Business finance in the United Kingdom and Germany

This article examines the sources and structure of business finance in the United Kingdom and the Federal Republic of Germany.[1]

Largely through historical and institutional circumstances, the present pattern of company sector liabilities in Germany differs fundamentally from that in the United Kingdom. Such differences reflect the traditional roles of the banks and the securities markets in the two countries, and the manner in which retirement pensions are funded.[2] *Nonetheless, the financial structure and institutional arrangements for corporate finance in the two countries have been converging for a number of years, and the relative importance of certain sources of new funds to companies in each country has in fact been strikingly similar for a decade or so. Capital gearing of German companies, however, remains generally much higher than is typical in the United Kingdom.*

The narrow equity base of companies in both countries may, for various reasons, have been a constraint on their activities in the past. Factors affecting external equity finance are therefore examined, including constraints imposed by legal regulations on the form of business organisation and by discriminatory taxation. The article begins by comparing the financial systems in the two countries.

Different financial systems[3]

The financial systems of the United Kingdom and Germany have evolved in very different ways.[4] Whereas the UK system has traditionally consisted of a variety of institutions specialising in particular financial services, the German system relies largely on 'universal' banks covering the whole range of financial activities. UK banks have, until recent years, tended to be more specialised, taking deposits and lending short term, so that much financial activity has taken place outside the banking system. Thus while in Germany the bulk of funds has been channelled through banks, which even dominate the organised capital markets, UK capital markets have functioned largely independently from the banking system and have traditionally been important sources of external funds. In the United Kingdom a wide range of non-bank financial institutions have been important intermediaries in channelling funds from savers to investors.

The structure of financial assets and liabilities of the non-financial private sectors[5] in the two countries mirrors these divergences (Table A). In the United Kingdom, these sectors claims on banks accounted for less than one sixth of their total financial assets at the end of 1983, whereas the proportion in Germany was about one half. The German banking system does, however, include institutions which in the United Kingdom would not be termed banks. German mortgage banks, for example, are akin to UK building societies, while its savings banks, which attract by far the highest proportion of personal savings, are closely involved in the housing market. The different roles of the banking systems are perhaps most clearly reflected in the liability structures of the combined personal and company sectors. In Germany, nearly two thirds of their total liabilities represents borrowing from banks, compared with only one quarter in the United Kingdom. Other financial institutions have a larger role

(1) This article is based on a study carried out by Dr W Friedmann of the Deutsche Bundesbank while visiting the Bank of England in 1983. The work has been supplemented and updated by D H A Ingram and D K Miles of the Bank's Economics Division.

(2) For a recent discussion of the links between structural features of the German capital markets and the pattern of corporate finance see the article 'The share market in the Federal Republic of Germany and its development potential' *Monthly Report of the Deutsche Bundesbank*. Vol 36, No 4, April 1984.

(3) In this article, a number of statistical comparisons are made of UK and German financial markets and company finances. Because of differences in coverage and definitions, and especially in accounting conventions, such comparisons are hazardous and should be interpreted with caution. Wherever possible, analogous data have been used. Company balance sheet items (including capital and income gearing ratios), for example, have been based on aggregations of reported company accounts compiled by the Department of Trade and Industry, and the Bundesbank, respectively. The UK data from company accounts are derived from a sample of around 1,700 companies (accounting for roughly 80% of total company sector turnover) while those for Germany are based on the accounts of about 70,000 firms, representing about 70% of total turnover registered in German VAT statistics.

Certain comparisons are based upon national accounts data where the definition of the company sector differs between the two countries. In the United Kingdom, the industrial and commercial company sector covers all domestic activities of non-financial corporate bodies which are under private control and have a policy of making profit. In the German national accounts all non-financial businesses, incorporated or unincorporated and whether privately or publicly owned, are included in the non-financial enterprise sector. This reflects the dominance of sole proprietorships and partnerships in Germany.

The figures quoted in the tables and charts derived from national accounts sources are largely on a consolidated basis—for example, net trade credit, which is almost exclusively intra-company sector, is netted out in Table A. Data from company accounts on stocks and flows do not usually identify intra-sector transactions. Table C is, therefore, not consolidated.

(4) See, for example: *The British and German banking systems: a comparative study* by the Economists Advisory Group (E Victor Morgan) for the Anglo German Foundation (1981); *Capital markets and industrial investment in Germany and France: lessons for the UK* by B T Bayliss and A S Butt-Philip (1980); *National attitudes and the financing of industry* by Yao-Su Hu (1975); and *Political and Economic Planning*, Broadsheet No. 559.

(5) Comprising the personal and non-financial company sectors. In Table A, assets and liabilities are valued, where possible, at market prices for the United Kingdom, but are largely nominal prices for Germany.

Table A
Structure of financial assets and liabilities of personal and non-financial company sectors
Percentages of total assets/liabilities at end-1983

	United Kingdom	Germany
Financial assets		
Bank deposits, notes and coin	16	50
Funds placed with other financial institutions	46	17
Securities	17	17
Other financial assets(a)	21	16
Total	100	100
Financial liabilities		
Bank borrowing	25(b)	61
Borrowing from other financial institutions	18	10
Securities	36	11
Other financial liabilities(a)	21	18
Total	100	100

Sources: *Financial Statistics* and *Deutsche Bundesbank Monthly Report.*

(a) Trade credit extended and received by companies has been netted out.
(b) Includes Bank of England Issue Department holdings of commercial bills, and personal sector loans from banks for house purchase.

in the United Kingdom on both sides of the balance sheet. The greater importance, historically, of share issues as a source of company finance in the United Kingdom is reflected in the size of securities in total liabilities compared with Germany.

In recent years UK banks have increasingly provided medium and longer-term funds for companies, with maturities mainly between two and seven years, but sometimes ranging up to twenty years. Leasing agreements with tax exhausted companies have allowed the lessee to benefit from generous tax allowances on investment expenditure.[1] In 1983, 10% of UK investment in plant and machinery and around 8% of all industrial investment was financed in this way. The clearing banks have also rapidly expanded their term lending, mostly at variable interest rates. The provision of a wider range of services by British banks has been encouraged by a number of factors, including the introduction of *Competition and credit control* in the early 1970s, and increasing competition in domestic markets from foreign banks who had originally come to London primarily to develop their international lending interests. High and variable inflation and volatile market conditions contributed to the virtual demise of traditional corporate bond finance, and stimulated demand for more flexible forms of finance, often at floating rates.

The major suppliers of long-term equity and debt finance in the United Kingdom are the non-bank institutional investors—life insurance companies, pension funds, investment and unit trusts—all of which play an important role as financial intermediaries between private savers and ultimate borrowers. At end-1983 about 40% of the personal sector's financial assets were represented by claims on insurance and pension funds (compared with a corresponding figure of only around 7% for Germany); about 36% of insurance and pension funds' assets were invested in UK company securities. The UK personal sector's direct holdings of company securities amounted to around 12% of its total assets.

The main feature of the German financial system is the dominance of the banks, whose operations cover not only short-term overdraft lines, discount and acceptance credits, a broad range of medium and long-term loans and instalment credits, but also mortgages[2] for private and commercial purposes. In addition, they invest in the securities markets on their own account, and issue their own 'bank bonds'.

As in the United Kingdom, the most important non-bank financial institutions in Germany are insurance companies and pension funds, channelling personal sector savings into medium and long-term loans to companies, public authorities and the banking system, and also into property and other investments; but the proportion of savings channelled through these institutions is much smaller than in the United Kingdom. Germany's social insurance system provides the main basis for retirement incomes, and like its UK counterpart is organised on a pay-as-you-go rather than on a funded basis. A second tier of pension arrangements is often provided by employers, partly via insurance companies and pension funds, and partly within companies' own balance sheets. Thus employees' contributions may be a significant source of corporate funds. For public limited companies in the manufacturing sector, for example, provisions made for this particular purpose amounted to 13% of total financial liabilities in 1982, double the figure of a decade earlier. For the whole non-financial business sector only figures for total provisions are available (Table C). In the early 1970s they accounted for 10% of total financial capital invested and by 1982 for 14%— indicating an increasing role for staff superannuation contributions. Part of the attraction of this form of finance is the tax exemption of the contributions. Company superannuation schemes are, however, usually only offered by larger firms. Smaller businesses have the option to contribute to life insurance contracts on a tax preferred basis but with the disadvantage that the funds are invested outside the company.

Capital markets compared

Securities markets differ markedly between the United Kingdom and Germany, although these differences have tended to narrow during recent years. German equity markets have not developed as far as those in the United Kingdom largely for historic reasons, but partly because of an absence of strong institutional investors with considerable underwriting capacity.

In Germany, the organisation of new issues, underwriting and even the final placement (and possibly a listing at a stock exchange) are services provided by the banking

(1) See 'Recent developments in equipment leasing' in the September 1982 *Bulletin*.
(2) Often provided by subsidiaries.

system. Banks may act as issuing houses, merchant banks and stockbrokers, although the facilities offered by individual banks vary considerably.

In both countries transactions in outstanding stocks are channelled almost exclusively through the stock exchanges. But while in the United Kingdom only a minor part of domestic securities dealing takes place outside the London Stock Exchange, in Germany most of the states ('Länder') have their own exchanges. There are eight independent stock exchanges, of which Frankfurt and Düsseldorf are the most important.[1]

The operating rules and membership structure of the German stock exchanges differ from those of the London exchange. The market-making function of the UK jobbers has no direct counterpart at the German stock exchange. Instead of the 'market maker' being himself on one side of the market, the German system relies on a 'market matcher' (or 'Amtlicher Makler'), whose function it is to match supply and demand for a listed stock without being himself a market participant. Moreover, whereas stocks are traded continuously on the London Stock Exchange, official trading on the German stock exchanges is carried out only once a day. The trading requirements of the German banks—for themselves and other customers—are therefore largely met outside the stock exchanges in an informal telephone market.

Share markets

At the end of 1983 equities accounted for only around one tenth[2] of the total stock of domestic securities outstanding in Germany, compared with over one half in the United Kingdom.[3] Only 2,100 out of a total of two million German business firms[4] are run in the form of a public limited company ('Aktiengesellschaft'). Only public companies can raise equity funds in the share markets and less than 450 of these are listed at a German stock exchange, capitalised at around DM 225 billion (£57 billion). Further, only around 30 equities in the German market are actively traded. By contrast, 5,300 UK enterprises are run as public limited companies, 2,400 of which are listed at the London Stock Exchange and capitalised at £163 billion. Many of these companies' stocks are actively traded.

A notable contrast between the UK and German equity markets is the size of institutional holdings (see Table B, which also nets out holdings of shares by the non-financial company sector). Insurance companies and other financial institutions hold only 6% of total stocks of German equities, compared with around 48% in the United Kingdom. This is mainly due to the differences in pension arrangements referred to earlier. While institutional investors are the main class of equity holder in the United Kingdom, non-financial companies hold most in Germany, and their share has been growing steadily in the last decade.

Table B
Structure of share ownership at end-1982[a]
Percentages

	United Kingdom		Germany	
Shareholders				
Insurance companies, investment companies, pension funds, unit trusts	48	*54*	6	*10*
Banks	3	*3*	9	*15*
Private persons (and trusts)	31	*35*	16	*27*
Non-financial companies	11		40	
Public sector	3	*3*	8	*13*
Non-residents	4	*5*	21	*35*
Total	100	*100*	100	*100*

Source: *Financial Statistics* and Deutsche Bundesbank (Special Series No. 4).

(a) Ordinary and preference shares. Figures in *italics* net out holdings by non-financial companies.

In both Germany and the United Kingdom, banks' direct investments in equity shares are fairly limited. At end-1982 German banks held about 9%, by value, of all ordinary and preference shares—a higher proportion than in the United Kingdom. In both countries, banks' investments in equity shares as a proportion of their total assets are fairly similar (between 1% and 2%). The influence of German banks upon companies goes beyond their own direct shareholdings, however; they often exercise (with customers' consent) the voting rights on shares deposited with them. In both countries the personal sector is an important equity holder though, as a result of the lower value of outstanding equity in Germany, the importance of shares in personal portfolios is considerably less than for the United Kingdom.

Bond markets

In the United Kingdom, total outstanding public and private domestic bond issues[5] are less than the stock of equities. (At end-1982 the market values of outstanding equities and bonds were roughly £150 billion and £100 billion respectively.) In Germany, the bond market is the more important: the nominal value of domestic bonds (public and private) outstanding amounted to nearly DM 700 billion (£180 billion) at end-1982, more than seven times the volume of shares in circulation.

Whereas financial relationships between non-bank issuers and investors predominate in UK bond markets, the German bond markets serve primarily as a means through which banks intermediate in raising and investing longer-term funds. German banks are by far the most important issuer group, and on average are the biggest investor group as well. At end-1983, for example, three quarters of the outstanding domestic bonds had been issued by banks (bank bonds), which also held about two fifths of the total. Only around one quarter had been issued

(1) There are also regional exchanges in the United Kingdom though they are much smaller than the London exchange.
(2) By nominal values.
(3) The ratio of ordinary and preference shares to the outstanding stock of Treasury bills, public sector long-term debt, debentures, ordinary and preference shares (all at market values). Issues of unlisted companies account for about one half of total issues in the German share market.
(4) Both incorporated and unincorporated.
(5) The largest proportion of which are British government securities.

by the public sector. The great bulk of fixed-interest securities in UK markets are issued by public sector borrowers and the dominant investor group is again insurance companies and pension funds, which hold about 45% of the total (compared with only one eighth in Germany). The personal and (non-financial) company sectors in the United Kingdom hold around one quarter of the stock of domestic bonds compared with around one fifth in Germany.

Structure of business finance

Because of the different financial and institutional traditions in the two countries it is not surprising that the balance sheet structures of their respective business sectors are different. Direct statistical comparisons are difficult, but Table C—drawn from aggregations of individual historic cost company accounts—indicates the relative importance of equity and debt finance in the two countries. A major caveat should be noted, however. The valuation of fixed assets in UK company accounts is not generally at true historic costs—revaluations take place from time to time. By contrast, assets in German company accounts are valued at true historic cost. This could lead to an understatement of the debt-equity ratio in the United Kingdom relative to Germany (since the equity stake will appear higher in UK accounts if assets have been revalued, but this effect may be offset by the higher rates of inflation experienced in the United Kingdom). This may help to explain what is otherwise something of a puzzle—the persistence of apparently sizable differences in the debt-equity ratios in companies' balance sheets in the two countries, even though there has been a convergence in recent years in the pattern of flows of funds to the company sectors.

Table C
Structure of liabilities of non-financial businesses
Percentages of total liabilities

	End-1971	End-1981
United Kingdom(a)		
Equity capital(b)	47	49
Debt	53	51
of which:		
Loans from banks	8	14
Bonds(c)	13	8
Trade and other credit	21	25
	100	100
Germany(d)		
Equity capital(e)	26	19
Debt	74	81
of which:		
Short-term liabilities	42	48
Long-term liabilities	20	19
Provisions(f)	10	14
	100	100

(a) Annual accounts of manufacturing and distribution/services industries. Figures for 1971 relate to all companies, those for 1981 to large companies only. Source: Department of Trade and Industry, *Business Monitor MA3*.
(b) Including reserves and small amounts of provisions (eg deferred taxation).
(c) Including certain long-term loans.
(d) Annual accounts of some 70,000 non-financial businesses (incorporated and unincorporated). The sample of German companies from which this balance sheet data is taken was extended to cover a significantly larger proportion of smaller companies in 1980. This statistical break also applies to the German lines in Chart 2. Source: *Deutsche Bundesbank Monthly Report*.
(e) Including reserves.
(f) Partly for staff superannuation schemes.

Since the early 1970s, total flows to the German company sector, in absolute terms, have typically been more than double the corresponding figure for the United Kingdom; the composition of these flows appears to have been remarkably similar, however (Chart 1—based on national accounts statistics). In both cases internal funds predominate, accounting on average for roughly 60% of companies' sources of funds.

For UK companies, internal funds have been highly cyclical and reflect squeezes on profitability, as in 1972–74 and again in 1979–81. With market sentiment mirroring, *inter alia,* the financial health of the company sector, the amounts raised in the United Kingdom via ordinary share issues have tended, if anything, to amplify the swings caused by the availability of internal funds. In periods when these sources of equity finance were under pressure, companies reacted in part defensively by cutting their expenditure, both on fixed capital and stocks; but in addition they resorted to substantial bank borrowing, especially during the two episodes of profits squeeze. In 1971–83 bank borrowing met over 20% on average of UK companies' financing needs; this compared with 13% between 1963 and 1970. In Germany, where economic conditions were less difficult over most of the 1971–83 period, the pattern of financing was much more stable from year to year; the proportion provided by the banks was also 20%.

Equity issues

Recourse of companies in the two countries to external equity finance was small in relation to total flows of funds between 1971 and 1983 (Table D). For UK companies, external equity contributed on average between 4% and 5% of their financing; in Germany, the corresponding proportion was roughly 2%.[1] It was only in the 'bull' market conditions of 1975, and on occasion in the last three years, that UK companies tapped equity markets to a substantially greater extent than German ones, however. Some of the factors affecting use of the equity markets are discussed later.

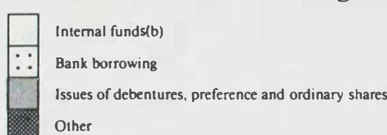
Capital and income gearing

While there have been similarities in the pattern of financing in the past decade or so, companies in the two countries still exhibit different levels of capital gearing (Chart 2). The different accounting and valuation conventions noted earlier make comparisons difficult, as does the extent of off balance sheet finance, such as leasing.

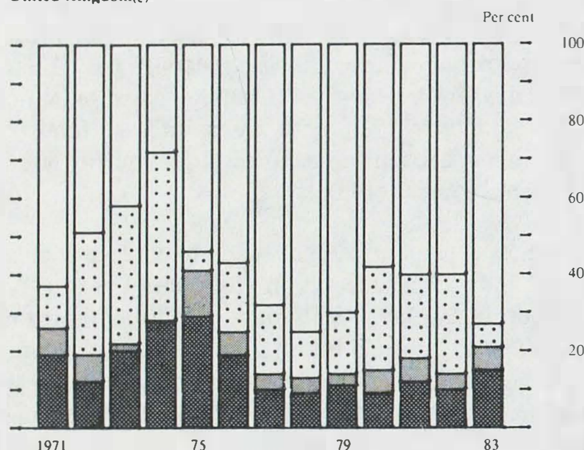
The net capital gearing ratio of the German business sector (defined as net financial debt as a proportion of total trading

(1) Both figures refer to equity share issues; as companies are able to raise external equity in other forms they may understate this source of finance.

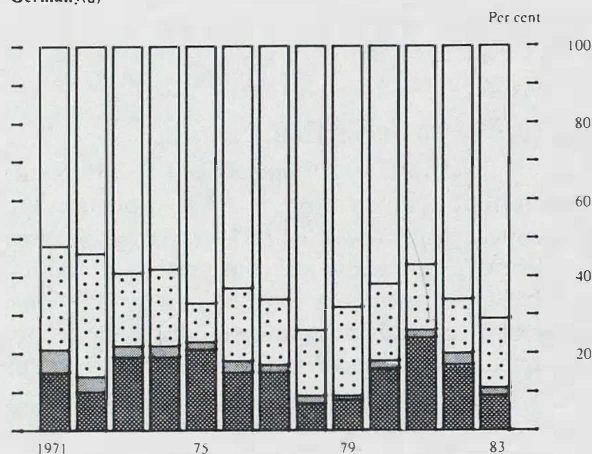
Chart 1
Internal and external financing of non-financial companies[a]



United Kingdom(c)



Germany(d)



(a) Based on flow of funds data from national accounts.
(b) Excluding stock appreciation and including capital transfers.
(c) Industrial and commercial companies. Source: *Financial Statistics*.
(d) Non-financial enterprises. Source: *Deutsche Bundesbank Monthly Report*.

assets valued at historic cost) was well over 50% during the 1970s, and over 60% at end-1982. In the same period a comparable measure for UK companies fell gently, to just over 25% by the end of 1982. If trading assets were consistently valued at replacement cost, however, the corresponding capital gearing ratios would be substantially lower in both countries. Apart from statistical distortions, the gap between the average capital gearing ratios in the two countries may also reflect the predominance in Germany of small and medium-sized private businesses which, as in the United Kingdom, tend to be more highly geared.

The difference between the two countries is less when income gearing is considered. This ratio represents the proportion of post-tax profits accounted for by net interest payments (see Chart 2). In 1971–83, the comparatively high level of UK income gearing was essentially a reflection of high nominal interest rates and depressed profits.[1] For both countries, the figures illustrate the vulnerability of company finances to sharp swings in interest rates. This was particularly noticeable in Germany in 1981 when domestic interest rates climbed steeply in the wake of US rates, bank borrowing having risen sharply in 1979 and 1980.

The decline of fixed-rate long-term finance

A striking feature of the past decade has been the negligible amounts of company finance raised in both countries by bond issues (Table D). For the United Kingdom, this was in sharp contrast with the 1960s. Between 1963 and 1970, debenture and preference share issues provided over 7% of companies' financing needs, more than double the contribution of equity issues. In Germany, corporate bond issues have never played a substantial role in company finance, probably mainly because of the dominant position of the banking sector which has provided fixed-interest finance at a broad range of maturities. Nonetheless, the issuing activity of German companies in the bond market has also declined considerably since the early 1970s such that, by the end of 1982, the total volume of corporate bonds outstanding amounted to some DM 3 billion compared with DM 10 billion a decade earlier.

The shrinkage in corporate bond markets coincided with high and volatile rates of interest and inflation in both countries, but especially in the United Kingdom. The uncertainty generated by such conditions made companies reluctant to commit themselves to fixed-rate borrowing for funding long-term projects. At the same time, the supply of new funds to the debenture market was limited by concern

Table D
Capital market issues[a]

Percentages of total sources of funds

	United Kingdom		Germany	
	Ordinary shares	Debentures and preference shares	Share issues	Debentures
1971	4	3	3	3
1972	4	3	2	2
1973	1	1	2	1
1974	1	−1	2	1
1975	12	—	3	−1
1976	6	—	3	—
1977	4	—	2	—
1978	4	—	2	—
1979	3	—	2	−1
1980	4	2	2	—
1981	6	—	2	—
1982	4	—	2	1
1983	5	1	2	—

(a) Footnotes to Chart 1 apply.

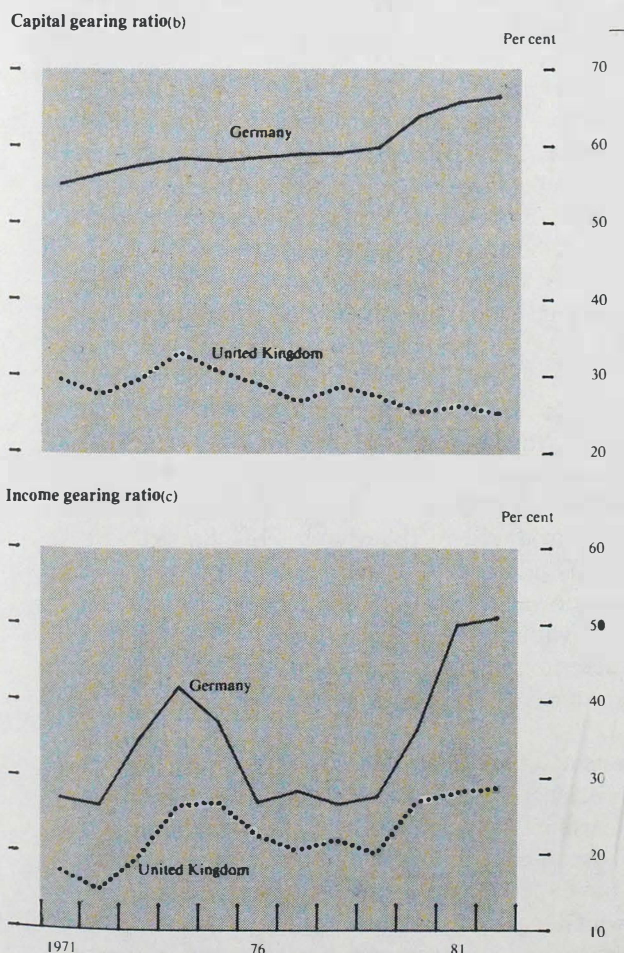
(1) See also page 354.

about the risks of lending long term to commercial borrowers at prevailing rates. Growing gilt-edged sales by the UK authorities in the early 1970s may also have crowded out corporate issues.[1]

The decline in the UK inflation rate since 1980 has not yet led to a sustained revival in the corporate bond market, even though the government has, for the past few years, limited its issues of conventional gilts in the maturities most favoured by corporate borrowers. The major reason for this is probably that the real cost of long-term fixed-rate finance in the United Kingdom has risen sharply as the rate of inflation has dropped by over 10 percentage points since 1980, while bond yields have fallen only 2–3 percentage points. Encouragement to the bond market was provided in this year's Budget, which brought certain issues of corporate fixed-interest stock into line with gilt-edged securities by exempting them from capital gains tax if held for more than twelve months. So far, this measure has met with little response from the market.

In Germany, too, there has been no upturn in (non-bank) corporate bond issues, although companies have switched the maturity of their bank borrowing towards longer-term finance in the last two years. In 1983, for example, long-term bank borrowing contributed 15% of total funds for companies compared with only 4% in the form of short-term bank loans: from 1979 to 1981 short-term bank borrowing had exceeded longer-term borrowing. An increasing proportion of longer-term bank borrowing in Germany is, however, at floating rates.

Chart 2
Capital and income gearing of non-financial companies[a]



(a) Sources: as Table C.
(b) Net financial debt as a proportion of total trading assets (end year).
(c) Net interest payments as a proportion of profits after tax.

For UK companies, the main counterpart to the reduction in bond finance in the early 1970s has been a more prominent role played by the banks. In part this shift reflected demand factors, but there were also changes on the supply side. The rise of leasing, for example, in large part reflected the tax exhaustion of a sizable proportion of companies, the relative profitability of the banking sector, and the introduction of 100 per cent first year capital allowances (though the changes announced in the March 1984 Budget will reduce the incentive for companies to lease fixed assets). In addition, term lending by banks, largely at variable rates, has proved more attractive to many corporate treasurers than fixed-rate bond finance and borrowing on overdraft.

Obstacles to a stronger equity base

It appears that German industry has generally operated with a narrower equity base and higher capital gearing than UK companies. While such a balance sheet structure was sustainable when economic growth was rapid and inflation low, its vulnerability was exposed in the harsher environment of the 1970s and early 1980s. By comparison, the balance sheet of the UK corporate sector was more suited to these conditions (although aggregate ratios of this kind are bound to conceal a wide range of experience). Nevertheless, the cautious attitude of UK companies over the past decade may indicate some form of balance sheet constraint—possibly related to concerns about income gearing—on their economic and financial behaviour, as well as pessimism on the prospective return on new investment. In both countries the structural changes needed as a result of economic and technological developments in the past decade or so require investment in new, high-risk and frequently capital-intensive areas.

On a number of different grounds, therefore, some strengthening of the equity bases of both German and UK companies may be desirable. Equity is a form of finance whose servicing cost is linked to available profits, and thus offers a lower risk of cash-flow problems than debt finance. There are two sources of additional equity capital, internal and external. Internally generated funds have typically provided companies with the bulk of their finance but are dependent on sustained, strong profitability (as in the post-war reconstruction period in Germany). Moreover, in an era of rapid structural change and depressed current profitability, it seems essential to supplement internal funds by access to a well-functioning market for external equity capital. The prospect of future profits can bring in

(1) See 'The UK corporate bond market' March 1981 *Bulletin*, page 54.

additional capital on a scale which cannot be achieved by relying on current profits.

Four major obstacles to obtaining external equity finance are frequently cited. These are shared in varying degrees by both countries:

- constraints imposed by legal regulations on the organisation of business firms;
- discriminatory tax regulations;
- structural characteristics of the financial system;
- unattractive dividend yields.

Organisational form
In Germany the most common types of businesses are sole proprietorships, partnerships and (private and public) limited companies. An individual proprietor's access to external equity capital is usually rather limited, and raising additional equity often requires a change in the firm's organisation. Sole proprietors are often reluctant to surrender control of their business and prefer to gear up as far as possible.

Only public limited companies are able to raise equity funds in the share markets. Legal regulations on the organisation of such companies in Germany, however, are rather strict and apply even to smaller, unquoted public limited companies: supervisory boards must be set up; annual accounts need to be testified by an independent auditor; and an annual report has to be published. Further, all German public limited companies are required to let their employees nominate at least one third of the members of the supervisory board. For all these reasons, the owners of smaller and medium-sized businesses frequently regard the public limited company as a rather unattractive form of organisation. The private limited company is often preferred since it imposes fewer formal requirements, even though the marketability of its equity is consequently much reduced.

In many ways, conditions in the United Kingdom are similar. As in Germany, only public limited companies can raise equity in the share markets, which normally precludes companies seeking start-up or venture finance. However, a number of development and venture capital institutions have been established—particularly in the last few years—to bridge this financing gap. In addition, the Government has given encouragement to individuals to take an equity stake in unquoted companies, through the introduction of the Business Start-up Scheme and its successor, the Business Expansion Scheme.[1] Third, the creation of an unlisted securities market (USM) has encouraged a number of companies to seek equity that otherwise would not have done so. Finally, there is now a rapidly growing over-the-counter market in the United Kingdom.

The role of taxation
Tax laws have been an important influence on financing and investment decisions in both countries over the years and may help explain the different business structures. In Germany the tax paid by businesses on distributed profit is charged at 36% while undistributed income is taxed at 56%. As in the United Kingdom, shareholders can offset tax paid by companies on dividends against their income tax liability. In contrast to Germany, however, UK pension funds are also able to reclaim the advance corporation tax (the tax charged on distributed profits) paid by companies. Such tax exempt investors generally find dividend payments more attractive than other shareholders who may face high marginal income tax rates.

There are tax effects which discourage new issues in both countries. In Germany the double taxation of corporate equity capital and shareholders' wealth, has been regarded as an obstacle to firms issuing shares (although in 1983 the wealth tax rate was considerably reduced). In both countries there are taxes on share issues and transfers. The German stamp duty on share issues (1.0% of value) and the transactions tax (0.2%) on share transfers are frequently contrasted with the fact that debt issues are not taxed and government bonds are to a large degree effectively free of transactions tax. There are similar stamp duties in UK markets where duties on share sales were charged at 2% of the transaction value prior to the March 1984 Budget—since then the duty has been cut to 1%. The German government is currently considering lowering or abolishing its duties.

Probably more important in the United Kingdom is the tax treatment of debt compared with equity finance. Interest payments on borrowed funds are deductible from taxable income in both countries. With tax rates over 50%, the actual cost of borrowing to taxpaying firms is less than half nominal interest rates. In the United Kingdom the basic rate of income tax and the advance corporation tax rate are both 30%, and, since this is less than the corporation tax rate, the post-tax cost to a firm of paying debt interest is lower than that of distributing an equivalent gross dividend. This tax incentive in favour of debt finance in the United Kingdom has been important in the past, especially when nominal interest rates have been high, though changes in tax rates introduced in the March 1984 Budget will substantially reduce it. The main rate of corporation tax will come down to 35% from April 1986. (The rate for companies with profits not exceeding £100,000 is now 30%, so for these companies there is no tax incentive in favour of debt finance.)

The structure of the financial system
It has been suggested that special characteristics of banks in the German financial system partly explain the weak equity base of companies there. The German Council of Economic Experts, for example, has argued that a major factor which tends to raise the cost of equity funding is the banks' aversion to placement risk, resulting in issue prices being set considerably lower than a tender issue would produce. In support of this, the first quotations of newly

(1) See 'Venture capital in the United Kingdom', June 1984 *Bulletin*, page 207.

issued shares on the stock exchange usually exceed, often quite substantially, the original issue price.

In the United Kingdom specialised institutions like merchant banks and broking firms provide corporate financial services, although the trend in recent years has been away from such institutional specialisation, gradually reducing some of the differences between the two countries' financial systems. For instance, the range of services provided by the banks is now much closer to that in Germany. This trend will continue. Nevertheless, the specialist capability of UK institutions (such as the merchant banks) is likely to remain important.

One major difference remains—the financing of pensions. It is perhaps not surprising that the capital market is typically a more important source of funds to the corporate sector in the United Kingdom where private pensions are provided at arm's length by pension funds or insurance companies. A simple example may illustrate the magnitudes involved. If all provisions for staff superannuation within German companies' balance sheets in 1981 had been funded by pension funds or insurance companies, and if their pattern of investment were similar to that in the United Kingdom, the additional supply of external equity capital might have been around DM 80 billion, raising the average equity ratio of German companies from 19% to nearer 25% (Table C). It cannot be assumed, of course, that the funds would have flowed back to the domestic corporate sector on this scale.

Dividend yields and profitability

In both Germany and the United Kingdom the real dividend yields on equity have not proved very attractive to investors in recent years. German investors have been able to obtain positive real returns on fixed-interest assets and in any case have a more limited choice of equity investments. Similarly, for investors seeking capital gains, equities were rarely attractive during the 1970s, with share prices in both countries remaining weak for much of the period. Only when expectations of company profitability were optimistic did equity markets provide substantial volumes of new finance. A flourishing equity market is obviously important for companies. But any policy aimed at increasing equity finance would be unlikely to succeed in either country if it relied solely on structural improvements in the equity market itself. The prospect of a lasting improvement in company profitability relative to expected real interest rates is also required.

The success of the unlisted securities markets in the United Kingdom is due to the performance of the companies these markets have attracted.[1] Starting with 11 companies in autumn 1980 the USM has grown in nearly four years to around 250 company quotations. Only a few of the companies attracted to the USM would probably be run as public limited companies in Germany, and even fewer could be expected to be able to get sufficient backing from issuing banks to float a public issue.

Conclusion

The financial systems of Germany and the United Kingdom are different, and this is partly reflected in the aggregate balance sheet structure of the business sectors in each country. The pattern of the flows of funds to firms has, however, been converging, and institutional changes are occurring in both countries—but especially in the United Kingdom—which will bring the systems still closer together. A number of advantages are likely to flow from this, for example, a closer relationship between firms and providers of finance in the United Kingdom, and a better developed equity market in Germany. Some of the fiscal and regulatory measures designed to encourage this progress have been described. But on their own, developments in financial markets cannot be expected to ensure the health of the business sector. Indeed, the recent history of financial flows to companies may reflect the health of businesses as much as it explains it.

(1) See 'The unlisted securities market', June 1983 *Bulletin*, page 227.