Recent developments in the corporate and bulldog sectors of the sterling bond market

During the past five years, there has been a sustained revival of issues of fixed-rate sterling bonds by both British and overseas companies and overseas governments and their agencies. By contrast, British companies had raised only minimal amounts in the sterling bond market in the second half of the 1970s, and overseas borrowers had been virtually absent from this market for more than thirty-five years since exchange controls were first imposed in the United Kingdom. This article. looks at why these categories of borrower should have returned to the sterling bond market in the early 1980s, and highlights developments in this market since then, in particular the increased use of eurobond issuing techniques and the associated growth of the sterling swaps market.

Issues of corporate and bulldog bonds in the 1980s

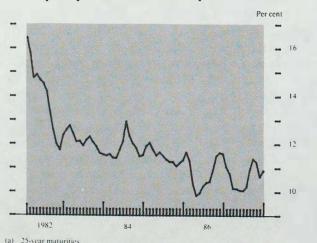
The only substantial borrowers in the sterling fixed-rate bond market during the second half of the 1970s were the British government and UK local authorities. Most British corporate borrowers had, by contrast, deserted this market, and overseas borrowers continued to find it impracticable to raise sterling bonds because of the application of exchange controls.(2) The period since 1980 has, however, seen both a sustained revival of issues of fixed-rate sterling bonds by British companies and a reopening of the long-closed bulldog sector of the market, which comprises sterling bond issues by overseas borrowers. Two factors underlay these developments: a more conducive economic climate than in the 1970s and the abolition of UK exchange controls in 1979. Lower inflation and a reduction in public borrowing in the early 1980s helped cause falls in long-term interest rates and it is this, above all, which has lain behind the recent revival

of issues of fixed-rate sterling bonds. Redemption yields on 25-year corporate debentures, for example, fell from more than 16% to less than 12% during 1982 and have fluctuated mainly in the range 10%-12% since then (Chart 1). Sterling long-term interest rates remain historically high in real terms, but a considerable number of companies have proved willing to borrow for periods of between five and thirty years at these rates.

The abolition of UK exchange controls in 1979 is largely responsible for the overseas interest in the sterling bond market in recent years. This did not have an immediate effect since long-term sterling rates were unfavourable in the second half of 1979, but it became practicable for the first time for more than forty years for overseas borrowers to become active in the sterling capital markets. Accordingly, when market conditions turned favourable, there was considerable overseas activity in the sterling bond market, which reflected confidence in sterling as a currency and, more generally, in the British economy.

The amount raised by way of new issues of fixed-rate sterling bonds by British companies and overseas

Chart 1 Redemption yield on fixed-rate corporate bonds(a)



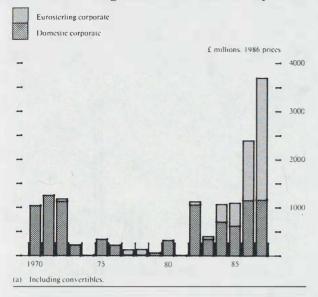
Sterling bond issues(a)(b)

Gross new issues, £ millions

	Domestic sector			Eurosterling fixed-rate			Total	Euro-
	British	Overseas (bulldog issues)	Total	British	Overseas	Total	fixed- rate	sterling FRNs
1980	219	75	294	52	295	347	641	70
1981	7	440	447	_	249	249	696	_
1982	880	725	1,605	85	375	460	2,065	
1983	300	595	895	145	688	833	1,728	505
1984	640	1,040	1,680	345	1,265	1,610	3,290	1.548
1985	597	710	1.307	522	1,450	1.972	3.279	2.275
1986	1,150	275	1,425	1.787	1,540	3.326	4.751	3,700
1987	1,209	_	1,209	3,619	4,338	7,957	9,166	1,307
Total (1980-87)	5,002	3,860	8,862	6,555	10,200	16,754	25,616	9,405

- (a) Other than by the UK public sector.
- (b) Including convertibles
- Written by Mark Pratt of the Bank's Gilt-Edged Division and Hugh Simpson of the Bank's International Division. The authors would like to thank the banks and securities houses which helped in the preparation of this article.
 See 'The UK corporate bond market' in the March 1981 Bulletin, pages 54-8.

Chart 2
Fixed-rate sterling bond issues(a) at constant prices



borrowers increased from £641 million in 1980 to £4.75 billion in 1986 and to £9.1 billion in 1987 (Table A). In real terms, the level of issues by British companies has been higher than in the early 1970s when the corporate bond market was last active (Chart 2). Issues of sterling bonds, however, remain a comparatively limited source of finance; companies have, for example, raised more by way of issues of equity and foreign currency eurobonds in recent years, and the range of companies issuing sterling bonds has been quite narrow. Furthermore, issuing activity in the sterling bond market has been irregular, with issues tending to come in concentrated bursts when bond prices were rallying and sterling was strengthening in the foreign exchange markets.

In recent years, overseas activity has had an effect on the sterling capital markets generally, but, in the case of bonds, its impact has been mainly felt in the sterling

Table B
Current differences between domestic bonds and sterling eurobonds

8	Domestic sector	Eurobonds		
Type of instrument	Usually registered	Usually bearer but some issues have an option to be registered		
Security/covenants	Often secured and/or with detailed restrictive covenants	Usually unsecured, but with a negative pledge (see text)		
Tax	Coupons paid net of UK income tax	Coupons paid gross		
Interest payments	Semi-annual	Annual		
Listing	Invariably London	Usually London or Luxembourg		
Method of placing	Placed with investors at a fixed price or. a particular day	Placed over a period at varying prices		
Secondary trading	Through the London Stock Exchange, starting the day after issue	Immediate over-the-counter trading organised by issuing banks with settlement by means of book entry transfer using one of the standard euromarket clearing systems		
Issuing houses	Mainly stockbrokers and British merchant banks	British and overseas banks		
Investors	Mainly domestic	Both domestic and overseas		

eurobond sector of the market. In broad terms, the parts of the sterling bond market catering for corporate and overseas borrowers may be regarded as comprising two overlapping sectors, which are referred to in this article as the domestic and sterling eurobond sectors. These terms are somewhat misleading, as issues in both market sectors are launched in London; and the distinction is rather artificial since the sectors largely embrace the same borrowers and financial intermediaries. The two sectors of the market have, moreover, become increasingly alike since the early 1980s but, as is shown in Table B, there continue to be important differences, for example relating to practices for bringing new issues to the market and for secondary trading. It is, consequently, useful to maintain a distinction between domestic issues and sterling eurobonds for expository purposes.

'Domestic' bond issues

Table A shows the amounts raised by overseas borrowers and British companies in the domestic and sterling eurobond sectors of the sterling bond market. The bulldog part of the domestic sector was reopened by an issue for the Kingdom of Denmark in July 1980, which was followed by a fairly regular flow of issues by governments, government-owned bodies and overseas companies in the ensuing five years. Issues covered a wide range of maturities, including twenty years and more, were traded on the London Stock Exchange and were pitched mainly at UK institutional investors as higher-yielding alternatives to gilt-edged securities. However, bulldog issues peaked at just over £1 billion in 1984 and have declined steeply since then; indeed there has not been a bulldog issue in the domestic market since mid-1986, with overseas borrowers preferring the sterling eurobond sector. The domestic corporate bond market, which had been especially active in the late 1960s and early 1970s, did not experience a revival of issuing activity until 1982, when there was a flurry of issues, especially in the final four months of the year, prompted by a fall in long-term sterling interest rates from 14% to 12%. But the value of new issues has fluctuated since then with no sustained upward trend.

Sterling eurobonds

The sterling eurobond sector may be regarded as a part both of the sterling bond market and of the international bond market, which embraces issues in several other national currencies. This latter market—commonly known as the eurobond market—emerged in the mid-1960s in parallel with the international market in bank deposits and credits and has undergone considerable expansion since then, with the mid-1970s and the past five years being periods of especially rapid growth. Although London was the main centre of activity for the issuing of international bonds, there was practically no activity in sterling in the 1970s. The first sterling eurobond was a £10 million issue for Amoco International Finance in 1972, but subsequent issues in the 1970s were few and far between, inhibited by the same unfavourable economic conditions that choked off corporate issues in the domestic market. In 1980, however, there were an

unprecedented ten issues of non-convertible fixed-rate bonds, but this was a short-lived revival as there was only a single equivalent issue in 1981. Issuing activity, however, expanded significantly in 1982, and there has been a growth in the number of issues, in the amounts raised and in the range of issuers in each year since then, unlike in the domestic sector of the market where the total amount raised peaked in 1984. Moreover, issues of sterling eurobonds exceeded issues in the domestic sector of the market for the first time in 1985 and have been larger in each year since then, with the gap between the two sectors widening considerably; in 1987, for example, issues of sterling eurobonds, including convertibles, were almost seven times as large as issues in the domestic sector of the market.

The sterling eurobond sector of the market was largely the preserve of overseas borrowers and investors in the early 1980s. A number of British companies had made pioneering issues of sterling eurobonds in 1977-78 when there was a short-lived upturn in issuing activity, but only Finance for Industry (now Investors in Industry) made follow-up issues-in 1979 (two), 1980 and 1982. The next British companies to tap this source of finance were British Oxygen and ICI in March 1983, but there were no further issues by British companies until April 1984. There has, however, been a sharp increase in the number and value of sterling eurobond issues by British borrowers since then; such issues accounted for 21% of the total amount raised in 1984, 26% in 1985 and 53% in 1986, but fell back to 45% in 1987 (Table C). In 1986, for the first time, British borrowers raised more by way of issues of sterling eurobonds than by way of issues of domestic bonds (Chart 3).

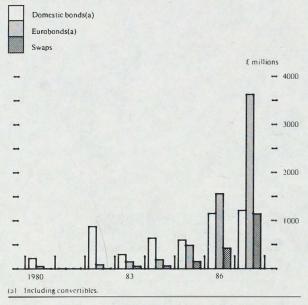
Table C
Amounts raised by sterling eurobond issues by UK
borrowers

£ millions

	1980	1981	1982	1983	1984	1985	1986	1987
Banks	12	_	_	75			60	450
Building societies	_	_	_	_	_	_	460	630
Other	40	_	85	70	345	522	1,267	2,644
Total Of which, equity-	52	=	85	145	345	522	1,787	3,619
related UK borrowing	-	-	-	-	155	35	228	1.911
as percentage of all issues	15	_	18	17	21	26	54	45

In the main, the trend towards sterling eurobond issues has reflected a growing awareness of the advantages of tapping this sector of the market. (These advantages are explained below.) The growth of sterling eurobond issues by British companies has also been assisted by various legislative changes. The 1984 Finance Act allowed British companies to make coupon payments on eurobonds without deducting witholding tax. The fact that coupons were paid gross made eurobonds attractive, especially to continental investors, and, prior to 1984, British companies had had to issue eurobonds through overseas financing subsidiaries in order to be able to pay coupons gross. A change in the 1985 Finance Act extended these arrangements to building societies, which immediately

Chart 3
Sterling fixed-rate finance for UK borrowers



became major issuers of floating-rate and fixed-rate instruments (Table C). Also in recent years, an increasing number of British institutional investors have begun to acquire sterling eurobonds and have taken the steps necessary to participate in this sector of the market, by, for example, establishing the necessary facilities for handling bearer bonds. At the same time, a number of issues have incorporated features such as a registration option, a London listing or restrictive covenants to increase their appeal to British investors. Similarly, the market has since 1986 embraced long-dated issues with maturities of fifteen years or more, which matched the investment horizons of British life insurance companies and pension funds. This was an important extension of the scope of the sterling eurobond sector, as long-dated issues had until 1986 been confined to the domestic sector of the market, while most eurobonds had maturities of between five and ten years.

New issues of sterling eurobonds have also been boosted in recent years by the possibilities of arranging swaps. Foreign banks, in particular, have taken advantage of these opportunities to issue fixed-rate sterling eurobonds and swap the proceeds at attractive rates into floating-rate sterling (which, in most cases, was used to finance their operations in the United Kingdom). On the other side of these swaps, a range of companies with operations in the United Kingdom obtained fixed-rate sterling on terms that were attractive to them.

Issues of sterling eurobonds were especially buoyant in the first half of 1987, against a background of relatively low and falling interest rates and a strongly rising equity market. The latter factor explains, in particular, the preponderance of equity-related issues, which mainly took the form of convertibles (Table C). These issues, which carried relatively low conversion premiums and early convertibility, were sold principally as a substitute for equity to investors in continental Europe. They had the

Table D Eurosterling bond issues by British non-financial companies

Number of issues				
	1984	1985	1986	1987
Ranking of issuing company in Times 1000				
Straight bonds				
1-10	1	3	1	1
11-50	1	1	1	1
51-100	1	2	4	_
101-200	_	2	3	3
201-1000	_	_	2	-
Equity-related bonds				
1-10	1	_	_	_
11-50	_	_	1	5
51-100	2	1	1	9
101-200		_	1	5
201-1000		_	2	4

attraction of being a means for companies to establish an international shareholder base, and they also enabled some less well known companies to gain access to the eurobond market, with the hope of being able to return later to issue straight eurobonds (Table D). But, in addition, because they were not covered by pre-emption requirements, convertible issues were, in many cases, the only practicable means of issuing equity at short notice to exploit the then favourable market conditions.

Sterling interest rates edged up in the third quarter and the level of issues in the second half of the year, especially of straight debt, was much lower than in the first. Subsequently, the sharp fall in equity prices in October reduced the attractiveness of convertible issues.

Why sterling eurobonds?

The previous section showed that issues of sterling eurobonds have outstripped issues launched in the domestic sector of the market in recent years. This section addresses the question of why this should have happened. There are three strands in the answer, relating to lower borrowing and issuing costs, greater flexibility in the methods of issuing and distributing new issues and the wider investor appeal of eurobonds.

Borrowing and issuing costs

The sterling eurobond sector has been and remains more internationally oriented than the domestic sector of the sterling bond market. In large part, this reflects the fact that overseas investors were familiar with the issuing and trading practices of the sterling eurobond market as these are much the same as those of the international bond market generally. By contrast, some overseas investors found trading on the London Stock Exchange inconvenient and were not familiar with some of its practices, such as the use of renounceable allotment letters. In addition, as is explained below, eurobonds embodied characteristics which had an especial appeal to many international investors. For these reasons, the strong overseas demand for top-rated sterling issues in recent years has been largely confined to eurobonds. This made it possible for prime borrowers, both British and non-British, to raise fixed-rate sterling at a lower cost in the eurosterling market than in the domestic market. Indeed, yields on short-dated sterling eurobonds have on

occasions fallen below those on gilt-edged securities of the same maturity, and this has provided a strong incentive for sterling bonds to be issued in the eurobond market rather than in the domestic market.

Any differences in the cost of launching an issue will influence an issuer's decision about which issuing route to use. It is, however, quite difficult to compare the cost of making an issue in the London domestic market with that of an equivalent issue in the sterling eurobond market. This is because the different distribution practices in the two markets influence the pricing of an issue. In the case of issues launched into the domestic market, matters are comparatively straightforward. Bonds are offered to investors at a price which is judged to give them a competitive yield and a borrower must meet the management and underwriting commissions and the other expenses of arranging an issue out of the proceeds of the issue. The management and underwriting commissions, which are the main costs of making an issue, depend on whether an issue takes the form of a placing or an offer for sale and on its maturity but, in every case, they are a fixed percentage of the amount raised. These commissions are lowest on a domestic placing at about \(\frac{3}{4}\% - \frac{7}{8}\% \) and were about $1\frac{1}{8}\% - 1\frac{3}{8}\%$ on an offer for sale.

The commissions on eurobonds are, at first sight, higher than commissions in the domestic market, being determined by market practice at 13% to 25%, depending largely on the maturity of an issue. The intense competition between issuing houses in the eurobond markets in recent years has ensured, however, that the effective launch costs borne by issuers have usually been much lower than the standard commissions, and they have probably compared favourably with the cost of launching equivalent domestic issues. However, over time, it would be surprising if the overall cost of making an issue in the sterling eurobond market remained significantly different from that of making an issue in the domestic market: competitive pressures would ensure equalisation, especially as, following 'Big Bang' and the merging of most large stockbrokers with wider financial groups, it is increasingly the same organisations which arrange issues no matter whether they take the form of a sterling eurobond or an issue in the domestic London market. Indeed, there was some shake-out of issuing house capacity in the eurobond market in 1987, and the events in the equity market in October appear to have encouraged a more uncompromising attitude towards remuneration on the part of issuing houses.

Issuing and distribution arrangements

A further attraction of sterling eurobonds to potential borrowers has been that it has been possible, because of differences in customary issuing procedures, for issues to be launched at shorter notice than in the domestic market. This has been especially important in recent years as interest rates have been volatile and some borrowers have wanted to take advantage of favourable market conditions

and, more particularly, of swap opportunities, which exist for only short periods, often hours.

The issuing arrangements for international bond issues were originally based on those in the New York markets, but have evolved considerably over the years in response to competitive pressures and changing market conditions. Virtually all international bond issues, other than equity-related issues, are nowadays launched on a pre-priced basis, and lead managers, with an eye to their reputations among prospective borrowers, have been loath to pull an issue after it has been announced, even if market conditions were to turn against the issue. Instead, in these circumstances, the banks leading an issue will sell the bonds at a loss or will take any unsold bonds onto their books in the hope that market conditions will subsequently improve. These developments have been to the advantage of issuers since they were assured of a certain borrowing cost at the outset. On the other hand, because the banks lead-managing an issue are initially exposed to the full underwriting risk, the arrangements for assembling a syndicate of banks to share the underwriting and distribution of an issue have been speeded up. Similarly, to save time, it has been customary for the documentation associated with an issue in the international bond markets to be finalised after it has been launched, in contrast to the practice in the domestic market.

The usual method of distributing an issue in the domestic London markets is for it to be placed with a selected group of investors. (Some issues, notably bulldog issues by overseas governments, used to be launched by way of an offer for sale, but this type of issuing procedure has fallen out of favour for issues other than gilt-edged.) With a placing, it is usual for an issue to be offered to investors on the morning of the day it is launched with the yield set at a margin over that on a nominated gilt-edged stock; the price of the gilt-edged stock is certified at 3 pm that day, and the placing price of the bonds fixed accordingly. Despite the flexibility of these issuing arrangements, they have tended to involve more pre-launch preparation than the procedures for eurobond issues and, as a consequence, have been less suited to the relatively unpredictable market conditions of recent years.

Non-price considerations

The norm in the eurobond market is for issues to be unsecured, whereas, in the domestic London market, it is usual for corporate issues either to be secured on assets belonging to the issuer (ie they are debentures) or to contain detailed restrictive covenants to protect the interests of bondholders (for example, imposing a lower limit on interest cover). Many potential issuers of sterling bonds have, however, been reluctant to concede security or detailed covenants, and, in some cases, this helped push them into making a sterling eurobond issue. In addition, overseas investors preferred sterling eurobonds to bonds launched in the domestic corporate bond or bulldog sectors because they placed a high value on the anonymity of a bearer instrument and on the ability to

receive interest without any deduction of tax (although some bulldog issues by sovereign and supranational borrowers launched on the domestic market also offered these features). On the other hand, overseas investors were not very concerned by the absence of security as they tended to purchase only bonds by top-rated companies that consequently carried a small credit risk and their interests were usually protected by a negative pledge (which prevented an issuer from securing future borrowing without giving existing bondholders equivalent security).

A sterling eurobond issue was consequently preferred to an issue in the domestic market by both potential issuers and overseas investors. Domestic institutional investors, on the other hand, had the opposite preference, since they attached considerable importance to asset backing and detailed covenants. They have, however, gradually relaxed their reluctance to invest in sterling eurobonds as the number of issues by first-rank issuers has increased and conversely as the supply of high-quality issues in the domestic market has declined. In part, this was because the presence of negative pledges in most sterling eurobond issues has made it difficult for issuers subsequently to raise a secured issue in the domestic sector of the market.

To summarise: the sterling eurobond sector has owed its development largely to a combination of strong overseas demand for top-rated sterling instruments and to the relative flexibility of issuing techniques in this sector, which have been more suited to the rather volatile market conditions of recent years than those used in the domestic sector of the sterling bond market. The banks which operate in the sterling eurobond sector have also been particularly innovative, for example, in tailoring issues to suit the needs of particular issuers and investors. In the early 1980s, the sterling eurobond sector suffered from poor liquidity, but, as the market has grown to be larger in terms of outstanding issues than the domestic corporate and bulldog sectors combined, so this drawback has diminished in importance.

The sterling swaps market

Swaps have had a large influence on the level of issues of sterling eurobonds in recent years. As indicated by Table E, an increasing amount of the funds raised, invariably by way of short-dated issues, has been associated with a swap transaction. Most—perhaps 70%–90%—of the swaps involved the exchange of fixed for floating-rate interest, and relatively few a currency swap.

Opportunities for interest rate swaps associated with fixed-rate issues arise primarily at times when sterling is expected to be strong on the foreign exchanges and overseas demand for sterling eurobond issues rises. At such times, yields on sterling eurobonds may be lower than those on gilt-edged securities and it is essentially this which has enabled some issuers of fixed-rate sterling

Table E Swap-related fixed-rate sterling eurobond issues

+	mı	llion

	1985	1986	1987
Type of issuer			
Non-UK banks	100	325 425	825 125
Other non-UK issuers	50	325 425	825
Building societies	_	460	340
Other UK issuers			110
	150	885	1,585

Source: Published details of issues.

bonds to swap their obligations to pay fixed-rate coupons for an obligation to meet floating-rate interest charges to the benefit all the parties concerned. Foreign issuers—typically European banks—are well placed to take advantage of these market conditions as their names are familiar to continental investors. However, they have no need for fixed-rate sterling finance, so the proceeds are swapped to provide floating-rate sterling, which can be used to fund their banking activities in the United Kingdom. Building societies have also become more prominent as issuers of fixed-rate sterling bonds since early 1986, when they were empowered to obtain floating-rate funds via a swap transaction. The onset of difficulties in the FRN market in late 1986 further encouraged swap-driven fixed-rate issues by building societies (Table E).

The other side of these swaps—that is the firms with a demand for fixed-rate sterling finance—are often small to medium-sized UK companies that are unable to raise the finance they require through the bond markets, usually because the amounts required are too small to form a viable bond issue and their names are not sufficiently well known in the market. Finance companies are also particularly heavy takers of swapped fixed-rate funds at up to five years maturity to match consumer loans and leases that have been written. A sterling bond issue of £50-100 million may ultimately be broken up and distributed among a number of counterparties in lots as small as £5-10 million. The access of UK companies to fixed-rate finance as a result of the expansion of the sterling bond markets has thus been greater than the figures for bond issues alone would suggest, since these figures exclude fixed-rate finance raised through interest rate swaps. On the extreme assumption that, in all cases, UK borrowers were the counterparties when non-UK issuers swapped the proceeds of eurobond issues, they gained access to up to £425 million of fixed-rate finance by this route in 1986 and £1,135 million in 1987. While these are undoubtedly overestimates, they do imply that interest rate swaps launched off bond issues have become an increasingly important source of fixed-rate sterling since 1985 (Chart 3).

Sterling finance has also been obtained by swapping the proceeds of a bond issue in another currency, but the opportunity for doing this has been relatively limited. This is because currency swaps normally require there to be wide disparities in how a particular borrower is rated in

different markets, but the sterling market is well integrated with other markets, particularly the dollar market. Another reason perceived by the market for the relatively low level of currency swaps involving sterling is the nature and complexity of the tax treatment of currency gains/losses in the United Kingdom, which means that companies have to plan carefully before arranging a swap and so might not be able to take advantage of opportunities which may exist for only a short interval. At the beginning of 1987, however, building societies were given permission to raise foreign currency loans, as long as the proceeds were immediately swapped for floating-rate sterling, and this gave an important boost to the fledgling currency swap market involving sterling.

Summary

The re-emergence of fixed-rate sterling bond issues by corporate and overseas borrowers in the past five years has, in the main, reflected an improvement in economic conditions, although the level of issues has been subject to wide fluctuations because of the underlying volatility of sterling interest rates. In real terms, the level of sterling bond issues in recent years has exceeded that of the late 1960s and early 1970s.

The sterling bond market has a more diverse structure than in the 1960s, when issues mainly took the form of long-dated debentures issued by British companies which were sold to domestic investors. The abolition of exchange controls in 1979, in particular, laid the ground for a reawakening of overseas interest in sterling bonds on the part of both issuers and investors. While the revival of issuing activity since 1980 has been shared between the domestic and eurosterling sectors of the sterling bond market, an increasing number of issues in recent years have taken the form of sterling eurobonds.

From an issuer's point of view, the eurosterling market has offered a number of advantages compared with the longer-established domestic market. It has been possible to bring issues at short notice, so that short-lived favourable market conditions and swap opportunities could be exploited. But, in addition, the eurosterling market has proved to be a source of borrowing at comparatively low rates because of strong overseas demand for sterling bond issues by top-rated issuers and competition among issuing banks which has kept launch costs to a minimum.

The boundaries of the sterling eurobond market have been extended in a number of directions since the early 1980s. No longer is it the preserve of overseas issuers and investors, since roughly half the issues of fixed-rate sterling eurobonds in 1986 and 1987 were by British companies. British institutional investors have also overcome their reluctance to invest in bonds that were typically unsecured and bearer; this change of attitude was, in large part, a response to the increasing volume and quality of issues made in the eurobond market and the

falling number of comparable domestic issues. The increased British presence in the sterling eurobond market has helped blur many of the former distinctions between it and the previously larger domestic market.

As the sterling eurobond market has grown, it has embraced larger issues, a fuller range of maturities and

issuers and a wider range of instruments, including floating-rate notes, call and put options, convertibles and warrants. In addition, the growth of the eurosterling sector has been linked to the development of the sterling swap markets, which has in effect given a range of medium and smaller companies access to fixed-rate sterling in amounts that would be too small to make a viable bond issue.