services to Ecu markets generally and which has helped to stimulate the interest and involvement of London market participants. It has also helped to promote the development of complementary instruments, even though there is still no other regular issuance by tender in international markets. (The Italian government has issued Ecu-denominated 12-month bills in its *domestic* market since October 1987. There are currently 4 billion outstanding, but issuance is somewhat irregular, and there is relatively little secondary market activity.)

In response to the international demand for short-dated Ecu securities created by the UK programme, several sovereign and supranational issuers now issue Ecu euronotes and eurocommercial paper (adding to the supply from corporate and financial sector issuers). By their nature, these instruments trade less actively than the UK bills, and at higher yields; they provide investors with an instrument intermediate between highly liquid bills and illiquid Ecu time deposits. There is currently about 8 billion of such paper outstanding, and many borrowing programmes allow issuers to issue in Ecu as well as in (the previously standard) US dollars. Ecu Certificates of Deposit have also grown in importance, again stimulated by investors' demand for an instrument with some liquidity but with a higher return than Ecu bills. The amount outstanding in this market is not known, but is estimated by one market source at roughly 7 billion.

The United Kingdom's Ecu bill programme also stimulated the launch of a 3-month interest rate contract on the London financial futures exchange (LIFFE). The contract, based on a notional deposit of ECU 1 million, was relaunched in October 1990 with a number of designated market-makers, after a period of light activity. Daily volumes are running at a level (with contracts at four maturity dates now listed) of about 1,100 contracts. The contract provides a useful hedging vehicle for traders of money-market instruments, deposits and also deposit derivatives—the use of which has grown steadily—such as the FRA.

The recent development of the bond market

While the United Kingdom's bill programme was stimulating the development of liquidity and depth at the shorter end of the Ecu market, there was a parallel growth in the maturity of Ecu bond markets. Among the most influential issuers in this process was the French government, which issued 1.7 billion of a 5-year bond in three tranches in 1989, and followed this with 2.1 billion of a 10-year bond issued in four tranches in 1990: these issues set new standards of both absolute size and liquidity. With Ecu securities becoming increasingly important to institutional investors, in December 1990 the Bank of England, after a process of consultation, allowed gilt-edged market-makers (GEMMs, which commit themselves to make a market in United Kingdom government gilt-edged debt, and who have a dealing relationship with the Bank) to enter Ecu markets. This was in recognition of GEMMs' close trading relationships with domestic institutional investors in the United Kingdom, who have shown increasing interest in Ecu instruments.

(1) This figure is arrived at by counting only one leg of the repo transaction—ie a loan of 1 million, after repayment, is counted as 1 million.

The liquidity of the London Ecu markets has also been enhanced by the increase in the number of Ecu bond market-makers operating in London. The number of market-makers who have obtained a listing from the International Securities Markets Association (formerly the AIBD) has increased rapidly; there were 44 at end-March, of which over 30 traded from London. There are also a number of firms which make markets in some instruments (for example, in UK Ecu bills) without complying with all of ISMA's requirements for listing. This is evidence of, and helpful in developing, the interest in Ecu of investors worldwide, who typically look to London as the principal source of international investment services.

The UK Ecu bond

To develop the market further, the United Kingdom issued a 10-year Ecu fixed-coupon bond in February 1991. This was, at the time, the largest fixed-coupon bond in any currency sold in the international market, with a total size of 2.75 billion. (Even now, it is one of only three issues which are larger than 2 billion.) Despite being priced on finer terms than any existing issue of comparable maturity, the bond met instant and widespread demand, and quickly became established as the most actively traded and lowest-yielding bond in its sector, thus providing a benchmark. Monthly turnover of the bond in the international clearing systems has averaged 10 billion (15% of all Ecu turnover); and even in February 1992, a year after issue, the UK Ecu bond was among the three most actively-traded international bonds. To put this in context, total Ecu turnover in *all* instruments in Euroclear and Cedel in February 1992 was equal to 160 billion, not far behind the turnover of dollar securities (200 billion), and just ahead of DM securities turnover.

The UK bond's liquidity has been increased by the commitment of the underwriting group to making a continuous market in it throughout its life. The group contains 25 of the leading Ecu houses, mostly based in London but including several which trade Ecu securities from continental bases.

Liquidity has been bolstered by the provision of a bond-lending facility by the Bank. This facility is similar to the bill-lending facility noted above and has the same purposes. In this instance, the Bank retained 250 million of the issue for lending. Lending under the bond facility had reached 3.3 billion by end-February1992, almost all for periods of 3–5 days and at a repo rate of 100–150 basis points below Libid. This innovation has recently been adopted by the Kingdom of Denmark in its 10-year Ecu bond issue.

Futures

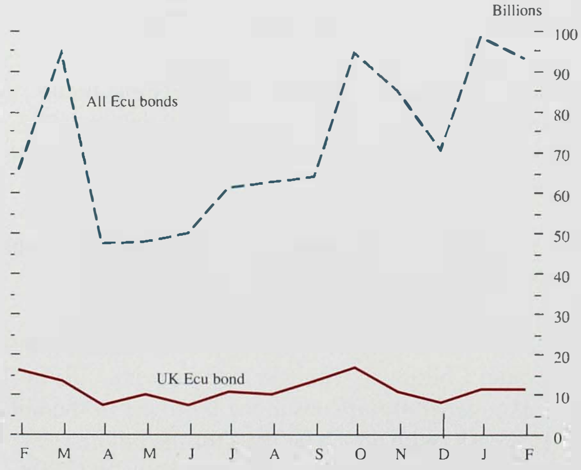
Bond futures contracts were developed in the MATIF in Paris and on LIFFE in London in 1991, to complement the cash market in Ecu bonds. Both contracts allow the delivery of bonds from large top quality issues, with a residual maturity of 6–10 years. At this stage in market development, however, there seems to be only modest demand for a futures contract for market positioning purposes. Several of the 10-year cash bonds are frequently traded in blocks of 10–50 million, on a price spread of only 0.07–0.10 ECU; and neither futures contract provides access to liquidity in such size with such assurance as to price.

Perhaps reflecting the close historical correlation between Ecu yields and the yields on French franc government bonds in the 8–10 year maturity range (and thus drawing on liquidity derived from the very active MATIF contract in French franc government bonds), turnover in the MATIF contract has recently exceeded that on LIFFE.

The development of futures contracts has probably been somewhat hampered by the variable and normally high cost of borrowing Ecu bonds. This has inhibited arbitrage between cash and futures markets, and the link between them has accordingly been less close than in most other major markets. Ecu bond borrowing is likely to become less expensive as markets and market structure mature, and the use of futures may accordingly grow.

As Chart 5 indicates, aggregate Ecu securities turnover grew extremely rapidly in 1991. The bulk of this turnover was at

Chart 5
Turnover in Euroclear/Cedel (a)



(a) Fixed-rate bonds only.

the longer end of the bond market, among the 'jumbo' issues of 1 billion or more, and with an initial maturity of 10 years or more. (In addition to the French government issues at 10 and 30 years, there is an actively traded Italian 20-year Ecu bond of 2.5 billion.) The total also includes an important contribution from UK Ecu bills and other short-term instruments, with bill turnover, as noted above, running at between 4 and 8 billion per month.

Intermediate maturities, however, particularly those below 5 years have been rather illiquid. This mainly reflects the lack of very large benchmark issues in the area. Issues of 1 billion or more, which were considered 'benchmarks' when they were issued, have already come to seem somewhat small, and have been tightly held by investors who are relatively insensitive to switching opportunities. (Substantial turnover of these issues is recorded in the international clearing systems, but much of it reflects repo activity.) New issues in the sub-5 year area have predominantly been relatively small corporate issues, made to take advantage of favourable swap opportunities. These issues do not typically trade actively because they are small, and because they are generally aimed at retail, 'buy and hold' investors. This illiquidity at short maturities is common enough in Euromarkets, but it is not a feature of the domestic government bond markets of major economies.

Developing the intermediate sector—UK Treasury notes

To help stimulate the development of liquidity at maturities below 5 years, the UK authorities decided in 1991 to launch a programme of Ecu Treasury notes, building on the Ecu bill programme. The first issue under the programme was the sale by tender of 1 billion of a 3-year note with a fixed annual coupon on 21 January 1992. (The tender process is the same as that for bills described above; as for bills, bids are on a yield basis.) The first issue was well received, with 5 billion of bids for the 1 billion of notes on offer. Successful bids ranged from 8.45% to 8.48%, with only 30% allotted at the 'stop rate' of 8.48%. There was a total of 2 billion of unsatisfied bids in the range 8.48% to 8.5%.

The structure of the programme is very similar to that of the Ecu bill programme. There is a group of 30 market-makers (also listed in the appendix) of which 24 are also bill market-makers. The market-makers accept the same obligation to support tenders and to make a market in each note throughout its life. In return, market-makers have access to note-lending facilities operated by the Bank (using an additional supply of notes issued to the authorities for that purpose), and can look to the Bank for a bid when they encounter difficulty in finding a buyer elsewhere in the market.

Initial turnover has been substantial, particularly given the absence of other actively traded instruments at similar maturities. Volumes ran at about 6.8 billion monthly in the first month after issuance, and 2.4 billion in the second month, with more than an additional 1 billion of repo turnover in each month.

Future tender dates for 1992 were also announced in January. They are on the third Tuesday of the first month of each calendar quarter: 21 April, 21 July and 20 October. The UK authorities' present intention is to issue further tranches of the existing 3-year note at these tenders, so as to build up a substantial short-dated bond which has sustained liquidity throughout its life.

A further 500 million of the same issue was sold by tender on 21 April. Total bids were 2 billion, and notes were allotted at yields in the range 8.84% to 8.87%.

The relative performance of the note has been hard to assess because of the paucity of pre-existing standards of value. (In the case of bills, interbank rates provide a partial comparison; and for the 10-year UK bond, other large sovereign issues can be used.) Synthetic Ecu yields—ie the composite of 3-year yields in the component currencies of the Ecu—are one possible standard of reference: relative to these, the UK notes have traded at substantially lower yields, but with the margin narrowing by 20 basis points in the first 10 days after the first tender. For a period after that, UK notes found a more stable level at about 75 basis points below the synthetic Ecu yield. As noted earlier, Ecu securities generally yield less than synthetic Ecu yields, partly because of the convenience they offer compared with buying, and managing the cash flows of, a basket of EMS currency-denominated securities.

The size of the yield margin suggests that there is an excess of demand from institutions who are unable (or find it uneconomic) to synthesise Ecu bonds from bonds denominated in the component currencies of Ecu. This may well lead to increasing supply which will contribute to the development of a complete set of liquid and efficient Ecu instruments, though it is impossible to predict how long this will take.

Other Ecu instruments

As well as a relatively extensive range of fixed-rate bonds, the Ecu market has a number of floating-rate notes, including sovereign issues by Italy, Belgium and (in March) by the Bank of Greece. These have coupons which are periodically reset to give a margin below or above interbank rates at the time of reset, and thus form another link between bonds and money-market instruments. Volumes outstanding were 5.7 billion at 31 March.

There has also been some growth in the volume of Ecu medium-term notes, issued under multi-option facilities and typically in small non-fungible tranches. Outstandings are estimated at about 2 billion. Most new MTN programmes are being structured to include the option to issue in Ecu.

There has so far been little activity in Ecu-denominated convertible or warrant issues, in contrast to other euromarket sectors. There has, however, been a considerable volume of interest rate swap activity, facilitated—as noted earlier—by arbitrage made possible by the tax status of Italian government domestic Ecu issues. According to estimates from the International Swap Dealers' Association, the volume of new swaps rose from 3 billion in 1987 to 19 billion in 1990.

The repo market

Another link between bond and money markets is provided by the repo market, which provides a means for the borrowing of securities, for the financing of dealers' inventories, and for the employment of surplus funds. An efficiently functioning market for borrowing and lending securities is important to dealers because it allows them to bid for, and to offer, securities aggressively, thus promoting deep and liquid markets: on the bid side, a dealer knows that if he is successful in buying securities, he can use those securities as collateral for the loan to fund their purchase, rather than having to borrow more expensive unsecured funds; and on the offer side he can, if he succeeds in selling, borrow securities for onward delivery even if he does not wish to (or cannot immediately on acceptable terms) buy securities outright. In the Ecu market, as in other euromarkets, securities borrowing and lending takes place by means of repos.

London has seen rapid growth in repo activity in the last few years, with a number of securities dealers and banks setting up specialised desks whose primary purpose is to borrow and lend securities, not only to fund their own operations and to cover short positions, but also to make markets in repos. This development—helped by interdealer repo broking facilities—has enhanced London dealers' ability to make deep and competitive markets in a wide range of European debt securities.

Efficient markets for securities lending also benefit large-scale investors by allowing them to lend their holdings, either directly or using an intermediary, to improve their returns. Furthermore, repo activity promotes settlement efficiency, thereby reducing counterparty risk in securities markets; and the demand for secured funds by securities dealers extends the range of money-market instruments available to investors.

The repo market is also likely to be of use in improving the functioning of the Ecu cash clearing mechanism. The present mechanism is operated by the Ecu Banking Association (EBA) with settlement facilities provided by the Bank for International Settlements. The EBA has discussed with EC central banks ways in which the current system, which falls short of the G-10 standards for cross-border payments systems, could be improved. In particular, settlement of the clearing relies principally on the willing extension of unsecured overnight loans from one bank to another, in potentially very large size. (There is an automatic recycling facility under which member banks commit to share in any residual lending need; but this is somewhat limited in size, and has not so far been used.) As a step towards improving the safety and robustness of the system, it would be desirable for such loans to be capable of being collateralised.

To this end, the Bank has offered the Ecu clearing banks two facilities. Under the first, the Bank will supplement the existing automatic recycling facility, interposing itself between borrowing and lending bank, borrowing unsecured from the latter and on-lending on a secured basis to the former. Collateral from the borrowing bank will be taken in the form of either certain categories of sterling money-market securities transferred in the bank's same-day clearing system (CMO), or HMG Ecu-denominated instruments held in Euroclear or Cedel. Collateral will be returned when the overnight loan is repaid. Under the second facility, banks may place with the Bank Ecu deposits which can subsequently be pledged to another bank as security for a loan in the clearing. (The Banque de France has initiated a similar scheme to the second.)

A present deterrent to the use of Ecu-denominated collateral —as proposed in the Bank's first facility—is that, in the major international securities clearance mechanisms, same-day movement of securities is either not permitted (Euroclear) or only possible in the early morning (Cedel); thus banks would have to hold collateral in readiness in advance of its possible use, at an additional cost.

Ecu securities settlement in London

The Bank is in any case actively considering whether the provision of Ecu securities settlement facilities in London would be of general benefit to the Ecu money and bond market. A service would be developed along the lines of the highly successful services the Bank operates for gilts and for sterling money-markets in the CGO and CMO. An Ecu service could provide same-day settlement (as in sterling and US dollar markets) so as to improve settlement efficiency and reduce systemic risks and would be likely to foster the development of Ecu markets, thus bolstering London's leading role. It would also provide a medium for the mobilisation of Ecu collateral in connection with the Ecu cash clearing.

The Bank believes that such a system would be particularly attractive to major dealers and to institutional investors, since it would also enable these participants to capitalise further on the benefits of reduced risk and improved income through their use of the repo markets. The system would allow banks to offer a combination of settlement service and bond-lending services to Ecu investors, both increasing these investors' income and adding to liquidity in cash markets by increasing the pool of lendable securities.

The obverse of this is the increased opportunity available to investors of Ecu cash to buy and then sell back Ecu securities ('reverse repo') so as to lend Ecu cash short term with the added security of collateral. This is likely to help stimulate the development of Ecu money markets generally.

Work is proceeding in consultation with market participants, and with the major international clearing systems to which 'bridges' would be built to enable the efficient transfer of securities between systems. There is every sign that the cash and repo markets are developing at a pace which would make such a system a valued part of the Ecu market infrastructure.

The progress of the Ecu market has been extremely rapid, particularly in the last two or three years, as European Monetary Union has been more actively discussed. This progress has owed much to the market's confidence in the process of European convergence, and has been facilitated by the authorities' actions (in the United Kingdom and elsewhere) in developing the necessary infrastructure. The Bank will continue to work with the grain of the market in initiatives which promote market efficiency in satisfying the needs of investors and borrowers, and thus improve the working of the market and ultimately of the economic system in general.

Appendix

UK Government Ecu Treasury bills: market-makers

Bank of Tokyo Capital Markets Limited
20/24 Moorgate
London EC2R 6DH
Tel: 071 638 1291

BNP plc
8-13 King William Street
London EC4P 4HS
Tel: 071 895 7496

Barclays Bank plc
Global Treasury Services
Murray House
1 Royal Mint Court
London EC3N 4HH
Tel: 071 283 0909

Chase Investment Bank Limited
PO Box 16
Woolgate House
Coleman Street
London EC2P 2HD
Tel: 071 726 8201

Citicorp Investment Bank Ltd
Cottons Centre
P O Box 199
Hays Lane
London SE1 2QT
Tel: 071 403 0077

Clive Discount Company Ltd
9 Devonshire Square
London EC2M 4HP
Tel: 071 220 7048

Credit Suisse First Boston Ltd
2A Great Titchfield Street
London W1P 7AA
Tel: 071 322 4706

Daiwa Europe Limited
5 King William Street
London EC4N 7AX
Tel: 071 548 8670

Deutsche Bank AG London Branch
6 Bishopsgate
London EC2P 2AT
Tel: 071 626 7511

First National Bank of Chicago
First Chicago House
90 Long Acre
London WC2E 9RB
Tel: 071 836 3434

Gerrard and National Limited
33 Lombard Street
London EC3V 9BQ
Tel: 071 626 2964

Goldman Sachs International Limited
Peterborough Court
133 Fleet Street
London EC4A 2BB
Tel: 071 774 2631

Istituto Bancario San Paolo di Torino SpA
9 St Paul's Churchyard
London EC4M 8AB
Tel: 071 236 3133

Lehman Brothers International Limited
One Broadgate
London EC2M 7HA
Tel: 071 382 9077

Lloyds Bank plc
Treasury Division
25 Monument Street
London EC3R 8BQ
Tel: 071 623 9881

Midland Montagu
10 Lower Thames Street
London EC3R 6AE
Tel: 071 626 4831

J P Morgan Securities Ltd
60 Victoria Embankment
London EC4Y OJP
Tel: 071 779 3180

Morgan Stanley International
25 Cabot Square
Canary Wharf
London E14 4QA
Tel: 071 513 7425

National Westminster Bank plc
Group Treasury & Capital Markets
3rd Floor
135 Bishopsgate
London EC2M 3UR
Tel: 071 588 5260

Nikko Europe Plc
55 Victoria Street
London SW1H OEU
Tel: 071 222 7738

Nomura International plc
Nomura House
1 St Martin's-le-Grand
London EC1A 4NP
Tel: 071 936 2825

Paribas Limited
33 Wigmore Street
London W1H OBN
Tel: 071 355 2100

The Royal Bank of Scotland plc
Treasury and Capital Markets Division
1 Alie Street
London E1 8DY
Tel: 071 283 6272

Société Générale Merchant Bank plc
Exchange House
Primrose Street
Broadgate
London EC2A 2DD
Tel: 071 417 7092

Standard Chartered Bank
22 Billiter Street
London EC3A 2BE
Tel: 071 488 0223

Swiss Bank Corporation
Swiss Bank House
1 High Timber Street
London EC4V 3SB
Tel: 071 329 0203

UBS Phillips & Drew Limited
100 Liverpool Street
London EC2M 2RH
Tel: 071 901 2258

S G Warburg Securities
1 Finsbury Avenue
London EC2M 2PA
Tel: 071 382 4790

Yamaichi International (Europe) Limited
Finsbury Court
111-117 Finsbury Pavement
London EC2A 1EQ
Tel: 071 588 7566

UK Government Ecu Treasury notes: market-makers

Bank of Tokyo Capital Markets Limited
20/24 Moorgate
London EC2R 6DH
Tel: 071 638 1291

BNP Capital Markets Limited
8-13 King William Street
London EC4N 7DN
Tel: 071 548 9420

Barclays de Zoete Wedd Gilts Ltd
Ebbgate House
2 Swan Lane
London EC4R 3TS
Tel: 071 956 3646

Baring Brothers & Co Limited
8 Bishopsgate
London EC2N 4AE
Tel: 071 220 7665

Chase Investment Bank Ltd
Woolgate House
Coleman Street
London EC2P 2HD
Tel: 071 726 5878

Citicorp Investment Bank Limited
Cottons Centre
Hays Lane
London SE1 2QT
Tel: 071 403 0011

Credit Suisse First Boston Ltd
2A Great Titchfield Street
London W1P 7AA
Tel: 071 322 3661

Daiwa Europe Limited
5 King William Street
London EC4N 7AX
Tel: 071 548 8609

Deutsche Bank Capital Markets Limited
150 Leadenhall Street
London EC3V 4RJ
Tel: 071 971 7000

First National Bank of Chicago
First Chicago House
90 Long Acre
London WC2E 9RB
Tel: 071 836 3480

Goldman Sachs International Limited
Peterborough Court
133 Fleet Street
London EC4A 2BB
Tel: 071 774 1000

IBJ International Ltd
Bucklersbury House
3 Queen Victoria Street
London EC4N 8HR
Tel: 071 489 8668

Istituto Bancario San Paolo di Torino SpA
9 St Paul's Churchyard
London EC4M 8AB
Tel: 071 489 0254

Kleinwort Benson Gilts Ltd
20 Fenchurch Street
London EC3P 3DB
Tel: 071 929 2828

Lehman Brothers International Limited
One Broadgate
London EC2M 7HA
Tel: 071 601 0011

Merrill Lynch International Limited
Ropemaker Place
25 Ropemaker Street
London EC2Y 9LY
Tel: 071 867 3997

J P Morgan Securities Ltd
60 Victoria Embankment
London EC4Y OJP
Tel: 071 779 3152

Morgan Stanley International
25 Cabot Square
Canary Wharf
London E14 4QA
Tel: 071 513 7870

NatWest Capital Markets Ltd
135 Bishopsgate
London EC2M 3UR
Tel: 071 334 1000

Nikko Europe Plc
55 Victoria Street
London
SW1H 0EU
Tel: 071 799 2222

Nomura International plc
1 St Martin's-le-Grand
London EC1A 4NP
Tel: 071 454 0530

Paribas Limited
33 Wigmore Steet
London W1H 0BN
Tel: 071 355 2000

The Royal Bank of Scotland plc
1 Alie Street
London E1 8DY
Tel: 071 283 6272

Salomon Brothers International Limited
Victoria Plaza
111 Buckingham Palace Road
London SW1W 0SB
Tel: 071 721 3307

Samuel Montagu and Co Limited
10 Lower Thames Street
London EC3R 6AE
Tel: 071 260 9793

Société Générale Strauss Turnbull Securities Limited
Exchange House
Primrose Street
Broadgate
London EC2A 2DD
Tel: 071 920 9242

Swiss Bank Corporation
Swiss Bank House
1 High Timber Street
London EC4V 3SB
Tel: 071 329 0329

UBS Phillips & Drew Securities Limited
100 Liverpool Street
London EC2M 2RH
Tel: 071 901 4206

S G Warburg Securities
1 Finsbury Avenue
London EC2M 2PA
Tel: 071 382 4790

Yamaichi International (Europe) Ltd
Finsbury Court
111-117 Finsbury Pavement
London EC2A 1EQ
Tel: 071 638 5599