The UK corporate bond market

This article, the third in a series of explanatory articles designed for the general reader, considers why there have been so few issues of corporate bonds in the last seven years, discusses the implications for monetary policy, and assesses the prospects for a revival in the bond market.

Uncertain prospects for inflation and interest rates have made companies reluctant to raise long-term fixed-interest funds at prevailing interest rates. Meanwhile, alternative sources of medium-term and long-term finance have developed, particularly through the banking system. Nevertheless, there is a latent demand for long-term loan finance on appropriate terms, and any revival in the corporate bond market can be expected to have beneficial effects on the operation of monetary policy.[1]

Background

In the 1960s the bond market was an important source of finance for industrial and commercial companies, but since the early 1970s the corporate market has been inactive (Table A); indeed, in five of the last eight years, the value of loan stocks which were redeemed exceeded the value of those issued. Nevertheless, the Wilson Committee, reporting in 1980, referred to evidence that there is "... considerable unsatisfied demand for long-term loan finance on acceptable terms arising out of companies' desire for semi-permanent funds at known cost and with known repayment dates".[2]

Table A
Industrial and commercial companies: borrowing requirement and its financing
£ billions
Percentage of total in italics(a)

	Gross borrowing requirement	*of which*, financed by:							
		Listed capital issues in the United Kingdom				Bank borrowing		Other	
		Loan capital		Share capital					
1963	1.2	0.2	*17*	0.1	*11*	0.5	*46*	0.3	*25*
1964	1.5	0.2	*17*	0.2	*11*	0.8	*51*	0.3	*21*
1965	1.3	0.4	*28*	—	*4*	0.5	*39*	0.4	*29*
1966	1.1	0.4	*39*	0.1	*13*	0.2	*17*	0.3	*30*
1967	1.0	0.4	*35*	0.1	*6*	0.3	*33*	0.3	*27*
1968	1.4	0.2	*14*	0.3	*21*	0.6	*42*	0.3	*23*
1969	1.5	0.3	*22*	0.2	*12*	0.7	*44*	0.3	*22*
1970	2.1	0.1	*7*	0.1	*2*	1.1	*53*	0.8	*38*
1971	1.9	0.2	*11*	0.2	*9*	0.7	*39*	0.8	*41*
1972	4.1	0.2	*6*	0.3	*8*	3.0	*74*	0.5	*13*
1973	6.2	—	—	0.1	*2*	4.5	*72*	1.6	*25*
1974	6.3	−0.1	—	0.1	*1*	4.4	*70*	1.9	*30*
1975	2.9	—	*1*	1.0	*34*	0.5	*17*	1.4	*48*
1976	4.4	—	—	0.8	*18*	2.4	*55*	1.2	*27*
1977	4.7	−0.1	—	0.7	*15*	3.0	*63*	1.1	*24*
1978	5.1	−0.1	—	0.8(b)	*16*	2.9	*57*	1.5	*29*
1979	6.2	−0.1	—	1.0(b)	*15*	4.9	*79*	0.5	*8*
1980	..	—	—	0.9	..	6.6	..	..	..

.. not available.
(a) Percentages have been calculated on unrounded figures.
(b) Includes take up of shares in BL Ltd by the National Enterprise Board (1978 £0.4 billion, 1979 £0.1 billion).

Debt and equity

Of the many factors which influence the way in which companies raise finance, pre-tax cost is probably the most important.[3] Over a period, borrowed funds tend to be cheaper than equity, partly because investors seek a higher long-term return on risk capital, and partly because the interest can be wholly offset against corporation tax, whereas only an effective partial offset is available for dividends on shares. Indeed, the introduction of corporation tax in 1965 reduced the cost of servicing debt relative to equity, and led to an expansion of issues of loan capital in 1965–67. This advantage was, however, partly removed when the imputation system of corporation tax was introduced in 1973.

In some cases, reluctance to accept the dilution of control implied by equity issues will be a factor favouring debt issues. But companies will wish to avoid becoming over-reliant on borrowed funds. The interest on borrowed money is a commitment of company income, whereas if profits are low or non-existent the company can reduce—or even omit—the dividend on equity or preference capital. Dependence on borrowing may be particularly inappropriate in the financing of long-term capital projects, where an obligation to make payments of interest and capital may cause cash-flow difficulties in the early years, when the stream of income from the project may be low.

Bank borrowing and loan capital

The respective advantages of loan capital and bank borrowing depend on the merits of fixed-rate borrowing compared with floating-rate, and, to a lesser extent, on the merits of long-term rather than short-term borrowing.

Issues of loan capital allow companies to borrow for terms of ten years or more, usually at fixed rates of interest. Loan stocks may be secured or unsecured, and the degree of security offered to investors can influence borrowing costs. Debentures, for example, are secured by a floating charge

(1) In the preparation of this article, the Bank consulted a number of industrial companies, and their experience and views are incorporated in the sections on the market since 1973 and on the prospects for a revival.
(2) *Report of the Committee to Review the Functioning of Financial Institutions.* Cmnd. 7937, HM Stationery Office: 1980, paragraph 808.
(3) See 'Financing British industry' in the September 1980 *Bulletin*, page 319, for a more detailed description of companies' financing needs and the ways in which these needs are met.

on the assets of the issuing companies or, in the case of mortgage debentures, by a charge on specified property. But most loan stocks issued in recent years have been unsecured. These include convertible stocks, which give holders the right to exchange the stock for new ordinary shares at stated prices on specified future dates. Debentures and unsecured loan stocks may be listed on the Stock Exchange, or may be unlisted. Listed stocks, being marketable, are more attractive to investors. Unlisted stocks have tended to be for small amounts and have usually been placed with financial institutions.

Debentures and unsecured loan stocks provide companies with long-term finance at a known cost. Most bank borrowing, on the other hand, is at floating rates and much of it is in principle recallable at short notice, although in recent years the banks have also provided a substantial amount of medium-term finance.[1] Companies tend to regard even their short-term bank borrowing as a reasonably secure source of finance, as banks have in practice generally been willing to roll over short-term lending to creditworthy companies.

Companies will borrow for long periods at fixed rates when they are confident that current interest rates are in line with—or lower than—their expectations of future rates. Loan stocks are therefore unlikely to be attractive when prospects for inflation and interest rates are so uncertain that a future fall in interest rates beyond that implied by current long-term rates is a serious possibility. In such circumstances, companies will probably prefer to borrow at floating rates until conditions for issuing loan stocks are more favourable, even if the immediate cost of doing this is higher.

To illustrate these arguments, consider a 20-year investment project which is financed by borrowed funds and which is expected to yield a real pre-tax return on capital of 5% a year—that is, a nominal return five percentage points higher than the rate of inflation. In order to determine whether this project is worthwhile, the return must be set against the real financing costs. But these costs are not known for certain at the outset; they will depend on inflation and interest rates over the life of the investment, and may be different for fixed-rate and variable-rate borrowing. If nominal interest rates are expected to move broadly in line with inflation, the real cost of floating-rate finance will not be greatly affected by movements in inflation; in contrast, changes in the rate of inflation will have a direct impact on the real cost of fixed-rate borrowing.

In this example, suppose that, when the investment project is appraised, inflation is running at 15% a year and that a company would have to pay 17% for floating-rate borrowing, and 14% for a 20-year debenture. Suppose also that the nominal cost of floating-rate borrowing is expected to remain two percentage points higher than the prevailing rate of inflation. The real cost of floating-rate borrowing is thus expected to be 2%, irrespective of changes in the rate of inflation. In this event the real return on the project (5%) compares favourably with the borrowing costs (2%). If, on the other hand, the project were financed by fixed-rate borrowing, the margin between the rate of return on the project and the borrowing costs would vary with the rate of inflation.

Table B gives some illustrative calculations. If inflation were to fall to 10% in the fifth year of the project and remain at this rate thereafter, the average annual inflation rate over the life of the project would be 11.2% and the real cost of fixed-rate borrowing 2.8%. The margin between the return on the project and borrowing costs would be 2.2%. But if inflation fell to 10% in the fifth year and then to 5% in the tenth, where it remained, the average inflation rate would be 8.7%: the real cost of fixed-rate borrowing would then be 5.3%, and would thus exceed the real return on the underlying investment.

Table B
Illustrative real borrowing costs
Per cent per annum

	Inflation assumptions(a)		
	Stays at 15%	Falls to 10% in year 5	Falls to 10% in year 5 and 5% in year 10
Real return on project	5	5	5
Real cost of borrowing:			
Fixed-rate	−1	2.8	5.3
Variable-rate	3	3	3

(a) See text for other assumptions.

These examples show that fixed-rate borrowing is especially attractive when there seems to be only a low probability of falls in inflation and in interest rates. The yield curve—depicting the term structure of interest rates—will, however, reflect prevailing expectations of inflation and interest rates. If long rates are lower than short rates, this generally indicates a belief that inflation and interest rates will fall. In deciding whether fixed-rate borrowing is likely to be cheaper than floating-rate, a borrower therefore compares his personal expectations about future inflation and interest rates with those implicit in the yield curve. If there were general agreement about future developments, there might be little to choose between borrowing at fixed and at floating rates. Nevertheless in such conditions fixed-rate borrowing may be preferred, because it gives the borrower the ability to make future plans on the basis of known costs in nominal terms which are perceived also to be reasonably stable in real terms. When views about future inflation and interest rates are especially tentative, fixed-rate borrowing and lending—particularly for long periods—is less attractive. For example, when interest rates are high and their future path uncertain, many companies will be inhibited from borrowing at fixed rates in case interest rates fall by

(1) In 1980 term lending probably represented about 60% of total bank lending to industrial and commercial companies, including lending in foreign currencies: the proportion of term lending in sterling would have been somewhat lower.

significantly more than is implied by the yield curve. Similarly, when interest rates are low and the outlook is especially unclear, borrowing at fixed rates may be inhibited by the reluctance of potential lenders to commit funds for long periods.

The corporate bond market to 1972

In the 1960s, the corporate bond market was an important source of finance for industrial and commercial companies. Between 1964 and 1971, they raised about £2¼ billion by issues of loan capital; this was about one fifth of the external finance they required, and twice as much as was raised by issues of share capital.

The main purchasers of loan stocks in the 1960s were life assurance companies and pension funds (Table C): between 1964 and 1971, their net acquisitions were a little over £2 billion, which compared with net issues by all companies of £2¾ billion. In 1966, insurance companies—principally life assurance companies—owned more than half of listed loan stocks, and pension funds about a quarter. Fixed-rate bonds were particularly suitable for these institutions in matching their long-term liabilities, which in the 1960s were to a large extent denominated in fixed monetary terms. Corporate loan stocks therefore competed mainly with gilt-edged stocks for a place in the institutions' portfolios. In 1966, the institutions' holdings of loan stocks were only about 20% smaller than their holdings of gilt-edged, even though the total value of gilt-edged stocks outstanding in the market was about two and a half times greater than that of corporate loan stocks. Moreover, in the mid-1960s issues of corporate loan stocks were larger than of gilt-edged stocks. In the period 1964–67, net acquisitions of corporate

Table C
Life assurance companies and pension funds: holdings and acquisitions of fixed-interest stocks
£ billions at market prices
Percentage of total acquisitions/holdings in italics

	Debentures and loan stocks		Gilt-edged stocks	
Holdings				
1966(a)	2.2	*14*	2.7	*18*
1972(a)	3.1	*10*	4.5	*14*
1978	2.2	*3*	16.0	*23*
Net acquisitions				
1964–67	1.2	*29*	0.4	*9*
1968–71	0.8	*14*	1.0	*15*
1972–75	0.2	*1*	3.0	*26*
1976–79	−0.5	*2*	13.8	*49*

(a) Bank estimates.

loan stocks accounted for about 30% of the total investments of life assurance companies and pension funds—over twice as much as net acquisitions of gilt-edged stocks. The corporate bond market was thus very healthy in the 1960s, when it was an important source of finance for companies and a major investment medium for, in particular, the life assurance companies and pension funds.

The corporate bond market since 1973

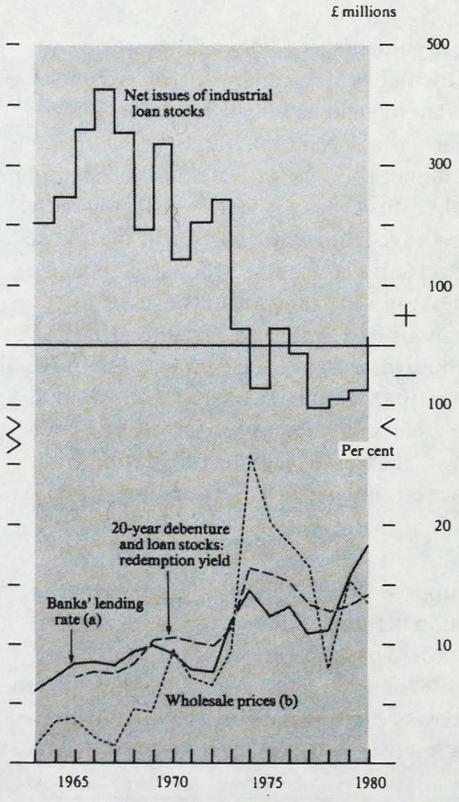
There has since 1973 been a sharp reduction in issues of loan stocks by industrial and commercial companies (Table D), despite a large increase in their borrowing requirement. Indeed, in five of the last eight years redemptions have been larger than new issues, and in the other three years only very small net sums were raised. There were minor revivals in issues of convertible stocks in 1975 and 1980, but these were issued mainly to help finance takeovers.

Table D
Industrial companies: issues and redemptions of listed debentures and other loan stocks
£ millions

	Gross issues	*of which, convertibles*	Gross redemptions	Net issues
1970	204	*88*	62	142
1971	259	*37*	56	203
1972	251	*59*	9	242
1973	54	*22*	25	29
1974	2	—	73	− 71
1975	119	*98*	89	30
1976	90	*7*	102	− 12
1977	9	—	112	−103
1978	9	*2*	100	− 91
1979	35	*29*	111	− 76
1980	219	*213*	206	13

Perhaps the most immediate causes of the cessation of new corporate bond issues in 1973 were the sharp increases in inflation and interest rates. The year-on-year rise in wholesale prices increased from about 5% in mid-1972 to over 9% in late 1973, and to 25% in late 1974. This was accompanied by steep increases in nominal interest rates: the London clearing banks' base rates rose from 5% in June 1972 to 9% in February 1973, and to 13% in November

Issues of loan stocks, and rates of interest and inflation



(a) Base rate (Bank rate before 1972) plus 2%.
(b) Selling prices; percentage change in year to fourth quarter.

1973. Yields on 20-year debentures also rose sharply, from about 9% at the beginning of 1972 to nearly 14% at the end of 1973. These rapid increases, to levels which had not been experienced for more than fifty years, together with an unusually uncertain outlook for inflation, made long-term fixed-rate borrowing appear much less attractive than variable-rate borrowing and issues of equity.

It is the persistence of similar conditions—high long-term interest rates and great uncertainty about their future path—which at root explains why fixed-interest loan stocks have remained an unappealing form of borrowing to corporate borrowers since 1973. They have appeared to combine the disadvantage—often shared with variable-rate bank borrowing—of imposing an immediate drain on cash flow, so increasing income gearing, with the further disadvantage that this pressure would not, as with variable-rate borrowing, abate if interest rates were to fall in the future. Moreover, in a period when the real profits earned by companies have fallen, and their confidence in their ability to earn satisfactory future real profits has weakened, this double risk has not seemed worth taking.

Another reason for the dearth of issues of corporate loan stocks has been the weight of government borrowing in the long-term capital market (Table E)—a reflection not only of growth in the borrowing requirement of the public sector, but also of the increased emphasis on funding in order to curb monetary expansion. The precise impact of government borrowing on the corporate bond market is, however, difficult to assess: it depends not only on the scale of gilt-edged issues, but also on the ability and willingness of the life assurance companies and pension funds to absorb increasing amounts of fixed-interest stocks.

Table E
Net capital issues
£ billions

	1965–68	1969–72	1973–76	1977–80
Company loan stocks	1.6	1.2	0.1	– 0.3
Share capital (ordinary and preference)	0.7	1.3	2.7	3.7
British government stocks	0.5	2.8	12.8	32.9

Gilt-edged stocks have generally offered yields which companies have been unwilling to match at a time of falling profitability and widespread uncertainty about inflation and interest rates. Because gilt-edged stocks satisfied the preferences of the financial institutions for long-term fixed-rate assets, it has proved difficult to establish markets in floating-rate or other types of loan stock which would give corporate borrowers some protection against possible large falls in interest rates.[1] The life assurance companies and pension funds have not, for example, shown much interest in the small number of floating-rate issues, both of gilt-edged and corporate loan stocks, which were made in 1977.[2] Rather, the institutions preferred fixed-interest stocks and invested heavily in gilt-edged: in the late 1970s acquisitions of gilt-edged accounted for about half of their total investments. For their part, companies themselves have shown no great desire to issue floating-rate stocks when medium-term finance, often at floating rates, has been available from banks.

Because conditions in the capital markets did not favour issues of loan stocks—whether fixed or floating rate—industrial and commercial companies increasingly turned to banks for funds. Since 1973, bank borrowing has financed about two thirds of their gross borrowing requirement, compared with less than half in the 1960s (Table A). Although most borrowing has been at floating rates and nominally short term, these have not been thought serious disadvantages. Competition to lend to companies by banks, stemming partly from the greater freedom which accompanied the new system of credit control introduced in 1971 and also from the increasing numbers of overseas banks in London, led to the development of a more flexible approach to lending. The amount of term lending expanded, the periods for which banks were willing to lend lengthened, and repayment schedules were tailored to meet the needs of individual borrowers. In addition, banks were a major force in the development of leasing, which has become an increasingly popular method of financing capital projects.[3] The development of these alternative sources of finance meant that industrial companies have not needed to issue loan stocks in unfavourable conditions.

Prospects for a revival of bond finance

Over the next five years, debentures and unsecured loan stocks amounting to nearly £700 million—about 17% of outstanding issued loan capital—will fall due for redemption. These stocks were mostly issued in the 1960s when the corporate bond market was active and when interest rates were much lower than at present. The companies concerned may wish to replace them by new loan stocks or by equity, rather than reduce their capital employed or increase their borrowing from banks. The considerations in the previous section, however, suggest that a large expansion of issues of fixed-interest loan stocks cannot yet be counted upon. In the view of some companies, it could take a sustained improvement in inflationary expectations and in real rates of return for a substantial revival of the corporate bond market to be stimulated. Nevertheless, it seems that, on the basis of their present expectations, a number of companies would be ready to give serious consideration to issues of fixed-rate long-term debt at rates of below 12%.

But if conditions in the next few years were to become less unfavourable for issues of loan stocks, the market might not

(1) Various loan stocks of this sort have been issued in the euro-bond market. For example, 'call options', which are also standard in the United States, allow the borrower to recall a fixed-rate stock after, say, five or ten years. 'Put options', on the other hand, give the privilege of early redemption to lenders. Floating-rate stocks have been issued in the euro-bond markets, although mainly by banks; the rate is sometimes allowed to vary only above a specified minimum or, less frequently, between specified limits. The Wilson Committee also recommended the issue of index-linked securities, although many companies would be reluctant to raise money by this method in case it proved substantially more expensive than other forms of borrowing.

(2) No variable-rate stocks have subsequently been issued on the UK domestic market.

(3) See 'Equipment leasing' in the September 1980 *Bulletin*, page 304.

fully regain the importance it held in the 1960s. This is mainly because—as noted above—alternative sources of medium-term finance have developed over the last ten years. Medium-term floating-rate bank loans are likely to continue to offer advantages of flexibility and ease of arrangement, and leasing will continue to be attractive to companies with insufficient profits to take full advantage of investment allowances. Foreign currency borrowing can also be seen as an alternative source of finance for UK business. Partly encouraged by the strength of sterling, several large companies have already raised finance in the euro-currency markets, either by obtaining a medium-term loan from a syndicate of banks, or by issuing bonds. In 1980, eight UK industrial companies raised the equivalent of about £180 million in the euro-bond market.

The corporate bond market and monetary growth

The increased reliance by companies on banks for finance since 1972 has probably contributed to a faster growth in the money supply, on the sterling M_3 definition, than would otherwise have been the case. Another consequence of this increased dependence on bank finance was a shortage of liquid assets among banks during much of 1980, when they found it difficult to acquire sufficient reserve assets to hold against their expanding balance sheets.

Any revival of issues of corporate loan stocks would probably moderate the growth in sterling M_3 and almost certainly ease the liquidity position of the banking system. It is difficult to be precise about the monetary effects as much would depend on whether the extra long-term finance added to, or replaced, existing borrowing from the banks. To the extent that it added to existing borrowing, interest rates would initially rise to balance the higher demand for funds with their supply. But, as most attention has been devoted recently to the case where capital issues replaced bank loans, the rest of this section considers the possible effects of such a rearrangement of company financing.

The monetary repercussions of a switch from bank borrowing to bond finance will depend on who purchases the extra bonds and how they finance the purchases. If loan stocks were taken up by insurance companies and pension funds—perhaps the most likely outcome—this would probably lead to less investment by these institutions in other instruments. If, for example, purchases of bonds replaced purchases of gilt-edged stocks, this would—for a given public sector borrowing requirement—require the Government to raise finance in other ways. One option would be to borrow from the banks—in which case the main effect of companies' switching from bank to debenture finance is that they and the Government will have changed positions in the long-term capital markets and in the market for bank loans. There would therefore be no effect on sterling M_3. If, however, the Government raised the extra finance from outside the banking system—perhaps by attracting more inflows to national savings—this would reduce sterling M_3.

Even if the expansion of bond issues had no immediate effect on sterling M_3, there might nevertheless be beneficial changes in the composition of banks' balance sheets. The weight of recent private sector borrowing from banks, coupled with heavy sales of government debt to non-banks, has reduced the proportion of bank assets held in the form of claims on the central government to levels that are low by comparison with those experienced in recent history. Among such assets are the short-term claims, notably Treasury bills, that form a significant part of the liquidity of the banks and also of their obligations under the reserve asset arrangements. During 1980 the shortage of reserve assets was the source of some disturbance in money markets and led to exceptional official operations to counter it, culminating in the reduction of the reserve asset ratio from $12\frac{1}{2}\%$ to 10% early in 1981. A lower demand by companies for bank loans would enable the liquid assets of banks to grow once more in line with their total balance sheets, and would help to avoid the danger of shortages of liquid assets in the money markets forcing banks to bid for deposits and thus inducing upward pressure both on bank interest rates and on sterling M_3.

Summary and conclusions

The Wilson Committee reported that they had identified an unsatisfied demand for long-term, fixed-interest loan finance which could materialise when economic conditions were thought favourable. But until the prospects for inflation and interest rates are seen with greater assurance, fixed-rate borrowing seems likely to remain, for the most part, less attractive to corporate borrowers than variable-rate finance. Whether issues of debentures can eventually regain the importance they had in the 1960s will also in part depend on the appeal of the alternative sources of medium-term finance which have developed over the last ten years.

The relationship between bond issues and sterling M_3 is complex. Larger issues by companies would reduce the growth in sterling M_3 to the extent that companies reduced their dependence on bank borrowing and, at the same time, did not induce other sectors of the economy to increase their borrowing from banks by an equivalent amount. Nevertheless it seems reasonable to assume that a revival of the corporate bond market, if it occurred, would have beneficial effects on the operation of monetary policy. It would reinforce a strategy under which the public sector increased its own direct borrowing from the personal sector and reduced its sales of gilt-edged stocks to the long-term financial institutions. By reducing private sector demands for bank loans it would mitigate the pressures on bank liquidity and so also those on short-term interest rates.