The financing of small firms in the United Kingdom

By Melanie Lund and Jane Wright of the Bank's Domestic Finance Division.

Economists have often argued that imperfections in the financing of small firms arise because of information asymmetries: the small business owner generally has much better information than the bank on his firm's performance. This is fundamentally different from the situation with large companies. This article examines the developments over the past decade in the financing of small businesses in the United Kingdom. It notes the sector's reduced dependence on external funds and increased use of a range of financing products. The article also assesses the current risks faced by the small firms sector and its providers of finance, suggesting that this sector is now more resilient to a downturn in the economy than in the early 1990s, thus reducing the likelihood of a recurrence of the high levels of business failures experienced in that recession.[(1)]

Introduction

The small firms sector makes a significant contribution to the UK economy. In 1997, firms with 49 or fewer employees accounted for around 40% of total turnover in the United Kingdom and 45% of total employment.[(2)]

The sector offers banks profitable opportunities, though not without risk. In the recession of the early 1990s, for example, the banking sector suffered large losses from its loans to the small business sector. The major clearing banks had to make provisions of around £3 billion against this part of their loan book. The problems experienced by the banks were intensified by the collapse of the residential property market, against which a high proportion of their lending was secured. Though these losses did not amount to a threat to the financial system as a whole, they did represent a reputational risk to the banks and reduced their profitability. Moreover, these problems served to highlight the fact that many firms in this sector had been inappropriately financed in the past.

More recent trends in small firms financing suggest that there has been a steady improvement in how finance providers service the market. However, against a background of sustained economic growth, it is difficult to distinguish improvements resulting from structural changes in the financing of these firms from those resulting from better trading conditions. The recent slowdown in the growth of economic activity will test the robustness of the improvements.

This article looks at the economic theory on the provision of finance to the small firms sector, underlining the problems of risk assessment of these firms by banks, the main providers. It then reviews how the patterns of small firms financing have changed over the past decade, making it less likely that the high levels of business failures in the previous recession will recur. It also focuses on competition in this market as a means of facilitating improvements. One area where improvement in the provision of finance is less evident is in the supply of risk capital for technology-based small firms.

The economics of small firms financing

Economists have often argued that market imperfections in the financing of small firms arise mainly because of information asymmetries—the owner of a small business generally has much better information than the bank on his firm's performance,[(3)] and has more control of the outcome. This is fundamentally different from a large company, whose shares are publicly traded and whose performance is regularly assessed by market analysts. According to economic theory, information asymmetries may lead to: (i) adverse selection, where banks, lacking information to identify firms with the highest expected returns relative to the degree of risk, find it difficult to use the price mechanism to distinguish between firms; and (ii) moral hazard, where (in the absence of collateral) use of higher interest rates by banks to offset risk would give firms receiving bank finance an incentive to alter their behaviour to adopt more risky projects. Banks may require collateral in response to these potential problems. However, this may then exclude entrepreneurs with viable business plans but who lack collateral, in particular technology-based firms.

It has frequently been argued in the economics literature that such problems can lead to credit-rationing for small and medium-sized enterprises (SMEs)—that is, finance is not made available to all firms with viable projects whose net present value is positive. The central hypothesis is that the

(1) See also the Governor's speech, 'Developments in small business finance', on pages 207–9.
(2) DTI figures covering all private sector businesses; employment is measured as the number of employees plus the number of self-employed persons. Turnover refers to the value (excluding VAT) of sales, work done and services rendered.
(3) See Williamson, O E (1975), *Markets and Hierarchies: Analysis and Anti-trust Implications*, Free Press, New York.

market is not cleared through price adjustments, because of the asymmetry of information between banks and SMEs. So banks have an incentive to respond to an increased demand for loans by rationing credit further rather than by raising interest rates.(1)

The empirical evidence(2) provides little conclusive support for the existence of such market imperfections in the financing of SMEs in the United Kingdom in general. It must be noted, however, that this conclusion is based on an analysis of surviving firms; it has not been easy to determine whether shortcomings in the provision of finance have contributed to business closures, or at least takeovers or other major restructurings. So it is difficult to assess properly the existence of credit-rationing. What evidence there is suggests that the most finance-constrained businesses are relatively small and young, located in the manufacturing sector, and of below-average profitability. But these same characteristics would make financing such firms relatively risky, and it is unclear whether the terms attached to such lending are unreasonable in relation to the extra risk.

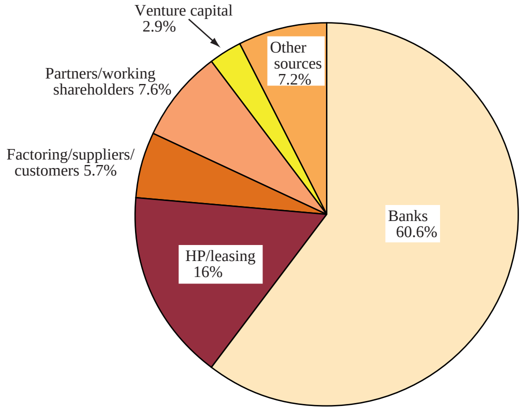
Changes in small firms finance

To compare the current risks to banks from their small business portfolio with those faced in the previous recession, it is necessary to assess the main changes in small firms financing patterns since the early 1990s. One change has been that, with the subsequent recovery, small firms, in aggregate, have become markedly less dependent on external finance. Recently published research has shown that only 39% of small businesses sought external financing of any kind between 1995–97,(3) compared with 65% between 1987–90.(4)

Within external financing, the proportion accounted for by traditional bank borrowing has declined. This partly reflects shifts towards factoring and asset-based finance,(5) of which a large proportion is provided by finance subsidiaries of the main clearing banks (see Charts 1 and 2). It also reflects a more cautious approach by small businesses, which has resulted in an absolute decline in the net indebtedness of the sector. Total small business deposits at banks amounted to 86% of total borrowing from banks by small businesses(6) in December 1998, compared with 56% at the end of 1992.

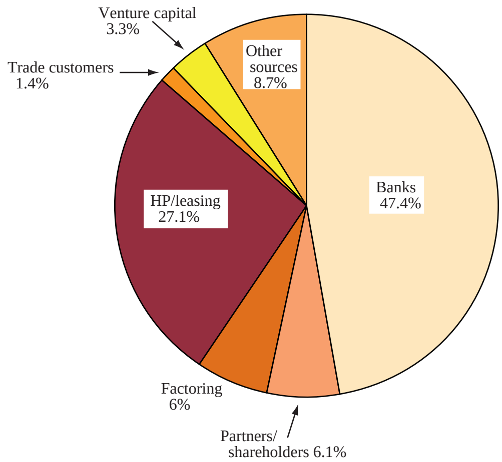
The general trend in levels of indebtedness of small, privately held firms(7) has recently been investigated by the Manchester Business School (see Chart 3).(8) Their research showed that the strong inverse relationship between capital-gearing levels(9) and GDP growth from 1988–93 has since been much less clear-cut. Average gearing levels of

Chart 1
Sources of external finance for SMEs, 1987–90



Source: Small Business Research Centre (1992), University of Cambridge, *The State of British Enterprise*.

Chart 2
Sources of external finance for SMEs, 1995–97

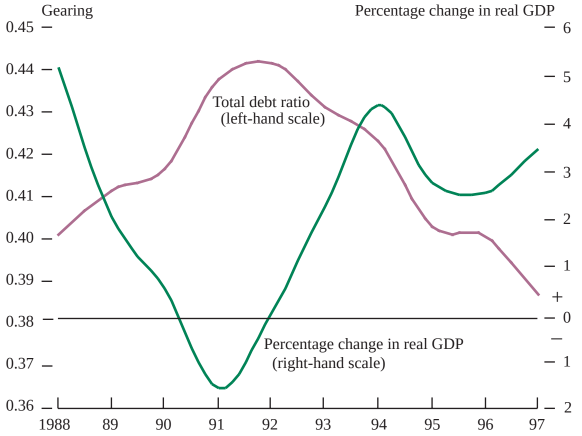


Source: ESRC Centre for Business Research, Cambridge, *Enterprise Britain 1994–97*.

small, privately owned firms continued to fall between 1994–96, despite some moderation in GDP growth. It was suggested that this might reflect the impact of the previous recession on borrowing and/or lending behaviour. However, other research has indicated that the borrowing behaviour of the 1980s was atypical for small firms (traditionally net creditors of the banking industry). On this basis, present behaviour indicates a return to the norm. Both of these possible explanations suggest that the current economic slowdown might not result in an increase in the indebtedness of the small firms sector on the scale of that experienced in the recession of the early 1990s. Reflecting these trends, the stock of total bank lending to the small firms sector has declined, from £39.5 billion at end 1992 to £36 billion by end 1998.

(1) The hypothesis, in the context of SME financing, is associated with Stiglitz, J E and Weiss, A (1981), 'Credit rationing in markets with imperfect information', *American Economic Review*.
(2) Aston Business School (1991), *Constraints on the Growth of Small Firms*, Department of Trade and Industry, HMSO, London; Cosh, A and Hughes, A (1994), 'Size, financial structure and profitability: UK companies in the 1980s', in Hughes, A and Storey, D J (ed), *Finance and the Small Firm*, Routledge, London.
(3) ESRC Centre for Business Research (1998), Cambridge, *Enterprise Britain 1994–97*.
(4) Small Business Research Centre (1992), University of Cambridge, *The State of British Enterprise*.
(5) ESRC Centre for Business Research (1998), Cambridge, *Enterprise Britain 1994–97*.
(6) British Bankers' Association figures, based on businesses with a debit turnover of less than £1 million.
(7) A panel database of 3,500 firms with fewer than 200 employees.
(8) Poutziouris, Chittenden and Michaelas (1998), Manchester Business School, *The Financial Affairs of Private Companies*.
(9) Gearing is defined as the ratio of total debt to total assets.

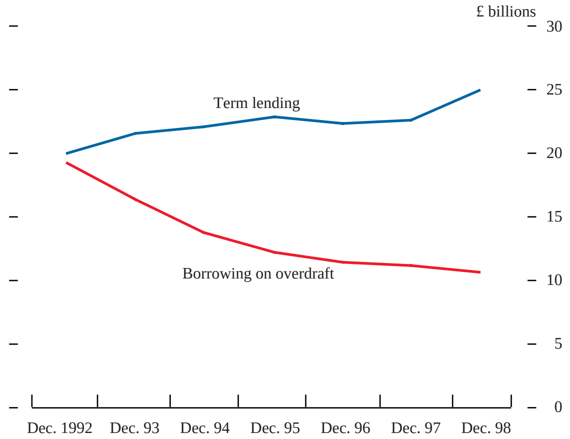
Chart 3
Gearing ratios of private companies over the economic cycle



Source: *The Financial Affairs of Private Companies*, Manchester Business School.

The structure of bank lending has also shifted, away from short-term variable-rate lending and towards more term (and to some extent fixed-rate) finance (see Chart 4). The ratio of overdraft to term lending has fallen significantly, from 49:51 in 1992 to 31:69 in 1998, and fixed-rate lending has risen from 28% to 33% of term lending since 1996. This has addressed one of the problems highlighted by the early 1990s recession—small firms' over-reliance on the overdraft facility to finance anything from working capital to long-term investment projects—and has reduced the vulnerability of small firms to the economic cycle.

Chart 4
Small business borrowing: overdrafts and term loans



Source: British Bankers' Association.

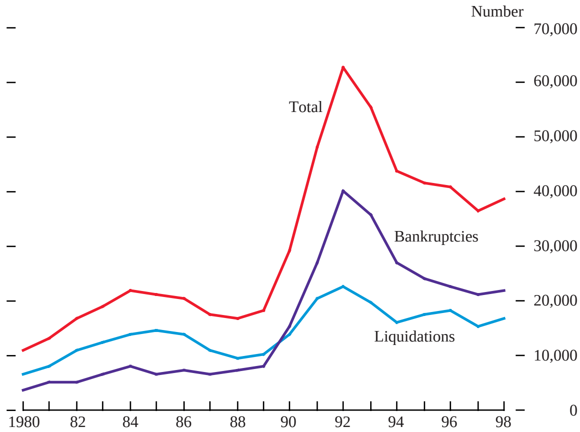
This changing structure of small business finance has also altered the profile of banks' exposure. Banks now have more committed funds than in the previous recession (term loans have risen from £20.1 billion to £24.8 billion since 1996). Most (63%) of these committed funds have residual maturities of more than five years, and more than one third (36%) have residual maturities of more than ten years. So banks are more locked into the provision of finance to the small firms sector throughout the economic cycle, though they have built terms and conditions into term loans to protect their exposure.

The risk of business failure

The main concern of the clearing banks in providing finance to the small firms sector is that businesses will fail and default on outstanding commitments. Given that approximately 35%–40% of banks' income is from fees and charges, a reduction in the number of small businesses adversely affects the banks' profitability even if the closures do not result in bad debts.

Evidence has shown that small business closures occur throughout the economic cycle, with slightly fewer than half of small businesses closing in their first three years, irrespective of the economic conditions. In most cases, small businesses will close without banks and other finance providers incurring any loss owing to the non-repayment of a loan or overdraft.[1] The number of failures that do result in losses to creditors fluctuates, and the trend in bankruptcies[2] and company liquidations is clearly linked to the state of the economic cycle (see Chart 5).[3]

Chart 5
Business failures



Source: Dun & Bradstreet.

It is important to consider the absolute number of business failures against the business stock. DTI figures reported that there were 3.7 million enterprises in the United Kingdom in 1997, compared with 2.4 million in 1980. The impact of the increase in the number of businesses can be removed by considering the percentage change in business failures.[4] The data show that the year-on-year percentage change in business failures has been fairly constant over the previous three recessions.

(1) It has been shown that business closure was twelve times more likely than 'entrepreneurial bankruptcy'. See Storey, D J, *Firm Size and Performance* in Acs and Audretsch (ed) *The Economics of Small Firms: A European Challenge*, Kluwer Academic Publishers.
(2) Bankruptcies of partnerships, associates and sole traders.
(3) Storey, D J (1994), *Understanding the Small Business Sector*. The results were sensitive to the definitions of business failure used.
(4) Chrystal, K A and Lipsey, R G (1997), 'Economics for business and management', *Oxford University Press*, page 19.

It is likely that the number of small business closures will increase if the economy slows, but probably by less than in the early 1990s, for a number of reasons:

- Business start-ups rose rapidly in the 1980s, as a result of a combination of government schemes(1) and deregulation of credit controls. These policy changes encouraged the formation of a large number of businesses, many of which were not economically viable and had a high probability of failure. In addition, the credit boom encouraged many small businesses that were traditionally net lenders to the banking sector to take on debt finance. This further increased the banks' exposure to small firms. As trading conditions deteriorated and collateral values slumped, the banks started to call in uncommitted funds, which in turn increased the number of failures.

- As noted above, small businesses are now more appropriately financed than in the 1980s, using a wider range of financing sources. They are no longer so dependent on overdraft financing, and rely more on committed funds, with fixed repayment streams.

- Individual small business banking codes of practice and the *Statement of Principles: Banks and Businesses Working Together*(2) have led to a more open, two-way relationship between banks and small businesses. This has benefited small businesses—research by the Forum of Private Business shows that SMEs that had developed a more participative relationship with banks were obtaining lower charges and collateral requirements. Banks now have better warning systems in place to detect at an early stage whether businesses are encountering trading difficulties. Small firms are more prepared to share information with their banks. Better relations and a greater degree of co-operation should help to avoid some of the strains of the previous recession, which contributed to increased business failures and seriously affected the reputation of the banks.

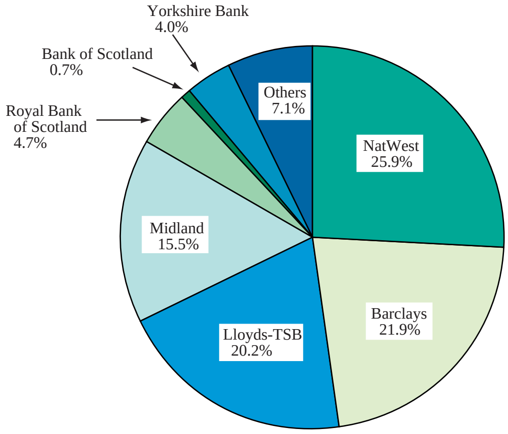
- Small firms are now assisted by a wider network of training and support agencies, such as Business Links, TECs and Chambers of Commerce.

Competition in the provision of finance to small firms

The Bank's latest annual report on finance for small firms(3) refers to research by the Federation of Small Businesses, which reported that some 34% of small firms considered changing their bank in 1998, although only 4% actually switched (15% in the past five years). This raises the issue of the degree of competition in the provision of finance for small firms.(4)

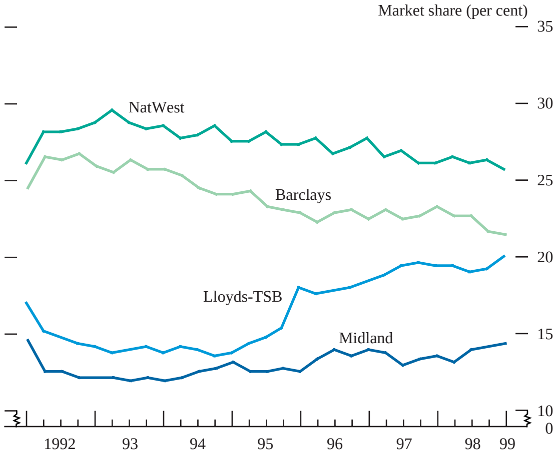
The providers of bank finance to small businesses operate in a concentrated industry. The four main English clearing banks account for 84% of the market, with NatWest and Barclays together accounting for 48% of the total (see Chart 6). However, though the overall market share of the Big Four has remained fairly stable, the market shares of the individual clearing banks have changed significantly over the 1990s: NatWest and Barclays have lost market share to Lloyds-TSB and, to a lesser extent, Midland (see Chart 7). This trend is even clearer in market shares of lending to finance start-ups. The Bank's work suggests that the English clearing banks may face more competition in the future from the smaller banks, finance houses and building societies aiming to capitalise on their extensive branch networks. New lenders, together with developments

Chart 6
Bank market shares, January 1999



Source: Taylor Nelson Business Line.

Chart 7
Bank market shares, 1992–99



Source: Taylor Nelson Business Line.

(1) The Enterprise Allowance Scheme encouraged unemployed people to become self-employed, and small firms' corporation tax was reduced from 42% to 25%.
(2) *Statement of Principles: Banks and Businesses Working Together* (March 1997) was developed by the British Bankers' Association and has been adopted by all the major banks.
(3) *Finance for Small Firms: Sixth Report*, Bank of England, January 1999.
(4) Don Cruickshank is conducting a review of the banking industry for the Treasury. This review will focus on four areas where the review team considered that there was *prima facie* evidence of lack of competition: money transmission, credit cards, joint supply and credit for SMEs. The review team is due to report to the Treasury in November 1999. A progress report was released in April, announcing that the review would be widened to include the development of e-money.

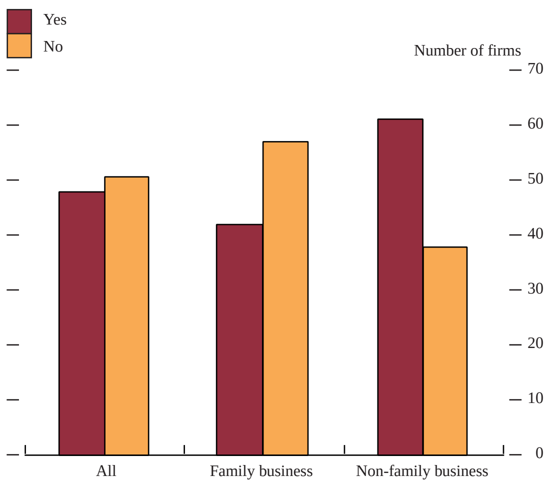
in risk-modelling, should lead to more competitive pricing of financial products. This should be facilitated by the development of new delivery and information channels, such as the Internet and computer banking. The Post Office is also well placed to extend a range of banking services to SMEs, given its large number of branches nationally, more than half of which are in rural areas.

Equity finance for small firms

Information on the use of equity finance by small businesses is limited. However, survey data suggest that venture capital finance accounted for only 3% of all SMEs' external finance in 1995–97, and was used as an additional source of finance by only 5.2% of respondents.(1) These proportions have remained fairly stable over the past ten years. This indicates that external equity finance plays only a small role in the financing of small business activity.

This could, of course, reflect demand as well as supply factors. Some recent research(2) suggests that UK entrepreneurs establish their own businesses partly because of a desire for independence. This contrasts with a more overt wealth-creation motive in the United States, and the desire for expansion in Europe. Consequently, it is suggested that UK entrepreneurs are more reluctant than their US and continental European counterparts to give up a proportion of ownership in return for equity finance. This attitude was highlighted in a survey carried out by the British Chambers of Commerce,(3) which reported that only one third of UK businesses were prepared even to consider using external equity finance. Research by Manchester Business School on private companies showed that the desire to maintain ownership is particularly evident among family-owned businesses (see Chart 8).(4)

Chart 8
Would you consider using external equity?



Source: *The Financial Affairs of Private Companies*, Manchester Business School.

These figures provide some support to the 'pecking-order hypothesis' of finance (see Cosh and Hughes (1994)). According to this, equity finance tends only be sought when internal resources and debt finance have been exhausted (perhaps leading to over-gearing). At this point, businesses will decide whether they would rather remain at their current size and maintain complete ownership, or give up a degree of ownership in return for further growth.

Financing of technology-based small firms

On the supply side, it is important to establish whether companies have access to appropriate amounts of equity, ie whether there is an 'equity gap'. The existence or otherwise of such a gap has preoccupied official enquiries(5) since the Macmillan Report in the 1930s. The possibility of an equity gap is attributed to the fact that the costs of assessing and monitoring investment projects tend, to some extent, to be invariant to the size of the project, leading many venture capitalists to prefer to invest in a smaller number of larger projects.

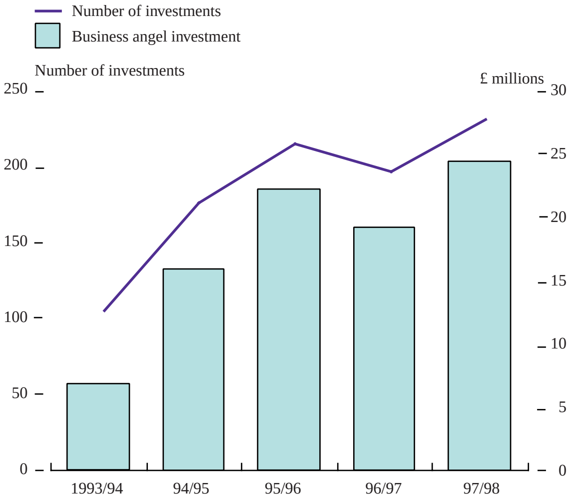
A key issue in SME finance is whether an equity gap exists in relation to the financing of technology-based small firms.(6) To establish this, it is necessary to consider the range and amount of finance available in the market. There are two main types of equity finance, private and public equity.

The key type of private equity finance available for technology-based firms at the start-up and early stages is venture capital finance, which can be split into informal and formal venture capital. Some smaller firms are not adequately prepared for venture capital investment, and so potential investors are required to dedicate significant resources to undertake due diligence. This increases the costs of investing in smaller companies, making them less attractive. To reduce this barrier, it has been suggested that 'venture catalysts', ie advisers who assist smaller companies in their preparations for obtaining venture capital investment, could play an important role.(7)

The informal venture capital market consists of 'business angels', private individuals who invest risk capital in smaller unquoted companies. This market is largely invisible. Activity taking place through business angel networks can be monitored (see Chart 9), but this undoubtedly accounts for only a small proportion of the overall activity. Business angels help to fill the gap between debt finance and formal venture capital

(1) ESRC Centre for Business Research (1998), Cambridge, *Enterprise Britain 1994–97*.
(2) Grant Thornton International (1996), Business Strategies Ltd, *European Business Survey*.
(3) British Chambers of Commerce Survey No 24 (1997): *Finance*, July.
(4) However, it must be borne in mind that the many firms that do not have growth aspirations and so respond negatively to raising equity are not likely candidates for such funding.
(5) Bolton, J E (1971), *Report of the Committee of Inquiry on Small Firms*, Cmnd 4811, HMSO, London; Wilson Committee (1979), *The Financing of Small Firms, Interim Report of the Committee to Review the Functioning of the Financial Institutions*, Cmnd 7503, HMSO, London.
(6) There is no single definition of a 'technology-based firm'. John Allen suggests in *Starting a Technology Business*, (1992), Pitman Professional Publishing, that a technology-based firm is 'a business whose products or services depend to a significant extent on the application of scientific or technological skills or knowledge (whether it be a novel application of advanced technology to provide a totally new product or service, or an application of existing technology in an innovative manner)'.
(7) Colin Mason, Department of Geography, University of Southampton.

Chart 9
Trends in business angel investment, 1993–98



Source: British Venture Capital Association (BVCA).

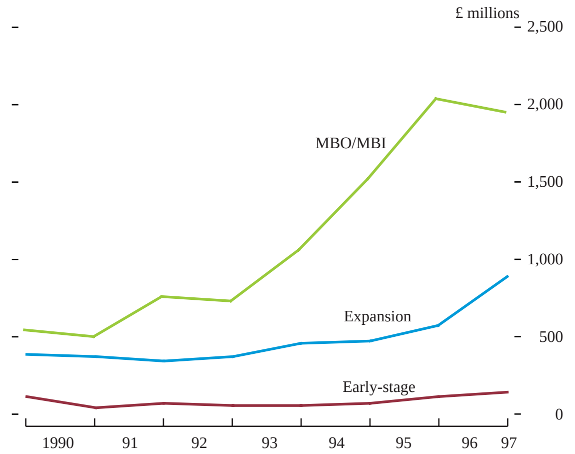
investments, and are more likely to invest in early-stage or start-up businesses, which together accounted for 50% of total business angel investment in 1998. This investment is provided in smaller tranches—typically between £10,000 and £50,000—than is economic for venture capital funds, and so plays an important role in reducing the impact of any equity gap.

Though technology-based firms receive the highest proportion of investments, business angels still appear to play a considerably less prominent role in the financing of technology-based firms in the United Kingdom than in the United States. The main barrier to business angel investment, which applies to all firms, is the lack of information on investment opportunities. Business angels operate most effectively through local networks (so geographical considerations are important), and adopt a hands-on approach to their investment, offering the benefit of their expertise as well as their financial commitment. However, some locally based business angel networks cannot achieve sufficient critical mass to become viable. Commentators have therefore suggested that further co-operation and coordination between the business angel networks in the United Kingdom could result in an increasing flow of informal venture capital to SMEs. With this objective in mind, a new National Business Angel Network was launched in February 1999.

Formal venture capital is often inaccessible to small high-technology businesses. Early-stage investments accounted for 20% of all companies financed by venture capitalists in 1997, but represented only 5% of the total amount of finance, compared with 65% of venture capital (or private equity) finance going to management buy-outs (MBOs) and management buy-ins (MBIs) and 30% to development capital (financing expansion/growth rather than start-up).

These figures suggest that venture capitalists and, in particular, the institutional investors on whose behalf they act, have only very limited interest in small investments in start-up and early-stage companies. This is partly because investment management, including appraisal and monitoring, is likely to be more expensive, for a given rate of return, than for larger-scale investments. The buoyant UK MBO/MBI market of the past few years has ensured that the institutions can gain high returns on relatively straightforward investments, permitting early exit routes if required. This has further reduced the attractiveness of investing small amounts in high-risk early-stage projects, especially if exit routes are not available for many years. This is a particular issue for technology-based firms, because they tend to be more dependent on equity capital than more traditional businesses with readier access to bank finance.

Chart 10
Amount of finance provided by BVCA members



Source: BVCA.

These are important areas of concern, and suggest a need for further research to quantify any market failure in the financing of technology-based SMEs. The Bank will be taking two initiatives this year to improve knowledge of the issues. First, as recommended in the Williams Report,[1] the Bank hosted a forum in April, designed to bring together institutional investors, venture capitalists and representatives of the high-technology company sector, to investigate the barriers to investment in this sector. Second, the Bank will be working on a follow-up to its October 1996 report *The Financing of Technology-Based Small Firms*, which will take a quantitative approach to an evaluation of the risk-reward relationship involved in investing in high-technology firms in the United Kingdom. It is hoped that this research will shed more light on the existence or otherwise of market failures in this crucial area of financing.

Although the capital markets are not a realistic option for small technology-based firms in their early stages of development, the presence of a liquid, easily accessible

(1) *Financing of High Technology Businesses: A Report to the Paymaster General* (November 1998).

public market is an important factor in the development of a healthy private equity industry. Venture capitalists would be reluctant to commit funds to a project if they were unable to see the exit route—this could, of course, be a trade sale, but an active public market in smaller companies ensures that the private stakeholders can support the company until it reaches a size suitable for a public listing, and then realise their investment. At this stage, the venture capitalist is free to reinvest in more early-stage firms. It has therefore been suggested that the lack of a large, liquid pan-European market, focused on the needs of smaller companies, is a barrier to the development of early-stage risk capital in Europe. This has been less so in the United States, where Nasdaq presents an obvious exit route, and this may be reflected in the more active US venture capital industry.

In practice, smaller quoted companies (SQCs) should not face difficulties in attracting finance, since the evidence suggests that, in the long run, such companies have outperformed the market in both the United Kingdom and United States, when measured by returns on equity. Between 1965–90, for example, the Hoare Govett Small Companies Index outperformed the FT-SE All-Share Index by an average of nearly 4% per annum. However, more recently, SQCs have underperformed the market. Since early 1996, for example, the FT-SE SmallCap Index has fallen by nearly 30% relative to the FT-SE All-Share Index. There appears to be a significant inverse statistical relationship between movements in GDP and the performance of small companies relative to large companies: in the past, smaller firms have tended to underperform in economic slowdowns. Furthermore, the composition of the FT-SE SmallCap Index is heavily weighted toward sectors that are more affected by the current world economic slowdown and the recent strength of sterling ('general industrials' make up 22% of the FT-SE SmallCap Index, but only 5% of the FT-SE 100). Finally, an increase in the risk premium attached to SQCs may reflect investor preferences for well researched companies at times of uncertainty, because of a greater concern that investments in less well researched companies may lead to losses.

If the disappointing recent performance of smaller quoted companies reflects purely cyclical factors, it might be expected that when economic growth returns to trend, investor interest will revive. But if the decline in performance partly reflects structural factors, such as the consolidation of the fund management industry, the prominence of tracker funds, and the cross-border sectoral (rather than country-specific) approach to investments, this may well continue.(1)

Conclusions

This article has looked at the economic theory on the provision of finance in the small firms sector, indicating how market failures in the financing of small firms could arise from information asymmetries, leading to problems of adverse selection and moral hazard. Empirical evidence provides little conclusive support for the existence of such imperfections, but the theory highlights banks' problems in undertaking risk assessment of these firms.

The article examined how the patterns of small firms financing have changed over the past decade, making it less likely that the high levels of business failures and bank losses experienced in the previous recession will recur. It was noted that small businesses are now more appropriately financed than in the early 1990s. They are more dependent on internal sources of finance—with many of the smallest businesses being net creditors to the banking sector—and businesses that do require external finance now use a wider range of finance products. Traditional bank finance does, however, remain the most important source of external finance for small businesses.

Market competition in the provision of finance to small firms was identified as a means of facilitating and maintaining the momentum for improvement. The providers of bank finance to small businesses operate in a concentrated industry, but the degree of competition in this market is increasing, because of technological changes and new entrants.

One area where improvement in the provision of finance is less evident is in the supply of risk capital for technology-based small firms. Problems appear to arise at the start-up stage, where supplies of 'seedcorn' and early-stage equity finance are limited. Many formal venture capital firms tend not to invest in small enough amounts for these companies, and the informal venture capital market (business angels) is still underdeveloped compared with that in the United States.

(1) A range of reports have been published on the issue of investment in smaller quoted companies: see *Smaller Quoted Companies: A Report to the Paymaster General* (November 1998).