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SMALL BUSINESS RISK
A FIRM BANK PERSPECTIVE

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SMALL BUSINESS RISK:
A FIRM AND BANK PERSPECTIVE

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Abstract
Small firms are more risky than large due substantially to the riskiness their environment imposes rather than their organisational structure. Even so the role of human capital is central to small firm performance, and those business owners with less human capital have businesses which are more prone to failure. This 'excess' risk is reflected in their 'excessive' failure rates internationally, relative to their larger counterparts. The paper shows how small firms and banks deal with the additional risk that the small business environment presents. From the banks' perspective, collateral provision, preferred creditor status, higher margins, debt rationing, closer customer links (including specialist advisors and bespoke products) and credit scoring systems are among the measures identified to reduce the 'excessive' lending risk the small firm presents to the bank. From the firm's perspective, we identify shorter term investments (in both fixed and human capital, eg training), short-term employment contracts, short term funding of activities (eg overdrafts versus term loans), product diversification and more speedy response to market changes as major components in firms' strategies to deal with 'environmental' risk.

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1. INTRODUCTION

Each year throughout the 1980s about 11% of the total stock of businesses in the UK which started the year failed to survive the 12 months. Almost all these businesses are small.

Although figures are no longer produced in this format, Ganguly (1985) showed the failure rates of the smallest sizes of businesses in the UK in 1980 were more than six times higher than failure rates for larger firms.

By the important objective measure of failure therefore, small businesses are more risky than larger firms. That risk is borne, in principle, by two main parties: the entrepreneur(s) who own the business, and the creditors of the business. The latter can be considered to be sub-divided between those institutions or individuals providing finance directly and those providing other inputs. For shorthand purposes, in this paper, the providers of finance are referred to as banks and providers of other goods are referred to as trade creditors.

This paper considers how the two parties adjust and respond to the risks involved in small businesses. It examines the characteristics of a small firm which distinguish it from a large firm, other than size per se. These elements both 'explain' the high risk and also illustrate how the firm itself and its owners respond to that risk. The paper then examines how banks respond to the risk involved.

The ultimate purpose of the paper is to provide an agenda for research designed to better understand how banks 'manage' the risk of lending to small businesses. It is intended that this better understanding should lead directly to improved practice. The paper begins, however, with a brief review illustrating the risky nature of small firms.

2. SOME DATA

The survival/non-survival of businesses is clearly related to their size. For example, in the United States, Dunne, Roberts and Samuelson (1989) in their study of manufacturing plants, showed the average failure rates for plants with between 5 and 19 employees was 104.7% higher than for plants with more than 250 employees. In the UK, Gallagher and Stewart (1985) found a firm employing less than 20 people was 78% more likely to fail over the next decade than one employing more than 1,000. As noted earlier, deregistration rates for UK firms registered for VAT are six times higher for the smallest firm than for the largest. Finally, for UK non-financial companies, Dunne and Hughes (1992) found non-survivors over the 1980-85 period constituted 27% of those with Net Assets of less than £1 million, compared with 14% of those with Net Assets exceeding £64 million.

Closely allied with the concept of size is that of the age of the business. It is clear from Figure 1 the youth of the business is also positively related to its likelihood of failure. This clearly shows that, for businesses registered for VAT, the highest failure rates are experienced by businesses in the 18 months to 3 year old age category. Once businesses are three years old or more, de-registration rates fall, but only slightly and at unpredictable rates.
Figure 1: Half-year VAT Deregistration Data by Age

Source: (Daly (1987))

The data shown in Table 1, taken from Evans (1987) for the United States, also emphasises that not only is size of firm an influence upon survival/non-survival, but also firm age. Thus businesses which are smallest and youngest have the highest failure rates and businesses which are largest and oldest have the lowest.
Table 1: Annual Exit Rates of US Manufacturing Firms

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>0-6</th>
<th>7-20</th>
<th>21-45</th>
<th>46-95</th>
<th>95+</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-19</td>
<td>40</td>
<td>22</td>
<td>20</td>
<td>17</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>20-49</td>
<td>32</td>
<td>14</td>
<td>11</td>
<td>11</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>50-99</td>
<td>31</td>
<td>13</td>
<td>10</td>
<td>14</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>100-249</td>
<td>25</td>
<td>12</td>
<td>11</td>
<td>7</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>250-499</td>
<td>32</td>
<td>13</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>500-999</td>
<td>21</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>1000+</td>
<td>-</td>
<td>13</td>
<td>9</td>
<td>2</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Evans (1987) p. 662

From the viewpoint of the banks it is therefore interesting to examine survival/non-survival of the most vulnerable group of businesses - those which are newest and youngest. Figure 2, taken from Cressy and Storey (1995), shows the survival of new business accounts with National Westminster Bank over a five year period. Over that time 80% fail and 20% survive. The diagram also shows the survival rates of another cohort of businesses established for three and a half years. These exhibit, during their lifespan, a very similar pattern to the longer-established businesses over their first three and a half years of life. An interesting point here is that the earlier (1988) start ups were established during prosperous macro economic conditions, compared with the later (1991) start ups which were begun in recession. As noted elsewhere (Storey 1994) this suggests that age and size are stronger influences upon the survival/non-survival of small firms than factors such as macro economic circumstances, sectoral influences, location etc.
Figure 2: Survival Analysis by Time Trading

% of original sample surviving

Source: Cressy (1995)

But business risk is not just about statistics. It is also about individual risk perceptions and about real people putting their own time, commitment and personal savings into an enterprise which can go badly wrong. A graphic case is reported by McDonald and Coffield (1991). They describe Lynne, a young mother living on Teesside who is asked why she established her businesses. This was her reply:

"It was something I had to try. I was getting nowhere. I couldn’t see any future in what I was doing. I’d levelled off and I wanted to climb. I wanted self esteem. Looking back it’s been totally the opposite. I’d had two relationships that’d failed. My life has been a total failure since leaving college to now. I needed something to succeed. As it happens, I failed in that as well. Perhaps I’m just a born failure. But at least I’ve had the experience. I haven’t just sat back moaning and on the dole. I’ve tried to get out of the poverty trap. Fine, it didn’t work but at least I’ve gained the experience.

So now a year later I have about £10,000 debts and I can’t afford to declare myself bankrupt so that amount is rising with the interest. I got taken to the High Court by a supplier for £1,300. Then I had the County Sheriff on my doorstep with a possession order. Because he was a nice chap, and he could see I had a kid, he left the furniture but he had possession of them so if I took anything out of the house or sold it, I would be charged with theft. So he owns the furniture and I’m being charged interest on that
at 27 pence a day and fees of 58 pence a day and that has been going on since last year. The taxman has also caught up with me and he wanted to take the furniture, but he couldn’t ‘cos it belonged to the County Sheriff. I’m between the devil and the deep blue sea. I’m totally in the dark at the moment about what I owe people but I can’t phone them to find out in case that reminds them about it. I’m stuck - just waiting for the axe to fall. I could have the £10,000 hanging over me for the rest of my life.

I went through hell mentally with it. Strait-jacket times, St Nick’s here I come”

In our view no statistics can encapsulate better the risky nature of owning a business.

3. WHY ARE SMALL FIRMS DIFFERENT?

The theoretical framework for this paper derives from the view that the issues facing smaller and larger firms, and their behavioural responses to them, differ fundamentally.

As Edith Penrose (1959) p 19, points out:

“The differences in the administrative structure of the very small and the very large firms are so great that in many ways it is hard to see that the two species are of the same genus...... we cannot define a caterpillar and then use the same definition for a butterfly”.

The converse is equally true. Using the Penrose analogy, we cannot assume that a caterpillar is a small butterfly. Instead we propose to take the characteristic of the small firm - most notably its risk/uncertainty profile - and theorise upon the implications of this for the firm itself and for its suppliers, most notably the bank. In undertaking this we draw heavily upon the arguments initially articulated in Wynarczyk et al (1993).

The prime uncertainty faced by the small firm is external to the business. Many small firms exhibit the characteristics of the firm in perfect competition; having no power to influence market price by adjusting the quantity of output produced. Small firms generally have a very small share of the market and, even when this is not the case, fear being unable to resist the entry of other firms into the market place. For this reason they feel constrained about raising their own prices to a level which makes entry attractive to others. The Cambridge (1992) study showed the bulk of small firms continue to be heavily dependent upon a narrow range of customers, and that little has changed in this respect since the Bolton (1971) report. The Cambridge study also demonstrated the bulk of small businesses were producing ‘standard’ products and saw their comparative advantage being in terms of price. Many small firms can therefore be characterised as ‘me too’ businesses.

For all these reasons the smaller business has significantly less credibility with either its suppliers or its bank as compared with larger firms. Even when the objective assessment of risk is the same, banks may be more likely to foreclose on the smaller firm because it is part of a more ‘risky’ group. For example if the bank or a trade creditor obtains information that a

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‘St Nicks’ is the local mental hospital.
particular set of financial ratios used as forecasters of impending closure are identical to those of large firms, closure actions may still be more likely to be taken for the small firm on the grounds that it is a member of a more risky group.

This contrasts with the larger firm which experiences considerably less uncertainty in the market place. Larger firms are more likely to have some market power and occupy a market which they feel more confident about protecting. Furthermore, any market uncertainty faced by large firms can often be transferred in part to smaller firms by the device of outsourcing. (Cressy and Storey, 1995). If demand for the larger firm’s product then falls, the subcontractors bear the loss of unsold stocks. Finally, large firms are more likely to have de facto limited liability (often a myth even for small incorporated firms) which enables them to transfer some of their financial risk to their creditors.

Instead the uncertainty facing large firms is often ‘internal’ uncertainty. This stems from an inability to ensure that decisions made at the top of the organisation are implemented throughout. An example from the banking industry is to ensure that decisions made in Lombard Street are implemented in High Street branches by sub-managers in South Shields and St. Ives. In such large organisations a key role is played by middle managers and efficient management is seen to deliver uniform high standards throughout the organisation. Management therefore, which is the medium through which decisions are transmitted, has to be seen to have a personal commitment to these decisions recognising that implementing them is in their personal interests.

But these decisions made at the top of large organisations have to be made on the basis of information provided by the personnel in the large organisations who have direct and frequent customer and supplier contact. Information is therefore transmitted through the medium of the middle management down from the top of the organisation and up to the top of the organisation. Using the banking analogy above, it is important for the customer response in St. Ives and South Shields is fed into decisions made by the top management. The efficiency with which this process is conducted is at the heart of the efficiency of the organisation. Different large companies achieve this with different levels of efficiency. ‘Internal’ uncertainty therefore reflects the extent to which there are barriers to the flow of information and the implementation of decisions in a large business, from the top down and (in the case of information flow) vice versa.\(^2\)

Middle management plays a minimal role in small firms. Here it is the owner(s) of the business who are likely to undertake a wide variety of different tasks and to have regular contact with their customers and suppliers. They are also clearly aware of working conditions and worker sentiment through regular contact with their workforce. The small firm is therefore significantly less likely to experience ‘internal’ uncertainty, but more likely to experience ‘external’ uncertainty.

\(^2\) The work of Prais (1978) on strike behaviour relates closely to this concept of linkages. He argues that larger firms in the 1960s and 70s were significantly more strike-prone than small firms as a result of their higher chances of random linkage breaks in the chain of communication. This relationship depends on the precise linkage structure of the organisation, with some organisation types of a given size being significantly more breakage-prone than others.
4. THE BANKS’ RESPONSE TO SMALL BUSINESS RISK

This section examines the response of suppliers to the clear risk of supplying to smaller businesses. The bank is considered as one of a number of suppliers to a business. The commodity which it supplies is finance and it is clearly a privileged supplier, in the event of the demise of the firm.

The risk-reward structure of the contract influences the banks’ willingness to supply funding to the (high risk) small firm. The nature of the rewards varies according to the traditions of the banking system between countries. In Germany, for instance, banks are more likely to be involved in ownership or part-ownership of businesses than in the UK. In the UK banks have traditionally focused upon loan capital, with venture capital organisations providing equity or risk capital. This paper assumes a UK model with the banks providing loan and overdraft facilities, rather than equity.

Banks can respond in five ways to the high risk of failure in small businesses.

The first is to minimise ‘downside risk’ in the event of the business failing. In the UK legal framework the bank is given priority status over other creditors in the event of a liquidation. The bank may also seek to ensure the loans made are secured against either the assets of the business or against the personal assets of the business owner. In the event of the business closing the bank will therefore have a claim on specific assets. Of course the business may close with insufficient assets to pay even the priority creditors. Risk is particularly likely in the case of smaller firms most of which are in the service industries. To minimise its losses in this event the bank may seek to secure loans on the personal assets of the owner(s) of the business, even if there is a legal distinction between the business and its owner. In short the bank seeks collateral.

A second dimension of minimising downside risk is by transferring it to a third party - in most cases the government. This is the basis of the Loan Guarantee Scheme, which has been in operation in the UK since 1981. [NERA (1990), Cowling & Cressy (1995)]. The Scheme has undergone many changes of detail but in principle several features have remained constant. The first is that it is a loan scheme which focuses upon businesses with insufficient collateral for a loan, but with an apparently viable business plan. Secondly, the loan is issued and administered by the bank, but the government acts to guarantee between 70% and 85% of the loan. Thirdly, the firm is charged a ‘risk premium’ on the loan, over and above the interest rate charged by the bank. Banks have often used the scheme to provide ‘top up’ funding for projects which are part-secured.

A second response by the bank is to identify low risk businesses. The bank monitors and assesses cases where loans have been made and repaid, and those cases where loans have been made and not repaid. It seeks to identify the characteristics of businesses which are more likely to survive and to focus its lending upon these groups. Thus Cressy and Storey (1995) show there are a number of ‘human capital’ characteristics of individuals - most notably their age and work experience - which are likely to influence the survival/non-survival of businesses, and which the bank can identify. More traditionally, the business owner seeking funds is expected to have at least a rudimentary business plan demonstrating market awareness and projected costings allowing the bank manager to assess the viability of the proposal. In these
ways the bank seeks to identify lower risk business and avoid high risk proposals, or price them at a higher risk premium, helping to circumvent a pre-existing asymmetric information problem.

A third response of the bank is to closely monitor the businesses to which it provides loans. Periodically - perhaps every 3 or 6 months - the business is required to inform the bank of certain indicators of performance. The bank itself is able to monitor transactions conducted and the draw down of loans. If there is evidence that performance is failing to meet targets and that the loan is more seriously at risk, the bank will seek meetings with the business owner to decide upon action to protect the loan.

Fourthly, the bank responds to the risk by adjusting the margin and other terms and conditions in the loan contract. In the most simple of cases the bank would simply charge a risk premium to cover lending to this sector. However Stiglitz and Weiss (1981) show, under conditions of asymmetric information, this can be counter-productive. Raising interest rates can deter low risk but low return borrowers, but not deter high risk and high return borrowers. In a situation in which the bank only gains when the business survives and is able to repay the principal plus interest, but in which it does not gain any additional payment if the business is very successful, the bank clearly prefers low risk and low return projects. As noted earlier UK banks do not fully participate in upside gains since they are not shareholders. Banks in practice are therefore reluctant to use higher interest rates as a risk premium. Instead the banks response to the risks of lending to the small business sector are more likely to be a refusal to lend at any price (credit-rationing), or to lend only where collateral is fully provided, rather than to use the price mechanism, with lending based on the net present value of the project. Hence the small business sector is often perceived as experiencing a ‘shortage’ of funds. Debate then proceeds as to whether or not there is a market failure in the sector because of the unwillingness of the banks to use the price mechanism to equate supply and demand [Binks, Ennew and Reed (1992)].

A variant upon this strategy is that the bank may indicate a willingness to change the terms and conditions of the loan, provided certain actions are taken by the firm. For example, several banks are currently involved in an experiment, undertaken with Norwich City College, in which those small firms which complete a course at the College are eligible for a reduction in the rate of interest charged on their loans. The assumption is that the course supplements the human capital of the individual owner and so makes the business less likely to fail. In principle, it is therefore in the interests of the bank and the business owner to participate on the course. The success of the Scheme is being watched closely by HM Treasury since the Chancellor, in his November 1994 Budget Speech, floated the idea of a Financial Management Certificate which, once obtained, would ensure lower interest rates on bank loans. Since then a consultation paper on the topic has been launched by the Treasury.

Fifthly, the bank can develop longer-term relationships with small portfolios of business customers allowing an in-depth knowledge of, and response to, their needs. This approach allows the bank to circumvent the asymmetric information problem to a considerable degree, but also creates (Sharpe, 1990) a bilateral monopoly situation, in which the firm’s bank knows more about the firm than other banks. This means that for low risk firms, other banks will offer higher cost finance than the firm’s ‘own’ bank, thus locking the firm into the relationship.
By contrast, the high risk firms will find that the long-term banking relationship means they are offered higher margins than average, providing them with an incentive to switch banks.  

'Relationship' banking, as this concept has come to be known, differs from the traditional 'account' banking because the focus is much more on the firm as the profit centre rather than the account. This has only been made possible by a revolution in bank accounting systems, and allows the bank to offer customer-dedicated products, tailored to individual requirements, and to offer the full range of products under one roof. UK banks such as NatWest, for example, have already established substantial numbers of Business Managers, who operate closely with a smaller portfolio than the traditional bank manager, and who offer a one-stop-shop for their full range of banking requirements.

In the context of ever-increasing competition in the financial sector, and the battle for market share in a finite market, the attempts by banks to 'bridge the gap' has become a major plank of their strategy. Moreover, research has shown that firms that do not receive good service from their bank will be more likely to switch banks in response, thus increasing the uncertainty faced by the banks if they do not deliver a quality product. Haines, Riding and Thomas(1991) show that 'service' includes not merely satisfactory loan parameters such as interest margins, collateral requirements and arrangement fees, but also non-financial considerations. Competence of the bank manager, services offered, speed of loan application processing, accessibility of the manager and the continuity of the same all rank highly in the customer's judgement of the bank.

Finally, it appears that at least one of the major UK banks (Barclays) has changed the products which it offers to its small business customers. The striking change is shown in Figure 3, illustrating the increased importance of term loans as opposed to overdrafts in their lending portfolio. This means that banks - casual observation suggests it is not simply Barclays - are appearing to favour longer term loans at the expense of shorter term overdrafts which can be removed almost immediately. At first sight this suggests the additional risk was being shouldered by the banks but, in the context of the other developments chronicled in this paper, this seems unlikely.

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3 In evidence to the Treasury and Civil Service Select Committee 1990-91 the then Chairman of Barclays Bank said "we find, as a matter of experience, something like half of all bad debts are from customers we have taken on from other banks in the last year or two", 19 June 1991 para 36

4 Until recently accounting systems in the banks have made it impossible for Head Offices to assess the profitability of a customer across a range of products
5. SMALL FIRMS’ RESPONSE TO RISK

Given this both risky and uncertain environment both for their final products and their inputs, in what respect does the behaviour of small firms differ significantly from that of large? This section identifies several dimensions in which the behaviour of the two groups of firms clearly differs.

The first is that the time horizon of small firm decision making is more short-term than for larger firms. The issues which face small firms are immediate - such as ensuring cash flow is sufficient to enable the wages to be paid at the end of the week, or that the most pressing of supplier invoices are covered, or that overdrafts, which may be required to be repaid overnight, do not lead to the demise of the firm.

For this reason the small firm favours investment which yield returns in the short, rather than the long-term. For example, workers are significantly more likely to be in receipt of training in larger firms than in small. Cambridge Small Business Research Centre (1992) showed that 69% of small firms, 85% of medium firms and 87% of larger firms provided formal training for their employees. There are a number of reasons for this, discussed by Storey and Westhead (1995), but clearly one element is that small firm owners see the provision of training as yielding primarily long-term returns. Small firms are also less likely to be able to capture the benefits of employees being in receipt of training on the grounds that they are unable to provide an internal labour market (ILM) through which individuals in receipt of training can stay within the business for its long-term benefit. [Creedy and Whitfield (1988)]. Demand uncertainty also tends to result in a greater use of short-term labour contracts by small than large firms [Cressy and Storey (1995a)], since it is easier to obviate fixed costs and reduce the probability of failure if salaries are conditional on the contract length of the product.
A second reflection of the shorter time horizon of small firms is the structure of balance sheets for different sized firms. Hughes and Cosh (1994) examined the balance sheet structure of small and large manufacturing companies in the period 1987-89. They show the ratio of Fixed to Current Assets is 47% for small firms, but 79% for large firms. This emphasises that small firms are much more likely to favour (current) assets which can be drawn upon quickly, in order presumably to offset immediate demands, than is the case for large firms.\(^5\)

A keyword often associated with small firms is that of ‘flexibility’. Small firms are perceived of as being significantly more ‘flexible’ than large firms. This is partly a function simply of relative size, of course, and the corresponding number of links in the chain of command. Thus, as noted above, smaller firms have less bureaucracy than large, and this means their ability to respond immediately to changes in the market place is greater. Both their response in supplying perceived market niches and their speed of adoption of new technology (e.g. new software systems) is often greater due to the sheer scale of change required in large firms, and to the existence of change-resistant interest groups established within them.

Successful small firms often rely on a portfolio of products to mitigate some of the risks associated with individual markets, the product life cycle, competitor inroads, technological change, and so on. Relying on a range of related products can allow the firm to respond to economic downturns in a more robust way, by reducing the variability of net returns. Thus, Reid (1990) shows the survival of small businesses with a more diversified product range is greater, ceteris paribus, than those with less diversification. The problems of co-ordination of these activities (diseconomies of scope) may appear after a certain ‘scope’ has been reached. Before the point at which a trade-off becomes apparent, and even after that point if uncertainty is more important than cost reduction, product diversification is an effective strategy for the small firm to deal with market uncertainty.\(^6\)

Finally, viable smaller firms tend start with more human capital than those that fail. A more mature and larger management team, work experience in the area of the start, the purchase of an existing business rather than a wholly new start, distinguishes the performance of the less risky business (Cressy, 1995). All these factors reduce the risk of the start-up, defined here as the chances that the business will close - for any reason.\(^7\) In the case of older proprietors, the experience of past failure and lifetime management skills will often make the business more robust, while the placing of collateral on loans (as required by the bank and available to the older proprietor) will generate more effort on the entrepreneur’s behalf, thus enhancing success.\(^8\) In the case of a larger start-up team, risk is reduced by two factors: firstly, homeostasis, and secondly the balanced team effect. The larger start-up team is more robust to chance depletion than the smaller one (homeostasis). It is also more adapted to growth if it has the right mix of skills that a larger team can provide (balanced team).

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\(^5\) We are not suggesting that response to uncertainty is the only explanation for the differences in the proportion of short term and long term assets. Term loans, used primarily for expansion or replacement of existing plant and machinery are little used by businesses that do not grow. Such businesses constitutes the majority of smaller firms. (e.g. Gray, 1992).

\(^6\) See Dryhmes(1962) for a development of this idea.

\(^7\) The reason for closure most touted in the literature is that of bankruptcy or insolvent. However, most small businesses do not close for this reason. (Most do not in fact borrow) (Cressy, 1993).

\(^8\) This mitigates the so-called moral hazard problem faced by the bank.
6. THE RESEARCH AGENDA

This paper has highlighted the particularly high risk of lending to small businesses - compared with larger firms. It has also highlighted the ways in which both the firms themselves and the banks attempt to 'manage' that risk. From the viewpoint of the banks, the management of risk in this area is crucial, but we are not persuaded the debate on this issue is as well informed as it needs to be. This indeed may at least partly explain the periodic outbreaks of hostility between small businesses and their banks.

This section therefore identifies four elements in the management of (small business) risk which merit further investigation. They are presented independently but would be best undertaken as a group to provide insight into risk management more generally. Each arise directly from the strategy of banks in coping with the risk of lending to smaller firms.

Section 4 of this paper examined five ways in which banks respond to the high risk of failure in lending to small businesses. The first was to 'minimise downside risk' by ensuring the risk was carried by either the owner of the business or by government - the Loan Guarantee Scheme being the clearest illustration of the latter scheme. Whilst there have been several government reviews of the LGS, [NERA (1991)], there has been little 'curiosity-driven' research on this topic. Data are now available upon more than 22,000 loans issued under the LGS since 1987 and default rates are around 30%. Little work has been conducted to analyse the characteristics of the defaulters/non-defaulters, although some preliminary results are available in Cowling and Cressy (1995). Further developments in this area include investigating the decisions made by banks on which firms to channel towards the LGS, and investigating the outcomes of businesses refused funding under the LGS to estimate the 'additionality' of the scheme.

The second element in the banks' management of risk strategy was to identify low risk businesses. A number of banks are moving towards greater use of credit scoring techniques for identification of high risk businesses. The types of factors identified by Cressy and Storey (1995b) are potential elements within credit scoring models but the predictive accuracy of the models needed improvement. At least part of the reason for this deficiency must be the familiar difficulties of forecasting human behaviour, but recently forecasting models have begun to combine both 'clean' data, sophisticated statistical techniques and 'insider' bank knowledge. As contributors to this research we believe there are a considerable number of new insights possible from developing this approach further. New samples of business start ups, in different macro-economic conditions and sectors, need to be drawn and monitored as panels. Then it will be possible to determine the extent to which models which forecast the survival/non-survival of new enterprises are statistically robust over time.

It will be recalled that a fourth element in the banks' strategy in dealing with risk is to vary the terms and conditions of its lending. The Treasury consultation paper reflects interest in a Financial Management Certificate, under which firms possessing the Certificate would become eligible for lower interest loans. The scheme itself is interesting, but as in many schemes promoting management training and development in SMEs [Storey (1994)], evidence of its current effectiveness is weak. It is clearly in the interests of the banks and government, if a public subsidy is involved, to ensure the provision of the training does indeed lead to a sufficient lowering of default rates to justify the interest rate cuts. Currently, as far as the
authors are aware, there is some monitoring of business on the scheme, but insufficient rigour to justify claims that the scheme is effective or otherwise.

Finally, it will be recalled that banks also seek to reduce risk by developing longer term relationships with their clients, as a route to overcoming the problem of asymmetric information. One route towards this is to appoint Business Advisors whose task is to liaise with 'premium' businesses. Major problems emerge, as the review by Rainbow (1994) demonstrates, however, in deciding which businesses are 'premium', the proportion of time spent by managers in liaising with each business, the 'optimal' number of businesses which can be handled by a single manager, the extent to which these should be geographical or sectoral specialisation etc.

As noted at the start of this section these issues are discussed as if they are independent but the study of each provides insight into the others. For example, decisions on how management time is best allocated between business has to be informed by research on the performance of firms. Equally research on the Loan Guarantee Scheme impact is influenced by basic research on small business performance and upon the impact of other public schemes such as the Financial Management Certificate, and vice versa. Thus the Treasury ideally would like to value comparably expenditure on FMC and LGS. Needless to say no such comparison could be undertaken currently.

7 CONCLUSION

This paper has demonstrated the risk of failure for small firms is substantially higher than for young firms. It has also demonstrated that young firms are more prone to failure than old firms.

The paper has examined the ways in which small firms themselves 'manage' that risk and how their suppliers adjust to the risk. The particular focus has been upon banks which acting as suppliers of credit.

Banks are argued to employ five strategies, which are not mutually exclusive: minimising downside risk, identification of low risk businesses, monitoring the existing portfolio, varying the terms and conditions of the loan contract and developing 'relationships'.

From the viewpoint of small firms themselves their role is to present themselves most favourably to the bank but, since they appreciate the high risk of failure, they have short time horizons. They favour 'flexible' over 'fixed' investments and those with short, rather than long term pay offs.

The paper concludes by presenting a research agenda in this important area. Given the increasing significance of smaller firms in most developed economies, the provision of finance for such enterprises is of wide and growing importance. The paper points to the need to examine in more detail several bank strategies: - minimising downside risk, identification of low risk businesses, varying terms and conditions of loans and developing long term relationships. Each of these requires further examination and a brief sketch of new research ideas within a general context of 'managing small business risk' is provided.
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