

Growing Firms and the Credit Constraint

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ABSTRACT. Restricted access to finance (either debt or equity or both) is potentially a significant constraint on the growth of small businesses. Financing problems arise primarily as a consequence of information asymmetries; the adverse effects of these may in part be counteracted by the use of collateral as a signalling and bonding mechanism and/or by the development of a good working relationship between lender and borrower. If the form of information asymmetry differs for growth firms or if the effects of information asymmetries are less easily ameliorated then growing firms may be more adversely affected by credit constraints. If growth is contingent upon access to credit then the generalised implications for the economy may be significant and detrimental. Using evidence from a survey of over 6,000 firms conducted in 1992, this paper addresses the extent to which growth firms are adversely affected by a credit constraint; the results suggest that the credit constraint for growing firms *per se* is no greater but growth firms may still experience a credit constraint as a consequence of their relative youth. However, there is evidence to suggest that firms expecting to grow in the future do perceive a rather tighter credit constraint but this may be partly or wholly offset by a generally better relationship with their bank.

1. Introduction

The availability and cost of finance is one of the factors which affects the ability of a business to grow. Access to finance on competitive and realistic terms will not by itself cause a small business

to grow, but the inability to obtain, or the restricted availability of, finance can certainly inhibit growth. Access to external equity has long been identified as a problem (Macmillan, 1931; Radcliffe, 1959; Bolton, 1971); more recently concern has been expressed about access to debt and the terms on which debt is available. The presence of information asymmetries in relation to the debt contract create the potential for credit rationing; in part, the willingness of a business to pledge collateral may counteract the effects of these information asymmetries while the development of a good working relationship may help to reduce them by improving information flows. To the extent that information asymmetries and the effectiveness of mechanisms to counteract them differ for growth firms, then the extent of any credit constraint will also differ.

This paper focuses upon the nature of the credit constraint confronting small businesses and the extent to which this may be more or less severe for growing firms. Given the considerable measurement problems which exist, the focus of attention is on a perceived rather than an actual credit constraint. Section two summarises the generic theoretical foundations for the existence of difficulties in the efficient operation of finance markets when dealing with smaller businesses. The particular case of growing firms is explored more fully in the third section and a framework for empirical analysis is presented. In section four, this framework is then tested against observations from around 6,000 businesses responding to a survey in 1992. A summary and conclusions are presented in section five.

2. The provision of debt finance

The growing emphasis upon SMEs as a major source of economic growth and dynamism has

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caused greater focus to be placed upon the efficiency of financial markets in meeting the needs of these businesses. The efficient and effective provision of finance to SMEs has long been recognised as a key factor in ensuring that those firms with genuine growth potential can expand and compete. More generally, there is evidence of a positive association between external finance and business performance (Keasey and McGuinness, 1990; Keasey and Watson, 1992). External finance may be in the form of equity or, more usually, debt. Concerns about the availability of external equity finance (the equity gap) can be traced back to the Macmillan Report in 1931. The size of the equity gap has been monitored on a regular basis through reports from the Radcliffe Committee in 1959 and the Bolton Committee in 1971. Further reference to the changing nature of the equity gap was cited by the Wilson Committee in 1979 and has also been traced since 1971 by, for example, Mason and Harrison (1991). As a result of the persistence of an equity gap for small businesses, the majority rely for external funding upon debt provided by the banking system.

The provision of debt by a bank to a small business is essentially an agency problem in which the bank (as principal) is using the firm (as agent) to generate a return on monies advanced. This process occurs under conditions of imperfect and asymmetric information (Berger and Udell, 1993; Keasey and Watson, 1993) which relate both to the *ex ante* evaluation of the project and the entrepreneur (adverse selection) and to the *ex post* monitoring of performance (moral hazard). Such information problems are not unique to the small firms sector, but are considerably more prevalent there because of the anticipated higher costs of information collection.

The implications of these information asymmetries for the provision of debt finance have been evaluated from a theoretical standpoint in a number of studies. Thus, for example, in examining capital market failure, Stiglitz and Weiss (1981) identify debt gaps as a result of both adverse selection and moral hazard problems. The adverse selection effect is analogous to that observed in insurance markets and arises because borrowers have different degrees of risk attached to their projects. As interest rates rise, low-risk borrowers (although having viable projects) drop

out leaving only high-risk borrowers. This is reinforced by the moral hazard problem associated with the lender's inability to monitor perfectly the project undertaken; again it is shown that as interest rates rise the higher-risk projects will be substituted for the lower-risk projects and there will be equilibrium credit rationing (see also Bester and Hellwig, 1989). A contrary view is expressed by de Meza and Webb (1987) who identify adverse selection in the presence of different (but unobservable) entrepreneurial abilities and this is shown to result in an oversupply of credit rather than a debt gap.

The degree of information asymmetry may be reduced through two mechanisms; the provision of collateral as part of the debt contract and/or the development of a close working relationship between the lender and the borrower. From a theoretical perspective it has been shown that the availability of sufficient collateral can ameliorate the adverse selection problem; specifically, the low-risk borrowers who leave the market in the Stiglitz-Weiss model can signal their status by a willingness to offer appropriate levels of collateral. As Dempsey and Keasey (1993) note, securitizing loans against appropriate assets (preferably personal) represents a rational approach for banks in the face of high project evaluation costs because it allows good projects to self-select. Problems of moral hazard can also be reduced by the use of collateral as a bonding device; the taking of collateral by the banks, particularly personal collateral, can provide an incentive to ensure that managers will perform to the best of their ability in undertaking the project (Bester, 1987).

Of course, the use of collateral may not eliminate credit constraints. Viable projects may still fail to obtain funding in instances in which collateral is unavailable or limited in supply. The value of business assets may be insufficient, particularly in instances where banks rely on 'carcass' valuation. Alternatively, business owners may resist the provision of personal collateral in the form of a guarantee or house deeds because such requirements effectively erode limited liability status and the protection it provides. This may be expected to discourage investment at the margin, given the additional personal risk it implies.

An alternative mechanism for addressing the problems of information asymmetry is the nature

of the relationship between the lender and the borrower. Although perfect information is an unobtainable goal, the quantity and quality of information available to a bank will be influenced by the nature of the relationship with each business (Berger and Udell, 1993). A close relationship has the potential to provide the bank with a better understanding of the operating environment facing a particular business; a clearer picture of the managerial attributes of the owner and a more accurate overview of the prospects for the business. Thus, from the perspective of the bank, the relationship provides the basis for understanding customer needs and resources and identifying the most appropriate ways of meeting those needs. This relationship is not simply a one way process. An effective banking relationship requires a positive contribution from both parties. The ability of the bank to meet customer needs requires that the owner/manager provides the bank with appropriate and timely information and is receptive to suggestions and advice provided by the bank.

The changing nature of the relationship between small businesses and their banks has been closely monitored since the Wilson Committee report in 1979 and, in particular, through regular surveys of the membership of the Forum of Private Business (see Binks, Ennew and Reed, 1988, 1990, 1993; Binks and Ennew, 1994). The evidence suggests significant dissatisfaction in the perceptions by small businesses of the quality of service received from their banks. There is disagreement as to whether these criticisms arise as a result of genuine market imperfections or simply as a natural product of the difficulty in measuring the risk reward conditions which obtain as far as many small firms are concerned (Storey, 1994). However, this disagreement does not detract from the fact that, among small businesses, there is a widespread perception that the quality of the banking relationship is poor.

To the extent that the information problems outlined above may differ between growing and non-growing firms, the potential for credit constraints will differ. Furthermore, if collateral availability and/or the banking relationship differ between growing and non-growing firms then again, the potential for credit constraints will also differ. The potential for these differences will be considered in greater detail in the next section.

3. Growing firms

The problems of information asymmetry are present in most if not all contracts and contracts for the provision of debt to small businesses are no exception. However the relative size of such businesses will tend to exacerbate problems of information collection and increase the costs of so doing. In the particular case of growing businesses, there is the potential for information gathering and processing on the part of the bank to be more difficult because of the pace of change within the business. However, the magnitude of this effect is likely to be small in comparison with information problems which are size based. Thus, while there may be little difference between growing and non growing firms in the existence of information asymmetries, there is potential for more variation in the mechanisms used to counteract them. Given the costs and difficulties associated with information collection, there is a tendency for banks to default to a capital rather than an income gearing approach for the evaluation of loans and as explained above, this approach may help to ameliorate problems associated with adverse selection and moral hazard. *A priori*, it must be assumed that under a capital gearing approach, less emphasis is placed upon the evaluation of proposed projects and the businesses from which they emanate and more emphasis is placed upon the available collateral. This approach to loan evaluation may have particularly significant implications in the case of growing firms.

Where businesses rely upon external debt to finance growth, it can be argued that under conditions of a capital gearing evaluation approach, the faster the rate of growth the higher the likelihood of problems in access to credit. For the purposes of collateral valuation, it is rational that banks consider the asset prices which may obtain in the event of default – namely, their ‘carcass’ value. In the case of plant and equipment, the relative illiquidity of many second-hand markets means that it is likely that such assets would be sold off (often at auction) at relatively low prices compared to their value to the business as a going concern. In the event that default has arisen because the market concerned is particularly depressed then the demand for dedicated plant and equipment may be low or virtually zero whilst

supply may be quite large. Under these conditions, the value of the plant and equipment concerned may be little more than its scrap value minus transportation costs.

Thus, a relatively illiquid market in second hand plant and equipment would suggest that the value of a business asset for the purposes of collateral is often considered to be much lower than its cost to the business as a new asset. Furthermore this type of heuristic is likely to apply to growing firms as much as to non-growing firms, not least because of the risks associated with growth. The faster the rate of growth of a business, the larger will be the gap between the collateral valuation of its newly acquired plant and equipment and the costs of these to the business. Under these conditions, businesses may be required to submit the private assets of owners and directors for the purposes of securitisation. Given the additional risk this implies and the possible limited access to personal collateral, it appears that growing businesses may be more prone to credit constraints as a consequence of inadequate collateral.

Alternatively businesses could seek a closer relationship with their bank in order to reduce information asymmetries and, therefore, make a prospects based approach to the evaluation process more feasible from the bank's point of view. From a theoretical perspective, the likely differences in the banking relationship for growing and non-growing firms are less apparent than was the case for collateral. Growing businesses are potentially attractive customers from the perspective of the banks. Growing firms are likely make more extensive use of bank facilities and in the longer term, their better prospects have clear implications for future bank profits. Thus, there are grounds for believing that banks may be more willing to invest in developing a closer working relationship with growing businesses or those which they perceive to have viable growth potential. Furthermore, because growth typically will involve the business in more frequent contact with their bank and will require a greater reliance on its services, it might also be anticipated that growth businesses may be more willing to share information with their bank. From the view point of both bank and customer, there are grounds for suggesting that the banking relationship may be closer for growth firms than for non-growth firms. However there are also

other factors which may affect the relationship, not least of which is age and size of business. Older firms will tend to have a more established relationship with their banks and the banks may be in a position to draw on information generated by past lending experiences (Sharpe, 1989). Equally, size will be relevant given that the costs of information collection and processing will tend to become relatively lower as firms get larger.

The preceding discussion suggests that collateral problems may be more severe for growing firms, resulting in a greater potential for credit constraints for such firms. By contrast, there is the potential for the banking relationship to be rather closer for growing firms than for non growing firms and there is therefore the potential for a good relationship to offset (at least partially if not wholly) credit constraints which arise due to collateral shortages.

Developing a framework to test these propositions is more problematic. As has already been indicated, the objective measurement of a credit constraint is difficult in the absence of detailed micro data. A useful proxy indicator of the extent of credit constraints can be derived from the perceptions of business owners themselves and the degree to which they perceive their business to be constrained by the availability of credit. The perceived credit constraint will provide some indicator of actual quantitative restrictions on the availability of finance but will also have a significant attitudinal component such that even if finance is available, respondents may continue to perceive some form of credit constraint due to the terms on which finance is provided. The extent of the perceived credit constraint will depend on current financing arrangements (price, quantity and collateral) and the nature of the banking relationship. In addition, firm specific characteristics such as age, size and profitability may also be relevant because of their implications for the nature of the banking relationship. Differences between growing and non growing firms in any of these areas will affect the nature and extent of a credit constraint associated with growth, although the presence of other unobservable effects due to growth should not be excluded. Accordingly an examination of the factors influencing perceptions of a credit constraint and the relationship between these factors and business growth should provide

further insight into the relationship between growth and credit constraints.

4. Data collection and measurement

Data used for the empirical analysis were obtained from a survey conducted among its members by the Forum of Private Business (FPB) in spring/summer 1992 (Binks, Ennew and Reed, 1993). Approximately 16,000 questionnaires (and follow-up reminders) were distributed to the entire membership and 6,101 usable responses were received.¹ This represents a response rate of 37.5%, which is high for a postal survey. Some biases are present in the sample; compared to the national population of small firms, the sample has a higher than expected proportion of manufacturing firms and a lower than expected proportion of agricultural firms. There is also some bias within the sample towards firms located in the south east of England and away from firms located in the south west of England. Neither of these problems were considered particularly significant. The presence of a relatively small number of agricultural firms may actually be desirable given the unique nature of the problems facing farming businesses. Similarly, in the context of the U.K. market, the uneven distribution of respondents between south east and south west is unlikely to cause problems because there are few grounds for believing that the experiences of these two regions would differ significantly.

Respondents to the survey ranged from very small businesses through to those which would be considered as medium sized than small. 30% of firms had a turnover of less than £150,000 per year, 17% reported turnovers between £150,000 and £250,000 and a further 20% between £250,000 and £500,000. It is noticeable that 17% of respondents had turnover in excess of the £1,000,000 threshold which is sometimes used to define the margin between small and medium sized business. Average profitability for respondents in the current sample was 16.7%, which was significantly lower than the reported average of 18.2% from a 1990 survey of the same source (Binks, Ennew and Reed, 1990). Such a fall was to be expected given recessionary conditions. The fact that the reduction in profitability was relatively small is likely

to be a reflection of the loss from the sector of a large number of low profit firms.

A high proportion of respondents in the sample were experiencing low or negative growth rates, as might be expected given the prevailing economic climate. Some 48% of respondents reported a decline in turnover over the previous year and only 9.4% reported growth in excess of 20% per annum. Firms experiencing decline or growing slowly typically expected to follow similar patterns in the immediate future, and it was only among the firms which were growing rapidly that there was a substantial expectation of future fast growth. Thus, the basic characteristics of the sample are indicative of a small firms sector which is suffering significantly from the effects of the recession but within which there is evidence of a significant number of firms which are prospering and growing in spite of prevailing economic conditions.

The survey contained a variety of questions which related to the constraints faced by business and the nature of the relationship between businesses and their banks. These data, along with basic demographic characteristics and details on financing were used to provide the basis for empirical tests of the framework discussed in the previous section. Specifically, the data set provided one dependent variable relating to the (perceived) credit constraint and a series of factual and attitudinal explanatory variables.

As indicated earlier, the specification of the dependant variable is problematic. In particular, it is difficult to obtain an objective measure of the extent to which a firm is credit constrained; accordingly the analysis uses a self reported perceived constraint scored on a five point scale, with higher scores indicating a higher perceived constraint. For the purpose of analysis, this five point scale was compressed to a three point scale with 0 defining those firms who perceived little constraint, 1 representing those who perceived some constraint and 2 representing those who perceived significant constraints.

The specification of the explanatory variables is somewhat more straight forward. The bank-business relationship was measured using eleven likert scaled items which focused on the interactions of small business owners with their account or bank manager (see Appendix for full specifi-

cation). To identify the underlying dimensions for the banking relationship and to reduce the number of items in the data set, the scale items were subject to a factor analysis using principal components extraction. The analysis suggested 3 underlying factors which accounted for 60% of the variance in the original data set. The first was concerned with the degree of trust and confidence in the relationship (TRUST) with higher scores being indicative of greater trust and confidence. The second factor concerned the degree of approachability and equality in the relationship (APPROACH) with higher scores indicating that managers were perceived to be more approachable. The final factor concerned information flows (INFO) with higher scores on this factor indicating a greater willingness to provide information on the part of respondents. To reduce problems of multicollinearity, factor scores for each of these constructs were used as explanatory variables. The factor scores were derived for the full data set and have a mean of zero and a standard deviation of 1. Higher factor scores are indicative of more favourable views of the banking relationship.

A number of variables were included to describe current financing arrangements. Since the number of firms in the sample with overdrafts is significantly larger than the number of firms with fixed term loans, the characteristics of overdrafts were used as an indicator of current financing arrangements. Rate of interest was measured as percentage points above base (ROI), and collateral ratios (COLLATERAL) were measured in relation to overdraft limits, with adjustments for outstanding mortgages when the owner/managers house represented the collateral. To obtain some indication of the extent to which the finance currently provided was adequate, the level of overdraft use, (calculated as the ratio of amount overdrawn to size of overdraft limit) was used as a crude indicator (ODUSE), although it is acknowledged that this may also be an indicator of the extent to which any given firm is experiencing financial difficulties. To accommodate this possibility, a dummy variable was included which took the value of 1 if a firm had experienced financial difficulties (FINDIF). Additionally, given the differences in type of collateral taken, a dummy variable (COLTYPE) was included which took a value of 1 where respondents were required to

provide personal collateral and 0 where business or no collateral was required. Firms giving or being required to give personal collateral were expected to feel a greater credit constraint because of the additional risk associated with personal guarantees. Higher levels of overdraft use were also expected to result in higher perceived constraints.

Finally, the firm-specific characteristics were measured as follows. Age, acting as a proxy for track record was measured in years, size was measured by number of full time employees,² while profitability was measured as a percentage of turnover. Finally two dummy variables were included for actual (AGROW) and expected (EGROW) growth rates as reported by respondents. These took the value 0 for firms which were declining or growing by less than 5% per year and 1 for firms growing or expecting to grow at a rate of more than 5% per year.

Age was hypothesised to have a negative effect on the perceived degree of constraint as suggested by Sharpe (1989). Similarly size and profitability were expected to have negative effects; larger and more successful firms are assumed to confront less of a credit constraint on the grounds that they are often perceived as good risks, because they tend to have a better relationship with their banks and may be better placed to raise collateral.

Since the dependent variable (perceived constraint) in this model is ordinal, OLS regression is inappropriate and an ordered probit approach was used instead. Allowing for missing values within the data set resulted in 2094 usable observations for estimation purposes. The parameters of the model were estimated using the maximum likelihood routine available in LIMDEP. The basic estimated form was as follows:

$$\begin{aligned} \text{CONSTRAINT} = & \\ & F(\text{SIZE}(-), \text{AGE}(-), \text{PROFIT}(-), \\ & \text{ROI}(+), \text{ODUSE}(+), \text{COLLATERAL}(+), \\ & \text{COLTYPE}(+), \text{FINDIF}(+), \text{TRUST}(-), \\ & \text{APPROACH}(-), \text{INFO}(-), \text{AGROW}(+), \\ & \text{EGROW}(-)) \end{aligned}$$

with the signs in parentheses indicating the *a priori* expectations about the direction of the relationship. Table I provides details on the estimated model.

With the exception of size, collateral ratio and

TABLE I
Ordered probit estimates (credit constraint)

Variable	Coefficient	T-Ratio	Mean(x)
EMPLOYMENT	0.16E-02	1.61	13.40
AGE	-0.55E-02	-4.47**	17.89
PROFIT	-0.77E-02	-3.76**	14.80
ROI	0.95E-01	3.39**	3.09
ODUSE	0.87E-01	3.07**	0.72
COLLATERAL	-0.19E-02	-0.44	3.28
COLTYPE	0.13E-00	2.22*	-
FINDIF	0.63E-00	11.06**	-
TRUST	-0.39E-00	-14.15**	0.89E-02
APPROACH	-0.29E-00	-10.81**	0.57E-01
INFO	0.69E-01	2.28*	0.20
AGROW	0.12E-00	1.88	-
EGROW	0.18E-00	2.93**	-
MU(1)	0.88E00	27.53**	-
Constant	-0.40E-00	-3.68	-
Log likelihood (slopes = 0)	-2269.52		
Log likelihood (model)	-1944.29		
Chi ²	650.46		

* Significant at $p < 0.05$.

** Significant at $p < 0.01$.

the growth dummy, all explanatory variables were significant. For firm characteristics and product characteristics, signs were as expected. The perceived credit constraint tends to be higher for younger firms and for less profitable firms with the former reflecting the problems associated with the lack of a track record and the latter reflecting the relatively poor prospects for a business. The rate of interest charged and the extent to which the overdraft facility is used both tend to increase perceived constraint as does the requirement to pledge personal collateral. If level of overdraft usage is a crude indicator of the extent to which the amount of debt provided is adequate, then a positive relationship with perceived constraint is consistent with *a priori* expectations. Conversely, although high interest rates do not necessarily imply a quantitative restriction on the availability of funds, a relatively high rate of interest may reasonably be expected to enhance perceived credit constraints. While the use of personal collateral may act as a signalling and bonding device to persuade banks to provide finance, in attitudinal terms it is clear that such requirements are associated with a perceived credit constraint.

Firms which had experienced financial difficulties also feel more constrained than those which had not. In terms of the direct measures of the banking relationship, high degrees of trust and greater approachability both tend to reduce perceived constraint, although surprisingly, there is a small but positive association between willingness to provide information and perceived degree of constraint. This is in line with other evidence which shows that the willingness to share information with the bank is greater among those firms which had experienced financial difficulties (Binks and Ennew, 1994). Both dummy variables were included to pick up any growth-related effects which were not directly incorporated into firm characteristics, financing characteristics or the nature of the relationship. The dummy variable for actual growth is not significant but that for expected growth is and indicates that firms which anticipate high growth in the future generally perceive themselves as more constrained.

In order to explore more fully the implications of these results for growing firms, it is useful to examine differences between the two types of firm. In particular, although the effect of the dummy variables was relatively minor, it is possible that many aspects of the differences between growth and non-growth firms are reflected in differences across other explanatory variables. A simple comparison of means is presented in Table II and a number of significant differences can be identified.

In relation to actual growth rates, three significant differences can be observed between growth and non-growth firms. Growing firms tend to be younger, more profitable and perceive their bank manager as more approachable. To the extent that growth firms are younger, they are likely to perceive a tighter credit constraint as a consequence of the lack of a track record and a less developed relationship with the bank. This may partly be counteracted by higher levels of profitability which may make these firms more attractive to the bank. Furthermore, despite the apparent lack of a track record, growth firms do perceive their bank managers to be more approachable and this may at least help with the development of the banking relationship. Interestingly, interest rates, overdraft usage and collateral ratios, where significant differences might have been expected

TABLE II
Independent variable means (actual and expected growth firms)

	Actual		Expected	
	Non growth	Growth	Non growth	Growth
Employment	13.2	14.9	13.2	14.8
Age	19.5	3.8**	20.1	13.3**
Profit	14.6	16.1*	14.8	15.7
Rate of interest	3.1	3.1	3.1	3.1
Overdraft use	0.74	0.70	0.72	0.74
Collateral ratio	3.4	3.1	3.4	3.2
Trust ^a	0.00	0.00	0.04	-0.05*
Approachability ^a	0.00	0.16**	-0.02	0.17
Information provision ^a	0.19	0.22	0.16	0.27**
N	1585	702	1490	781

^a Variable means are derived from factor scores.

* Significantly different at $p \leq 0.05$.

** Significantly different at $p \geq 0.01$.

(given the discussion in sections 2 and 3), provide no evidence of any systematic differences in financing conditions between growth and non-growth firms. The pattern for firms expecting to grow is similar, although there is evidence growing firms have a poorer perception of the degree of trust and confidence they can place in their bank manager. In other dimensions of the relationship – approachability and information provision – firms anticipating growth have significantly more favourable perceptions of their banks.

5. Conclusions

Information asymmetries and transactions costs inevitably mean that the provision of finance to small firms occurs under conditions of imperfect information. From a theoretical perspective, there are conditions under which these information problems will result in credit rationing. Empirical evidence for the extent of credit rationing is limited and ambiguous, although it may be reasonable to expect that at the micro level, there may be rationing for some businesses and an over-supply for others (Berger and Udell, 1989). Given the importance of small firms as a potential source of growth it is sensible to examine whether there

is any evidence of a systematic credit constraint on firms that wish to grow.

If the conditions which create information asymmetries are more severe for growth firms or if the mechanisms to counteract information asymmetry are less effective, then growth firms may experience a greater credit constraint than is the case for non-growth firms. In theoretical terms, there may be a particular problem for growth firms in instances in which collateral may be required to ameliorate information asymmetries. However, where a better relationship is employed to reduce information asymmetries, it is possible that conditions for growth firms may be more favourable. Empirical evidence suggests that there are a number of factors which will tend to enhance the perception of a credit constraint. Actual growth rates per se were not found to be significant, although expected growth rates were. More significantly a range of product, firm and relationship characteristics did have a significant influence on perceived constraint. Given that growth firms do differ from non-growth firms on at least some of these characteristics, the evidence would suggest that the extent to which growing firms do confront a credit constraint will be dependent not on their status as growing firms as such but rather on other specific characteristics. However, there is evidence to suggest that those firms expecting or planning to grow perceive a significantly higher constraint than those which are not planning to grow, although it is possible that the effect of this tighter constraint may be offset to some degree by the observation that firms planning to grow have a better relationship with their banks and in this respect are likely to be less constrained.

Appendix: Scales used in measuring the banking relationship

Relationship with bank manager

The following statements about the bank/small business relationship were scored on a scale from 1 = strongly agree to 5 = strongly disagree.

Trust

My bank manager is always available to help in a crisis.

My bank manager often comes forward 'with positive suggestions to help my business.

I am confident in the advice I get from my bank manager.

I am confident that my bank understands small businesses.

I can rely on my bank manager to find ways of meeting my business's changing financial needs.

Approach

I prefer to avoid contact with my bank manager. My bank manager is not really interested in my business.

I feel intimidated when dealing with my bank.

My bank manager is only prepared to offer standard financial small business products.

Info

It is important to provide my bank manager with timely and regular management information.

It is important to discuss in advance potential excesses over agreed borrowing limits.

The listing above presents the wording as given on the questionnaire. To simplify interpretation, scaling was reversed where necessary to ensure that for all summary variables, a higher score was indicative of a more positive relationship.

Notes

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¹ Missing values for certain questions may mean that the size of the sample for subsequent analysis is rather smaller than 6101.

² This is, admittedly a crude measure of size but was preferred over an ordinal measure of turnover (based on 9 categories) because the employment figures collected in the survey are continuous data.

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