Finance for SMEs: A U.K. Perspective

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ABSTRACT. This paper provides an overview of recent trends in the financing of smaller businesses in the U.K. It refers in particular to the findings of a major recent programme of work in this area funded by the Economic and Social Research Council, in which the author participated. This programme included the first national survey to address these issues since the Bolton Report of 1971, as well as a range of projects covering the finance of ethnic businesses and hi-tech firms as well as the market for informal venture capital. On the basis of this work and of the results of more recent follow up surveyors it is concluded that the evidence for general equity or debt gaps in the U.K. is weak. If anything SME funding was too easy in the boom of the late 1980s. It is argued that consideration could be given to the promotion through seedcorn funding of SME co-operative or mutual guarantee schemes to reduce information asymmetry in U.K. credit markets.

1. Introduction

The purpose of this paper is twofold. First to draw out some of the central findings of the ESRC Small Business Research Programme on the financing of Smaller Businesses. Second to discuss their implications for policy. I do not attempt to provide a general survey of all recent relevant work on this issue. The background of research papers and other material on which I draw, however, does do this and the interested reader can turn to the large number of working papers and publications arising from the ESRC Research programme for a wider contextual analysis.

What follows draws on material from two sources in particular. The first consists of work carried out at the ESRC Centre for Business Research (CBR) at the University of Cambridge (formerly the Small Business Research Centre (SBRC)). This includes the national SME surveys of over 2,000 firms carried out by the Cambridge team and published as *The State of British Enterprise: Growth Innovation and Competitive Advance in Small and Medium Size Firms* (SBRC, 1992) and *The Changing State of British Enterprise* (Cosh and Hughes, 1996) as well as a series of paper produced by them concerned with small business finance (Hughes (1994), Cosh and Hughes (1994a), Cosh and Hughes (1994b), Moore (1994), Cosh and Hughes (1993), Cosh, Duncan and Hughes (1996)). The second is a collection of papers containing contributions from each ESRC programme team concerned principally with financial issues (Hughes and Storey (1994)).

The idea that problems in the financing of smaller firms have significantly hindered the role they play in the overall performance of the U.K. economy is deeply rooted. Successive Committees of Inquiry into Small Firms (The ‘Bolton’ Report H.M.S.O. (1971)), and into the Functioning of Financial Institutions (The ‘Wilson’ Report H.M.S.O. (1979)), identified problems for small and medium-sized independent owner-controlled firms employing less than 200, or 500 employees (SMEs). The Wilson Committee in its report on SME financing argued, for instance, that SMEs were relatively risky. They could therefore expect to face higher interest charges or more severe security conditions than larger firms. They concluded nevertheless that excessive bank caution led to smaller, and especially newer, SMEs being rationed in the market for loans and bank finance. They also pointed to a shortage of start-up capital, and of equity development capital for fully geared established businesses wishing to expand. These reports led over the years to the introduction of a

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variety of policy measures designed to tackle 'market failures' in the supply of finance to SMEs, and particular sub-groups of them, such as hi-tech firms with a specific requirement for risk capital. For instance in the 1980s the Loan Guarantee Scheme (LGS) was introduced alongside the Business Expansion Scheme (BES). These were designed to tackle respectively the debt and equity sides of the SME financing problem. In the nineties the Loan Guarantee Scheme has been augmented and although the BES was wound down other (very different) schemes such as SMART and SPUR were introduced to support investment in hi-tech and innovative businesses, along with other developments such as the Enterprise Investment Scheme and Venture Capital Trusts to boost finance for investment in SMEs. There was also a substantial increase in the availability of private venture capital funding, although questions may be raised as to the extent to which this favoured lower risk management buyouts rather than high risk, high-tech, or innovative small business growth (Hughes (1994)).

The apparent resurgence, alongside these changes, of the SME sector in the 1980's, and the identification of contemporary government fiscal policy, generally, with corporate and personal tax cuts to encourage an 'enterprise culture', might have been expected to reduce the intensity of claims that the SME sector in the U.K. remains at a disadvantage. Indeed one recent academic survey concluded that "small firms in Great Britain currently face few difficulties in raising finance for their innovation and investment proposals in the private sector" (HMSO (1991), p. 17.) The subsequent report of the House of Commons Trade and Industry Committee on the Competitiveness of U.K. Manufacturing industry also concluded that

> there is no evidence of a shortage of funds available for lending and investment (HMSO (1994), pp. 61, 28)

This is not, however, the end of the story. The combined impact of high interest rates and prolonged recession in the early 1990's served to highlight the extent to which SMEs continue to rely heavily on short term finance from banks, to finance their activities. It also revealed the way in which, when times are hard, the smallest businesses, which proliferated most rapidly during the 1980's, and are most dependent upon banks, protest vigorously about the apparently unsatisfactory nature of their relationship with them. (Binks et al. (1992), Cowling et al. (1991), Bank of England (1993)). Moreover, a recent study by the Advisory Council on Science and Technology of barriers to growth in small firms echoed the Wilson and Bolton Report's concerns over equity, especially its absence in small amounts for risky projects, and those involving significant innovative components. In this connection it pointed to the much better developed informal venture capital market in the U.S. It also noted a number of instances in the case studies it conducted in the U.K. where financing difficulties had led to the sale of otherwise viable independent businesses to larger concerns, with the implication that where foreign purchasers were concerned an opportunity to develop an independent internationally competitive U.K. concern had been lost. (A.C.O.S.T. (1990)).

Other developments in the 1980's led to the emergence of new questions in the debate over small business finance. One of these was the growth of ethnic businesses, in particular those owned and run by members of the Asian community. Here the debate focused on their particular strengths and weaknesses in raising finance in the face of cultural stereotyping, lack of established track records, and racial discrimination on the one hand, and strong informal financial networks on the other (Deakin et al. (1992), Ward (1991). At the same time the unprecedented rate of company formation in the 1980's was associated with a debate about the relatively high cost of compliance with company audit and disclosure requirements for small firms compared with their larger counterparts, and the widespread use by the former of the dispensation to submit brief 'modified accounts' granted under the Companies Act of 1981. It also led to a debate about whether the benefits of limited liability were worth the costs incurred for smaller companies in a world in which the pursuit of collateral by banks effectively undermined it, and in which the supposed benefit of company status in gaining access to capital could rarely be taken advantage of because of the equity capital market failures noted above. The ESRC Small Business Research Programme has something to say on each of these issues.

2. The comparative financial structure and profitability of large and small companies

Table I and the figures derived from it present a summary analysis of the balance sheet structure, gearing, and profitability of large and small U.K. non-financial companies in the U.K. in the period 1987–89. 'Large' companies are those ranked in the top 2,000 in terms of capital employed in the U.K. non-financial corporate sector. They are

TABLE I
The balance sheet structure, gearing, and profitability of large and small U.K. companies in the manufacturing and non-manufacturing industries (excluding oil) in the period 1987–89

	Manufacturing companies		Non-manufacturing companies	
	Small	Large	Large	Small
	(Average % 1987–89)			
1. Fixed assets				
Net tangible assets	30.2	34.2	26.4	52.4
Intangibles	0.4	3.3	0.9	3.4
Investments	0.9	7.0	3.5	3.4
Total net fixed assets	31.5	44.4	30.9	59.2
2. Current assets				
Stock and work in progress	19.6	19.8	25.0	14.0
Trade and other debtors	37.9	23.6	36.0	19.3
Investments	1.0	2.8	0.6	1.7
Cash and short term deposits	9.9	9.3	7.9	5.8
Total current assets	68.5	55.6	69.1	40.8
Total current and fixed assets	100.0	100.0	100.0	100.0
3. Current liabilities				
Bank overdrafts and loans	11.3	6.1	11.0	4.4
Directors short term loans	0.5	0.0	2.7	0.0
Other short term loans	0.3	1.1	1.1	1.3
Trade and other creditors	35.3	23.6	41.9	21.9
Dividends and interest due	0.3	1.7	1.3	1.5
Current taxation	7.1	4.8	4.4	3.9
Total current liabilities	55.0	37.3	62.4	33.1
Net current assets	13.5	18.3	6.8	8.3
Total net assets	45.0	62.7	37.6	67.5
4. Long term liabilities				
Shareholders Interests[a]	36.1	42.0	26.8	47.4
Minority interests and provisions	2.3	6.5	1.1	2.8
Loans[b]	3.2	11.5	6.3	15.4
Other creditors and accruals	3.4	2.7	3.5	1.9
Total capital and reserves	45.0	62.7	37.6	67.5
Total capital and liabilities	100.0	100.0	100.0	100.0
5. All loans as % total assets	15.3	18.7	21.1	21.1
All loans as % shareholders interest	42.4	44.3	78.7	44.5
Long term loans as % all loans	20.5	61.7	29.4	72.9
Interest expense as % earnings before tax	15.4	12.4	21.4	14.7
6. Pre tax return on net assets	15.9	19.6	19.1	14.4
Pre tax return on total assets	12.4	14.3	13.0	17.6
Pre tax return on equity	10.4	19.1	18.8	13.3

[a] Ordinary, plus preference plus capital and revenue reserves.
[b] Directors loans, bank loans, convertible and debenture loans, all of which have a duration of over one year.
Source: Business Monitor MA3 Company Finance: Various Issues.

primarily quoted companies. 'Small' companies are a 1 in 300 sample of the remainder of the corporate sector stratified by size of capital employed. Averages for these two groups may obviously conceal wide variations within them, and may also reflect the effects of aggregation across industries characterised to different degrees by the presence of large and small firms. As a rough check on the latter effect a breakdown of the sample is provided into manufacturing and non-manufacturing industries. The data are the best available official statistics for the purpose in hand and may be compared with similar analyses specially carried out in the Bolton and Wilson Reports. It is worth emphasising, however, that in the course of the 1980's increasing numbers of small companies took advantage of the dispensation to submit modified accounts in their returns to Companies House. This has led to an increase in the estimation involved in producing the data which is reported here. It is ironical that at a time when information on small company performance is of growing interest it is becoming increasingly difficult to obtain it in a useful form. Consequently when I try to probe beyond these aggregate figures I use a specially constructed panel sample for an earlier period 1977–83 (Cosh and Hughes, 1994), which pre-dates the extensive use of modified accounts, and for later years the results of the ESRC Centre for Business Research SME surveys (SBRC (1992), Cosh and Hughes (1996)). Both of these sources cover samples of over 2,000 firms.

The data in Table I, and the accompanying Figures 1 and 2 derived from it, are presented as averages over the three financial years 1987–89. Each balance sheet item is shown as a percentage of total assets/liabilities whilst rates of return are shown upon calculated total assets, net assets and equity (ROTA, RONA and ROE respectively). In view of our interest in the role of debt and equity in financial structure several measures of gearing are calculated. First, a simple stock measure expressing all loans as a percentage of total assets. Second, a ratio designed to capture the relative importance of short and long term gearing (long term loans as a % of all loans). Third, a stock measure which relates all loans to shareholders interests and finally a flow measure showing interest expense as a percentage of earnings before tax. A number of conclusions may be drawn from Table I, and Figures 1 and 2.

(a) *Asset structure*

(1) Small companies have a relatively low ratio of fixed to total assets. In the non-manufacturing industries, for instance, small companies hold 30.9% of their total assets in the form of fixed assets. For large companies the figure is 59.2%.
(2) Small companies have a relatively high proportion of Trade Debt in their asset structure. Thus in manufacturing Trade and other Debtors comprise 37.9% of total assets. For large manufacturing companies the figure is 23.6%.

(b) *Current liabilities*

(1) Current liabilities are a higher proportion of total liabilities for small than for large companies especially in non-manufacturing, where the respective percentages were 33.1% and 62.4%.
(2) Small companies are more reliant on short-term bank loans and overdrafts than large companies (4.4% and 11.0% of total assets respectively in the non-manufacturing sector for instance).
(3) Trade and other creditors are a higher proportion of liabilities for small than for large companies. In manufacturing Trade and other Creditors were 35.3% of total liabilities compared to 23.6% for large companies. In comparison with the Trade Debtor ratios we find that the small manufacturing companies were net receivers of credit. For large companies Debtors and Creditors cancel out.

(c) Long term liabilities

(1) Small companies are less reliant on shareholders interests to finance their assets. In manufacturing for instance these accounted for 36.1% of total small firm liabilities compared to 42.0% for large companies.
(2) In non-manufacturing, gearing, (as measured by the stock ratio of total loans to shareholders interest, or by the flow measure of interest expense as a percentage of earnings before

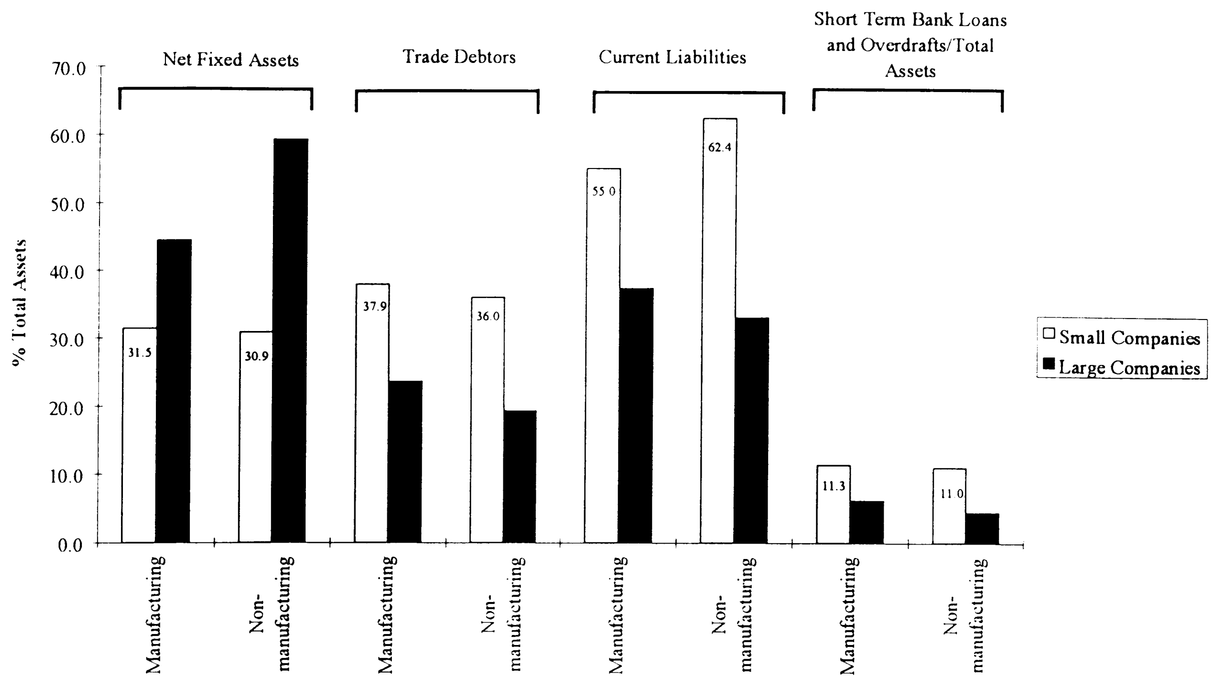

Fig. 1. Selected Financial Ratios I: U.K. SMEs 1987–89.

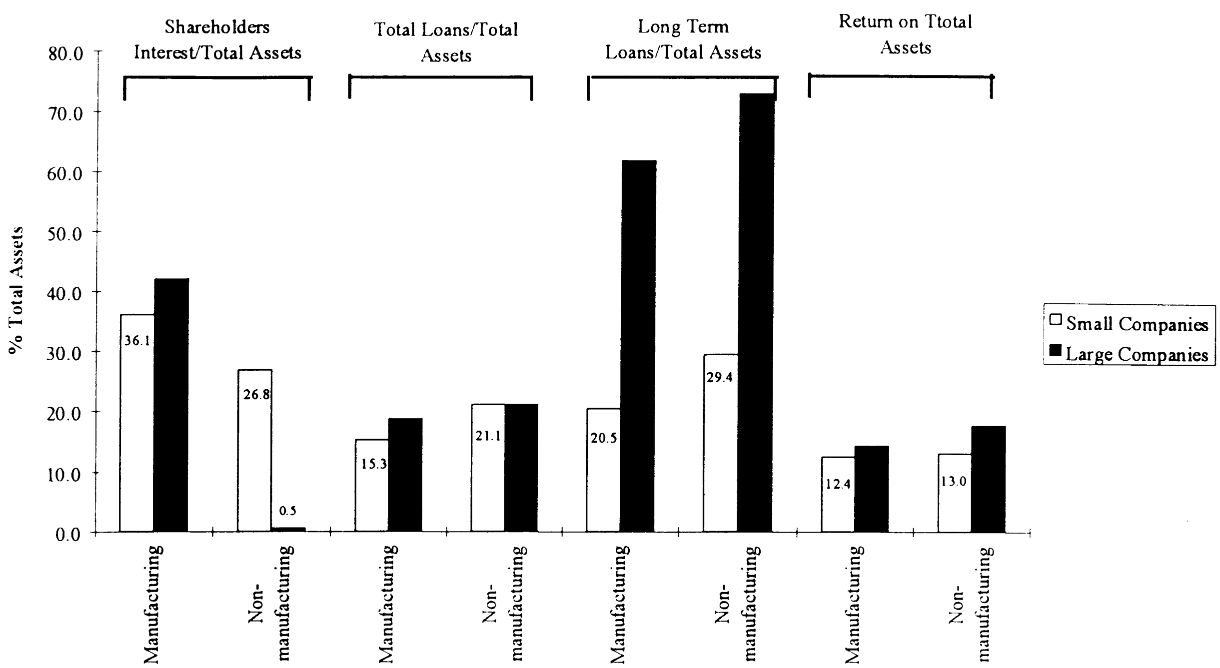

Fig. 2. Selected Financial Ratios II: U.K. SMEs 1987–89.

interest and taxes) is higher for small companies than for larger companies.

(3) In manufacturing small companies are slightly more highly geared on the flow measure but slightly *less* highly geared than larger companies on the stock measure.

(4) If we compare the ratio of total loans to total assets, however, there is very little to choose between large and small companies in non-manufacturing. In manufacturing the larger firms are more highly leveraged using this measure.

(5) In both manufacturing and non-manufacturing small firms are much more reliant on short term loans. Thus in manufacturing long term loans are only 20.5% of all loans for small firms, but 61.7% of all loans for large firms.

Thus in manufacturing we find little difference in overall gearing but within the overall level of gearing a greater emphasis in small firms is placed on short term loans. The high reliance on short term finance provided by banks, and the relatively low proportions of assets financed by shareholders interests are clearly long run persistent features of small business finance. The same is true of the relative importance of trade debt, and trade credit and the relative unimportance of fixed assets in their balance sheet structure. Thus our results match the results of previous investigations for the 1960's and 1970's for the U.K. It does appear, however, that the extent of reliance on short term loans and overdrafts has if anything increased since the Bolton and Wilson reports where the differences reported between larger and small firms were somewhat less than those shown in Table I.

(d) *Profitability*

The implied relatively high reliance on internal funds makes assessment of profitability important in determining the growth potential of smaller firms. Table I shows that;

(1) The profitability of small manufacturing companies is below that of large manufacturing companies on each of the three measures shown. Thus for example the rate of return on total assets (ROTA) was 12.4% for small, and 14.3% for large, companies.

(2) The profitability of small non-manufacturing companies was above that for larger companies when measured as the return on net assets (RONA) or equities (ROE), but below that for larger companies on a ROTA basis. They earned a ROTA of 13.0% compared to the 17.6% ROTA of larger companies.

(3) Profitability estimates based on ROTA are relatively low for small firms because of their much higher reliance on short term liabilities in the form of trade credit. Netting out short term liabilities to calculate returns on net assets inevitably raises estimated small company profitability compared to large companies.

These results imply that the relative profitability of large and small firms has been reversed since the Bolton Report.

The Bolton Report provided estimates of ROTA, RONA and ROE for small and large businesses in 1968, whilst estimates of RONA for 1973–75 were prepared for the Wilson Committee. These estimates showed that small firm profitability was between 8% and 30% higher than larger company profitability, depending on the measure and time period. This superiority was also recorded in a number of other studies surveyed by the Bolton research team for the period 1958–68. It is apparent, however, that over the years shown the gap was narrowing, and that, as we have seen, it was reversed by the late 1980's.

We can probe a little further behind these profitability figures by making use of a specifically constructed panel data set covering the years 1977–83 which in part fills the gap in time between the profitability results of Table I and the Wilson and Bolton Reports (Cosh and Hughes, 1994). This data set has a number of advantages. First, it allows us to distinguish between different time periods, 1977–79 and 1980–82, so as to pick up any greater volatility in small business profitability in the face of recession in the early 1980s, and, secondly, it allows us to disaggregate by a wider range of sizes.

For the sake of brevity discussion is confined to one measure of profitability, the ratio of profit to net assets; (RONA); Figure 3 shows median values of RONA averaged over the years 1977–79 for 1,191 continuing companies ranging in size from £30,000 to £12.5 billion in terms of total assets in 1976 and for 1,185 companies in the period 1980–82. Once again smaller firms appear in general less profitable than larger ones but there is a non-linear relationship between size and profits. Thus the smallest 3 size classes show a lower RONA than the top 3 but the difference is only statistically significant (on either the mean or median measure) when sizes 1, 2 and 3 are compared with size class 4. Thereafter average RONA declines insignificantly with size.

The years 1977–79 were relatively buoyant compared with 1980–83. The results of an analysis of RONA for these latter years is also shown in Figure 3. The impact of the recession is dramatic. Whereas RONA falls from 9.9% to 4.7% for all companies, by far the most dramatic falls occur in the smaller size ranges, with size class 1 falling for example from 8.7% to 1.8%. The result is that size classes 1 and 2, with an upper limit total asset size of £500,000 in 1976, now have a significantly worse profit performance than size classes 4, 5 and 6, where the lower cut off point is £2.5 million. Size class 3 also has a substantially lower RONA than the large size classes but the wide dispersion of returns prevents this from being statistically significant.

From the point of view of the finance of company growth these findings highlight the relative financial volatility of small firms to the trade cycle (a volatility which is reinforced by an analysis of company failure in this data set (Cosh and Hughes, 1993)). They also confirm the relative riskiness of this sector.

3. Profits retentions and finance for expansion

Small firms are heavily reliant on retentions to fund investment flows. The relatively low level of profitability which we find for the small firm sector is coupled with an absence of dividend payment by them and hence a policy of maximum retention for growth and replacement investment. Thus the median company in the Cambridge panel with total assets of less than £2.5 million paid no dividends at all in the period 1977–79.

We can gain a further insight into funding patterns by switching from an analysis of company

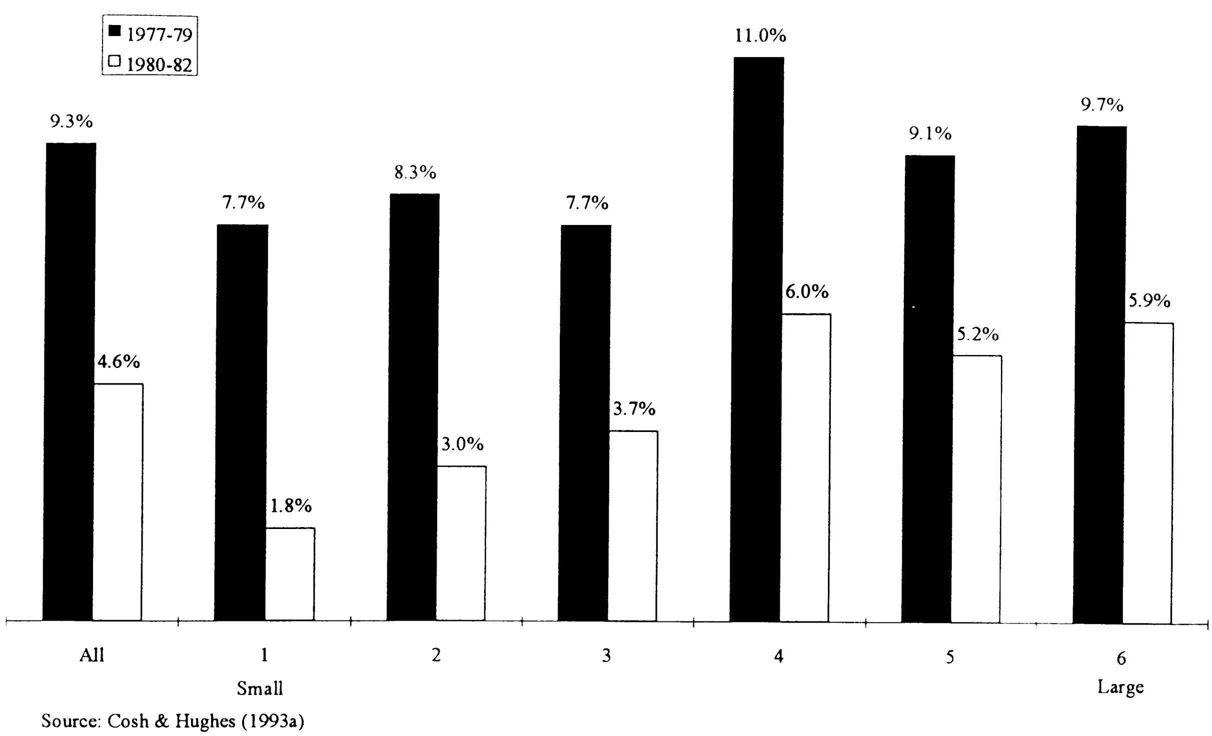

Fig. 3. Median profit rates by size of company.

accounts to the results of the Cambridge SME Surveys (SBRC (1992), Cosh and Hughes (1996)). Sixty-five percent of the 1991 Cambridge survey sample of over 2,000 firms had sought external finance in the three years 1987–90. The proportion in the Bolton sample was 26% but in that survey the question related to the previous two years. However, if we adjust the Bolton figure to 39% in order to make it comparable to the later finding, we can see a marked increase in the proportion seeking external finance. It is not possible on the basis of our study to say whether this is a trend or cyclical difference. Moreover the Dun and Bradstreet sampling frame on which the Cambridge surveys are based is biased towards firms seeking finance since it is a credit rating database. What is striking, however, is that of the 65% which sought finance in the period 1987–90, only a small number (25) failed to obtain some. This may reflect a reluctance to admit having sought finance and failed to get any or relatively easy financial conditions in the period 1987–1990. The Cambridge Survey of 1995, however, reveals similarly high success rates in the periods 1991–93 and 1993–95 in rather different financial conditions (Cosh, Duncan and Hughes (1996)) Taken as a whole these results contrast with earlier findings for the U.K. Thus in the Bolton sample about a third of those seeking finance failed to obtain any at all and so in that sense there may have been some closing of the small firms finance gap since then.

A comparison of the proportion seeking additional finance across various groups of firms in the Cambridge survey covering the years 1987–90 showed that there was little difference between manufacturing and services, whereas the Bolton survey found that manufacturing firms were far more likely (32% in the previous two years) to have sought additional finance than service firms (20% in previous two years). On the other hand, and like the Bolton survey, the Cambridge data show that larger companies and faster growth companies are more likely to have recently sought additional finance. In addition, a higher proportion of newer companies seek external funding.

Cambridge survey firms who had obtained external finance were asked to indicate the proportion obtained from different sources. This gives a clear picture of the relative importance of different sources of finance. The responses for the period 1987–90 are shown in Table II and Figure 4. Table II shows that banks are by far the most significant providers of finance to the small firm sector. The banks provided some finance to 84% of those who had raised finance, and a separate analysis shows that they accounted for more than half of the additional finance raised for 65% of the sample. Loans were dominant as the first source of finance sought after internal cash flow. The next most important source was hire purchase or leasing which was a source of finance to 45% of the sample firms which had raised new finance, and accounted for over half the additional finance in 14% of the cases. This has clearly grown in importance as a significant alternative to further borrowing since the Bolton Report and from the point of view of the contracting parties solves several moral hazard and default problems which would be present if assets were bought on the basis of debt finance. The Cambridge SME Surveys of 1993 and 1995 reveal a further shift in this direction (Cosh, Duncan and Hughes (1995), Cosh, Duncan and Hughes (1996)). The only other important source is partners or working shareholders who were identified as a source of finance in 19.5% of the firms in 1987–90. Table II and Figure 4 also show what proportion of the funds raised in the period 1987–90 came from these various sources. Banks accounted for 60% of total funds raised and hire purchase for 16%. Partners and Working Shareholders put up another 7.6%. Much further behind come venture capitalists (2.9%) and private individuals (1.7%). By 1995 the mean share of funding raised from banks had fallen to 50% and the mean share of hp/leasing risen to 31%, with only minor changes occurring in the importance of the other sources (Cosh, Duncan and Hughes (1996)).

When the 1987–90 Cambridge sample is divided into the different groups of firms the broad picture already identified is maintained, but there is some difference in emphasis across the groups. Newer firms raised a lower proportion of their additional finance from banks and hire purchase or leasing; consequentially, they were more reliant on other sources, particularly private shareholders (both working and other). This reflects the heavy reliance on this sort of finance in the start up phase. In a similar way service firms were less

TABLE II
Sources of additional finance for SMEs

Source of finance	All	Micro	Small	Medium	Larger	Older	Newer	Stable/ declining	Medium growth	Fast growth	Mfg	Services
% of respondents receiving additional finance from:												
Banks	83.7	80.5	84.1	85.7	90.1	85.4	81.8	82.4	84.7	87.4	85.6	81.6
Venture capital	6.5	2.4	7.1	13.4	6.3	5.5	7.4	4.8	6.0	8.3	7.5	5.4
Hire purchase/ leasing	44.6	33.3	50.3	46.2	41.4	50.3	38.8	38.1	51.0	47.8	48.3	40.4
Factoring	6.0	3.7	7.3	7.6	3.6	4.1	7.4	7.3	4.5	5.4	6.2	5.8
Customers/suppliers	8.5	9.8	7.7	7.6	9.9	8.2	8.7	11.7	7.4	8.3	8.9	8.1
Partners/working shareholders	19.5	24.6	17.4	25.2	13.5	15.3	23.7	15.4	18.4	23.7	15.0	24.5
Other private individuals	5.6	9.4	4.9	3.4	1.8	2.5	8.4	4.0	3.3	7.6	4.1	7.2
Other sources	9.7	8.1	9.3	11.8	14.6	9.4	10.0	9.5	9.3	10.1	8.9	10.6
Mean % share by source of finance:												
Banks	60.6	60.8	59.1	60.1	68.9	64.6	56.6	63.5	62.1	58.5	62.5	58.4
Venture capital	2.9	1.0	3.4	5.2	2.6	2.4	3.4	2.6	2.4	3.7	3.1	2.8
Hire purchase/ leasing	16.0	13.9	18.3	12.6	12.7	17.5	14.6	13.4	18.1	16.8	18.2	13.4
Factoring	3.5	2.2	4.1	4.2	2.4	2.2	4.5	3.9	2.7	3.1	3.3	3.7
Customers/suppliers	2.2	2.6	2.0	1.9	1.8	1.9	2.5	3.2	1.9	2.3	1.9	2.6
Partners/working shareholders	7.6	11.8	6.7	7.2	3.6	5.5	9.9	7.1	7.0	8.1	4.6	11.1
Other private individuals	1.7	3.0	1.5	0.8	0.4	0.6	2.8	1.1	1.1	1.7	1.4	2.0
Other sources	5.4	4.7	4.9	8.2	7.5	5.2	5.7	5.3	4.8	5.8	4.9	6.1
Total responses (no.)	1185	297	648	119	111	561	598	273	418	278	627	554

Source: SBRC (1992).

dependent on these two main sources and far more reliant on partners and working shareholders.

As might be expected, the fast growth firms appear to have drawn their new finance from a wider variety of sources than slower growing firms. Thus apart from factoring and customer/suppliers, both of which were of minor importance, the fast growing group had a higher proportion from each of the other sources. But even the fast growth group was heavily dependent on bank finance and obtained very little outside equity.

A comparison of size groups in 1987–90 shows that larger firms had the highest proportion of bank finance and that the micro firms were more reliant on private individuals, partners and working shareholders. The results also suggest that, whilst finance from venture capitalists is generally insignificant, its greatest impact was among medium-sized firms. Medium and Larger SMEs also have more term loans in the late 1980's. A further analysis of the interest payment structure of the surveyed firms as a whole also suggests some increase in the importance of term loans. Thus fixed interest payments as a percentage of all interest payments increased in importance between 1987 and 1990. Whereas 56% of firms had no fixed interest borrowings in 1987 this proportion had fallen to 47% by 1990, and the proportion of firms with fixed interest payments proportions in the range 1–49% rose from 21 to 28%. This trend has continued in the 1990s (Bank of England (1996)).

The analysis confirms the unimportance of outside equity as a source of new finance amongst small firms and even amongst those growing fastest; increasing debt, which in the period 1987–90 was for small firms primarily short term, was the overwhelmingly most significant route, followed by raising additional 'insider' equity capital.

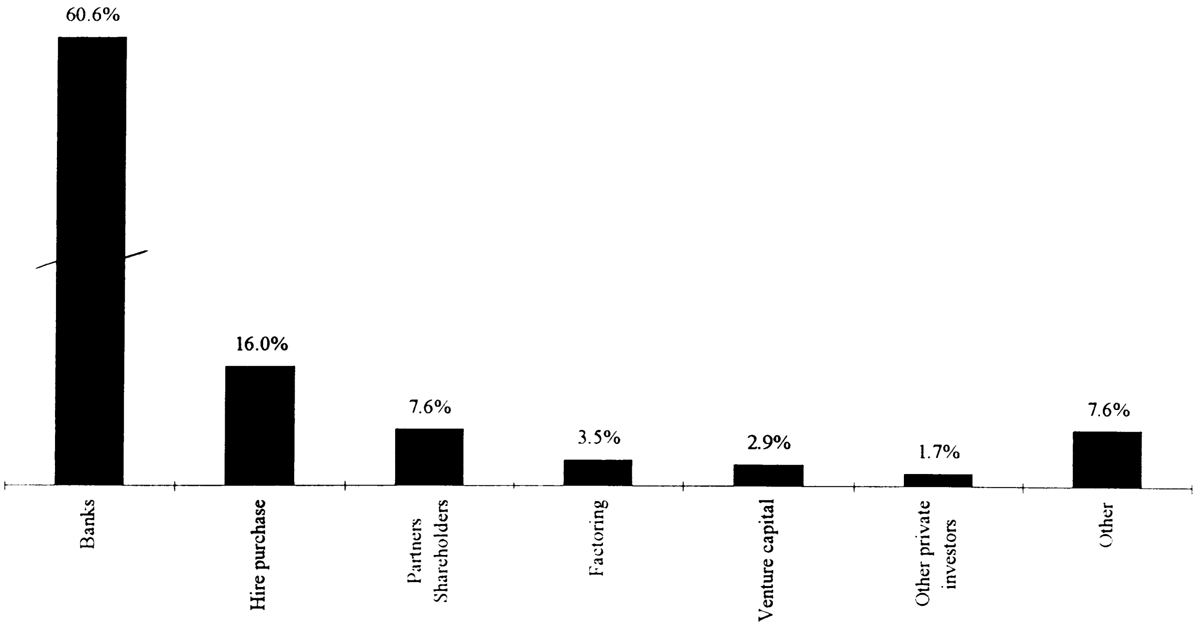

Fig. 4. Shares of amount of additional funding obtained by source.

This is consistent with a 'pecking order hypothesis' of fund raising (Myers and Majluf (1984)). Funds are sought in an order which minimises external interference and ownership dilution by leaving equity till last after retentions and debt have been exhausted. This also has positive signalling qualities in so far as preferring debt to an early issue of equity implies confidence in high returns and an unwillingness to share them with new shareholders. The upshot is that small firms are characterised by a relatively greater reliance on short term loans and overdrafts and a much smaller reliance on equity finance than are larger firms. This structure, is as we have seen, of long standing, as is the greater significance of trade debt and trade credit in their balance sheets. During the long boom of the 1980's it was associated with a substantial increase in short term gearing as small companies found it possible to gain access to bank finance on a large scale. The impact of high interest rates and recession were therefore even more damaging than they might otherwise have been when the long boom ended. For a sector dependent in the first instance on retained profits to finance growth the 1980's were not historically a particularly auspicious period for SMEs. Whereas in the 1960's and to a lesser extent the 1970's they had recorded somewhat higher returns than larger firms, by the 1980's the position was reversed. Although the quality of the data requires the exercise of some caution it appears that small firms suffered particularly badly from the impact of the recession of the early 1980's.

One important conclusion to emerge from this analysis is that the financial structure of SMEs may reflect well the wishes and strategies of their owners as much as constraints placed upon them by suppliers of finance. It is therefore necessary to probe qualitatively beyond the financial structure itself to address issues of financial constraints more directly. Here case study evidence (ACOST (1990)) supports theoretical arguments for some market failures on the loan and equity fronts for rapidly expanding or innovative firms, as well as the relative paucity of informal venture capital in the U.K. In the latter case in particular the Cambridge survey data supports case study material. Informal funds (i.e. supplied by private individuals who were not working partners or owner-directors[1]) amounted, as we have seen, on average to only 1.7% of total new funds raised by the Cambridge sample of around 2,000 SMEs in the period 1987–90, whilst formal venture capital averaged around 2.9% with little further change by the mid 1990's (SBRC (1992), Cosh, Duncan and Hughes (1996)). This is also confirmed using wider sources of data for the 1990's (Bank of England (1996), Buckland and Davis (1996)). The contrast with the United States is striking. In that country informal venture capital is twice as important in quantitative terms as institutionalised venture capital, (Wetzel (1987)). However, the Cambridge Survey also revealed that informal capital was at its most significant amongst micro-firms employing less than 10 people. In those firms it accounted for 3% of new funds compared with 1.0% from formal venture sources.

The nature of this type of informal finance is explored in the ESRC funded work by Mason and Harrison (1994). One of their main contributions, in the first systematic attempt to survey this sector in the U.K., is to identify the characteristics of U.K. informal investors, ('business angels') and their investment practices. The problems of surveying this sector are formidable and are well set out in their work, one part of which reports the results of a postal questionnaire sample of 78 firms supported by 8 face to face interviews. The small sample sizes reflect the paucity of systematic information to serve as a sampling frame as well as the reticence of 'angels' (shown to be predominantly middle-aged businessmen with a continuing interest in other business(es) they have founded) to reveal themselves to public gaze. Mason and Harrison's analysis confirms the role played by 'business angels' in supplying relatively small sums (median value of around £22,000) to smaller businesses that is suggested by the Cambridge Survey results. Their detailed analysis shows that this reflects the relatively modest incomes of business angels (only 16% reported earnings above £100,000), their small individual investment portfolios (75% had invested under £50,000 in total in the previous three years, with only 12% of individual investments in amounts over £50,000), and their reluctance to take part in syndicated deals (66% always or usually acted independently). Nevertheless, the highly skewed nature of both income and wealth in the Mason and Harrison sample meant that in total their 86 respondents had available investible funds amounting to nearly £10 million.[2] In addition to their potential and actual role as financiers, the strong entrepreneurial and managerial background of the typical investor in their sample meant that they typically played a 'hands-on' role as minority shareholders, joining the board in around 27% of cases, and playing a purely passive role in only 20%. Whilst this may be beneficial in cases where injections of both expertise and finance are required it may have costs in terms of conflicts over strategy and control where they are not (Harrison and Mason (1992)). Moreover, given that over 50% of the sample expected to 'exit' from their investment within 3–5 years, the implications from the point of view of growing medium-sized independent companies are not necessarily promising. Indeed, as Mason and Harrison note, U.K angels are less 'patient' than their U.S. counterparts, and more likely to sell to 'outsiders' via merger or stock market flotation than to sell their shares to 'insiders'. From a policy point of view, what emerges most strongly is that if this sector of the financial market is to play a more significant role a greater degree of information exchange about potential investors and investment opportunities is required. Thus Harrison and Mason show the essentially ad-hoc nature of much business angel search and referral activity. The essentially individualistic nature of the informal investment activity which their survey reveals leads the authors to conclude that one possible avenue for policy intervention is to be found in the promotion, especially at a local and regional level of information brokerage, either through the TEC system or the Business Link 'one-stop shops' introduced by the DTI.[3] The informal investors investigated by Mason and Harrison are primarily interested in high growth potential businesses, many but not all of which are to found in sectors where innovation intensive activity offers the prospects of spectacular breakthroughs. The financial problems facing these 'New Technology Based Firms (NTBFs) has been of particular policy concern, not least because findings such as those of Pavitt et al. (1987) have suggested that the share of innovations accounted for by smaller firms since the 1950's in the U.K. has outstripped the contribution which might have been expected given their shares of output or employment. It has been suggested in the reviews by Barber et al.

(1989) and by ACOST (1990) that, although NTBFs play a crucial role in the economy, they find it disproportionately difficult to obtain appropriate financing from the institutions. This is because such firms are perceived to be particularly risky for several reasons. The first is they are frequently attempting to introduce products and processes which are new to, and untested in, the market. Secondly the firms are often in industries where rapid developments make existing technology obsolete and thirdly they are often in businesses which have only a single product. Finally the businesses are often owned and managed by individuals with stronger technical than business skills. For all these reasons it is not surprising that studies such as those by Oakey (1984) suggested that bank finance is significantly less important at start up for NTBFs than is the case for conventional small businesses. Even so, these results contrast with those of Monck et al. (1988) which indicate little difference in the ways in which high technology firms are initially funded, compared with small businesses as a whole.

Moore (1994) provides a detailed analysis of the issue. He takes 292 high technology small companies and compares them with more than 1,700 smaller companies which are not in the high technology sector. Both groups are asked the same questions about the extent to which a range of factors have constrained the growth of their business. For both high technology *and* conventional firms, finance constraints are seen to be the most important. In a multiple regression analysis Moore demonstrates that the businesses which are most likely to report financial constraints are those which are young, in the manufacturing sector, have below average profitability and are smaller. Holding these and other variables constant, Moore can find little evidence that the high technology business is more likely to experience difficulties in obtaining finance than its counterpart in the conventional sectors. Indeed it appears to be the case that the small high technology firm is, if anything, more likely to be in receipt of venture capital and support from private individuals (Angels) than is the case for the conventional firm. It is the *youth* and lack of track record of these firms rather than their hi-tech nature as such which appears to constrain their access to funding. Since they are relatively young and small their plight is however a specific reflection of several problems facing the SME sector.

The second special case is the financing of ethnic or non-white businesses. The central issue here is whether there is evidence of the owners of these businesses being denied access to loan or equity capital on racial grounds and whether the mode of financing influences the performance of the ethnic business sector.

The major research finding on this topic in the United States has been provided by Bates (1991). Bates' work finds that in the United States start up businesses established by blacks tended to receive smaller loans from banks than white owned start ups. Secondly he found that black-owned firms were under-capitalised, compared with white owned firms.

Bates hypotheses that commercial banks are more likely to lend to individuals with more human capital, more equity and with demographic traits that are associated positively with business viability. In this context human capital is likely to be reflected in the level of education of the individuals, their age, whether or not they have previous managerial experience and family small business background. The first key result which Bates generates is that, even when these factors are taken into account, it is still the case that the loans made to white business start ups exceed those made to black business start ups.

Bates then shows that it is *lower* levels of capitalization which are associated with higher risk of business failure. From this he infers that at least part of the observed higher failure rate of black owned firms reflects this lower capitalization and that, most significantly, their failure rates would be no different from white-owned start ups if they received a similar level of external loan.

Research on the financing of ethnic businesses in the United Kingdom in the ESRC programme has not made use of the huge databases or the statistically sophisticated techniques which are employed by Bates. Nevertheless the ESRC funded work by Jones, McEvoy and Barrett (1994) provides helpful insights. They review the financing of both white and non-white businesses. They show that the most striking difference between ethnic groups, in terms of mode of financing, is not between white and non-whites, but between Asians and Afro-Caribbeans. They show that Afro-Caribbeans are perhaps twice as likely to experience problems obtaining bank loans as white applicants. Secondly they show that the Asian business is significantly more likely to have been established using loans from family or friends than is the case either for white or Afro-Caribbean businesses. Thirdly they point to recent, but highly significant, changes in the ways in which Asian businesses are being financed. They suggest that, if anything, U.K. banks now look *more* favourably upon the Asian business owner, than upon the white business owner. However, in a very interesting analysis of those businesses established by Asians which have been funded 100% by the bank, the authors show these are much more likely to have been started by British-born Asians than those born overseas, and more likely to have been established by Asians with higher educational qualifications.

In their comments upon how matters are likely to change that the authors offer important policy perspectives. Although there is now clearly a much greater willingness of banks to support Asian owned businesses, the evidence is that bank support is more difficult to obtain for businesses in the non 'traditional' areas such as manufacturing than in the 'traditional' areas of food retailing and confectionery, tobacconists and newsagents (CTNs). Thus they point to the changing character of the Asian entrepreneur in the 1990s, as being more likely to be British born and educated to a high level, more likely to be seeking finance for a business outside the traditional areas and less likely to either wish to, or be able to, rely upon finance from family sources. It is unclear whether the banks are yet targeting, or even aware of, this type of shift.

To summarise, there does appear to be clear evidence of market imperfections in the financing of black businesses in the United States. Fully comparable work has not been conducted in the United Kingdom but, that which has, does not suggest any clear market failure in the financing of Asian businesses. The only major reservation is whether banks are sufficiently aware of the 'new' type of entrepreneur emerging from the Asian community. So far as Afro-Caribbean businesses are concerned, these are clearly very different from Asian businesses and do experience significantly greater problems in both raising finance, and in their relationships with the banks. Whether this constitutes an illustration of a market failure, or whether it merely illustrates the higher risk associated with these types of businesses is not clear from the research conducted so far.

4. The implications

To what extent does the evidence presented here support, or undermine, the view that access to finance has inhibited the contribution which small firms make to the U.K. economy? Do the papers provide further evidence of "gaps" or "market failure"? If so, what should be done to rectify these matters?

The evidence in support of the existence of "gaps" is provided mainly by Mason and Harrison in their analysis of Business Angels. They suggest that many such individuals are seeking to make further investments in appropriate smaller companies, but are unable to obtain a sufficient flow of suitable proposals. Mason and Harrison also suggest there are business owners, whose firms are constrained in their growth by a "shortage" of equity, and who would be prepared to share that equity with informal investors. The clear implication of their research is that information barriers exist between the two groups, and that it would be beneficial to the economy as a whole if these barriers were overcome.[4]

However, little further evidence emerged from the ESRC research programme or the subsequent Cambridge surveys of 1993 and 1995 to suggest that general gaps exist in the financing of small firms, although it must be noted throughout that invariably such evidence arises from the analysis of **surviving** firms and severe financial constraints could have produced failure or takeover (Cosh and Hughes (1994) and Cosh, Duncan and Hughes (1996)). Bearing this in mind financial constraints did not appear in areas where they might be expected. For example, Jones, McEvoy and Errett in their paper on the financing of White and Ethnic Businesses find no difference in this respect between Asian and White Businesses. They do point to problems experienced by Afro-Caribbean business owners, but these may reflect both the sectoral composition and poorer performance of businesses established by these groups. The fact that they find that discrimination occurs does not, in itself, imply a market failure without further work on the relative characteristics of these businesses.

The same principles apply to the findings by Moore. He shows that the businesses which are most constrained are those which are young and small – and therefore likely to appear most risky – and manufacturing businesses where the amount borrowed is likely to be higher than for service sector businesses. What Moore does not find, although he explicitly tests for it, is evidence that when age, size and sector are taken into account, businesses in the high technology sector are more likely to be finance constrained than those operating in the more conventional sectors. Although he does report that both groups claim financial constraints to be their most significant barrier to growth. What this points to is special care in dealing with young and small firms, NTBF, and manufacturing firms. Distinguishing between those who want to grow and have the non-financial capacity to do so and those who don't, and dealing with the specific risk assessments of high-tech firms, remain major challenges for lenders.

So, what should be done? One role for government is that of encouraging the sharing of both the risks and returns of business ownership between the providers of finance and the entrepreneurs. One illustration of moving policy in this direction would be to specify, a substantial minimum share capital for those wishing to establish limited companies and gain the benefits of limited liability whilst leaving businesses with little aptitude for growth to remain unincorporated.

The provision of equity funding more generally will always be problematic for smaller firms given the internal pressures to maintain independence and the 'signalling problems' associated with issuing equity. Entrepreneurs totally convinced that their business proposition will be hugely successful, is very unlikely to be willing to share the fruits of that success. As the National Westminster Bank put it to the House of Commons Select Committee:

> where the businesses had real confidence in themselves or their products or their customers, they would not give up that equity. Conversely, where we found businesses that lacked direction very badly and where the management was extremely weak and did not have much faith in their product, in those situations they will give up equity (HMSO (1994) pp. 107, 287).

On this basis many proposals which are put to venture capital organisations or individuals are likely to include a high proportion of cases which should not be supported and the challenge is to sift these out on other criteria. The development of clearing house schemes to encourage 'investment angels' is worth pursuing here. So too is the consideration of schemes to encourage 'plough back' by the *owners* of SMEs either by tax breaks for retentions used to fund certain types of 'qualifying' investments, or more general differential taxation of retained profits. The fate of the BES suggests that technical progress in tax avoidance may subvert even the best intentioned of schemes but that should not stop the search for an effective one.

On the loans front smaller business may have a role to play independent of government if together with, or independently from, banks they could form consortia to underwrite their own loan applications. This would capitalise on information held by the firms themselves and solve some of the information asymmetry problems which bedevil the lending market. The development of Mutual Guarantee Schemes along these lines is common in Europe. There is a seedcorn role for Government here in overcoming 'public good' problems in setting them up though not necessarily in maintaining them where they are in operation (see Hughes (1992)).

There is a case too for a 'public goods' role for state or region backed development finance banks for smaller firms. The prime national example of this sort of institution is the Kreditanstalt fur Wiederaufbau (KfW) in Germany. Its quasi-government status and long term performance has given it high credit ratings in its pursuit of international and national funds which it uses to refinance private sector commercial long term loans to SMEs. SMEs benefit by lower interest rates than would otherwise be available, and more generous phasing of repayments than would otherwise be the case. The recent Trade and Industry Committee's recommendation that a loan funding scheme along these lines be investigated should be followed up. The importance of both the mutual guarantee approach and the KfW development bank approach is that there is explicit recognition of a public good problem is SME financing but the commercial banks are not asked to solve it. They make commercial lending decisions in circumstances in which either consortia of borrowing companies offer guarantees against cost of default or state backed (but *not* state funded) refinancing arrangements are available.

Developments of this kind should, however, enable banks to shift emphasis away from collateral – backed short term lending and towards longer term lending based on human capital and business prospects rather than carcase valuation. Cosh and Hughes (1994) note that the latter has happened to some degree but it needs to go further. One way in which banks can build a longer term and more fruitful relationship with their client base is to build upon and strengthen decentralised lending decisions based in turn upon more stable regional career patterns. Lending decisions could then be more satisfactorily based on information gleaned from a longer-term association of individual bankers with a given regional or local community. This would also stimulate and develop an information framework to bring together informal investors and entrepreneurs as recommended by Mason and Harrison. Whether this decentralised 'relationship' banking is compatible with cost effectiveness for the Banks is a moot point. An alternative way forward may well, on the contrary, turn out to be standardised credit scoring for the smallest borrowers and a more resource intensive but cost effective relationship with companies with sufficient scale, and growth potential to be future candidates for stock market flotation.

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Notes

[1] Some businesses angels could be classified as partners/working shareholders, so that a wider definition of !informal funds might increase its apparent importance somewhat.

[2] This amount comprises both investments in the previous three years plus amounts available for investment.

[3] Some TECs have already operationalised this "match making" function.

[4] Harrison and Mason also imply that latent demand for equity finance would be realised if angels were seen to be more accessible. They regard the key step to be a demonstration to business owners such as angels exist and are prepared to make small investments.

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