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The Provision of Finance to Small Businesses: Does the Banking Relationship Constrain Performance

Christine T. Ennew
Martin R. Binks

The beneficial economic effects of entrepreneurial activity can only be realised if such activity is relatively unconstrained in both product and factor markets. Finance has been widely identified as a potential constraint on entrepreneurial activity due to either debt or equity gaps. However, in terms of externally supplied finance, it is arguably the availability of debt which is of greatest significance to most entrepreneurs. Given the inevitable information problems associated with the provision of debt finance, the nature of the relationship between bank and entrepreneur can be of considerable importance in ensuring the appropriate financing decisions are made. This paper examines the link between the banking relationship and the extent to which entrepreneurs are constrained by financing arrangements. Empirical analysis of the extent to which the banking relationship constrains performance suggests that there is no significant difference between more and less successful entrepreneurs.

I. INTRODUCTION

Although not restricted to small businesses, much entrepreneurial activity is manifested through small firms. This entrepreneurial activity can contribute to economic growth and development through the generation of jobs (Storey & Johnson, 1987), by promoting competition and by facilitating economic restructuring (Bolton, 1971). For these positive contributions to be realized, it is important that firms are not constrained by imperfections in either output markets (Mayes & Moir, 1989) or input markets (Binks & Vale, 1990), the latter being the main focus of this paper. It has long been argued that small size may preclude firms from access to certain sectors of the capital markets, resulting in finance gaps (Macmillan, 1931). Where finance gaps exist, potential viable growth may be foregone. Restricted

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access to finance is not attributed directly to size; rather it reflects problems of asymmetric information. Such information problems are not unique to the small firms sector but are considerably more prevalent because of the anticipated higher costs of information collection.

The relative costs and benefits of information collection mean that it is unlikely that any financing transaction would be conducted under conditions of perfect information. When information is less than perfect some firms may suffer from restricted access to finance. However, the more limited the information available, the greater potential for misallocation of funds and the greater the constraints on growth in the small firms sector. In addition to cost factors, the extent of information asymmetry or communication imperfections will be governed to a large extent by the nature of the "relationship" between the suppliers and recipients of funds. Since small firms rely predominantly on banks for external funds, the potential for finance based constraints can be evaluated by some explicit analysis of the relationship between banks and small firms. The paper examines this proposition in the context of small firms in the UK. Section II provides an overview of factors governing the provision of finance to UK small businesses and Section III discusses the problems of asymmetric information and examines the extent to which the banking relationship can, in principle, ameliorate these problems. A model to test these propositions is presented in Section IV while Section V discusses data collection and measurement. The results of the empirical analysis are discussed in Section VI and the conclusions from the study are presented in Section VII.

II. THE PROVISION OF FINANCE TO SMALL BUSINESSES

The efficient and effective provision of finance to small firms has long been recognized as a key factor in ensuring that those firms with genuine growth potential can expand and compete and a number of studies have noted a positive association between external finance, particularly bank finance, and business performance (Keasey & McGuinness, 1990; Keasey & Watson, 1992). In the UK, successive government sponsored enquiries, including the Macmillan, Radcliffe, Bolton and Wilson Committees, have all highlighted the problems experienced by small businesses in gaining access to debt and equity finance. It is generally accepted that size may preclude firms from access to certain sectors of the capital markets, particularly where equity finance is concerned. The development of the venture capital market and the introduction of the Business Expansion Scheme have improved the supply of equity finance to small businesses in the UK, although recent evidence suggests that the equity gap has not been eliminated (Harrison &

Mason, 1990). Arguably, however, it is in relation to debt that the problem of access to finance may be more pressing, since debt is generally identified as the most common type of external finance used by small businesses in both the UK (Keasey & Watson, 1992) and the US (Scherr, Sugrue, & Ward, 1993). In the UK, access to external equity from venture and development capital firms is typically restricted to projects requiring in excess of £250,000 while informal sources from Business Angels are still embryonic (Mason, Harrison, & Chaloner, 1992). Even in cases where projects are large enough to justify venture capital, there is evidence to suggest that a large number of small businesses are resistant to external equity participation (Binks, Ennew, & Reed, 1992; Cowling, Samuels, & Sugden, 1991; Dow, 1992). Consequently, small businesses in the UK rely primarily on debt finance from the banking sector either in the form of fixed term loans, or more commonly, overdraft finance (lines of credit). Where such businesses experience difficulties in obtaining debt finance, potential viable growth may be foregone. If such difficulties occur with any regularity then they may inhibit the positive economic contribution which would be expected from the small firms sector.

Difficulties in obtaining debt finance do not refer simply to the fact that some firms cannot obtain funds through the banking system. Indeed, we should not expect that all projects would automatically be financed. Genuine difficulties occur first, in situations in which a project which is viable and profitable at prevailing interest rates is not undertaken because the firm is unable to obtain appropriate funding and second, in situations in which viable projects can only obtain funding on apparently disadvantageous terms. Restricted access to finance is not necessarily attributable directly to size, but is instead a result of the problems associated with the availability of information on which projects are evaluated (Berger & Udell, 1993; Constand, Osteryoung, & Nast, 1991; Keasey & Watson, 1993). 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. This paper focuses attention specifically on issues surrounding the provision of debt finance although the analysis may be generalized to deal with issues relating to the provision of equity finance.

III. ASYMMETRIC INFORMATION AND THE BANKING RELATIONSHIP

Information asymmetry poses two problems for the provision of debt finance. First, the bank cannot observe *ex ante* certain information which is relevant to the decision to enter into the contract, typically the actual abil-

ities of the individuals applying for finance and the qualities of the project (adverse selection). Second, the risk that the small business will not perform in a manner consistent with the contract, necessitates some form of *ex post* monitoring procedure (moral hazard). In principle, information could be collected with respect to the abilities of the entrepreneur, the nature of the industry, and market and the behavior of the business once finance has been made available. In practice, the cost of gathering such information at a single point in time is likely to be high, and in most cases prohibitively high, relative to the risk and return associated with any given project. Even if a comprehensive information set were available, the bank is likely to encounter difficulties in processing that information, thus limiting its practical usefulness. However, during the lifetime of a firm's relationship with its bank, there exists considerable potential gradually to accumulate information (Berger & Udell, 1993; Sharpe, 1989) which might be expected to ease the problems of adverse selection and moral hazard.

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 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 & 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 as leading to an oversupply of credit rather than a debt gap.

While there is a need for further work to reconcile these views, there is evidence to suggest that they may not be mutually exclusive. Berger and Udell (1989) argue that while the macro effects of credit rationing may be small, there is evidence to suggest that when credit is rationed to some firms it may be more readily available to others. In particular, this result may be related to the role of collateral in bonding debt finance. Indeed, from a theoretical perspective it has been shown that the availability of sufficient collateral can counteract these problems; 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, and the taking of collateral by the

banks can provide an incentive to ensure that the firm will perform to the best of its abilities in undertaking the project (Bester, 1987). However, if collateral is in limited supply, debt gaps may still exist. In effect, the information costs associated with the evaluation and monitoring of a project may prohibit an income gearing or prospects based approach to project evaluation, thus causing the lender to default to a capital gearing approach which is contingent upon the availability of sufficient collateral. This collateral may be in the form of either personal or business assets. 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. The downside of such approaches may be that valuable projects may be lost in instances in which the proposer has inadequate personal collateral. In addition, the provision of personal collateral in the form of a guarantee or house deeds effectively erodes 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.

Small firms may also experience a debt gap because they have insufficient business collateral. With a capital-gearing approach, a debt gap may be more frequent in the case of small firms because asset-backed collateral must be valued at "carcass value" prices to ensure that the loan is covered realistically in the event of default and immediate realisation. Loans for specific items of plant and equipment will require more than the current resale price of the equipment for full collateral since the depreciation rate of the machinery will often be assumed by the bank to surpass that of the decline in loan values outstanding in the early periods of repayment.

Thus information problems can produce financial constraints either because debt finance is not provided or is only provided on disadvantageous terms. 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 & 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 development of close working relationships between banks and small businesses has often been identified as a weakness of traditional Anglo-Saxon banking systems (Edwards, 1987; Yao-Su Hu, 1984) and a comparative analysis of medium sized enterprises in Germany, France, and the UK lends some support to this hypothesis (Binks, Ennew, & Reed, 1992). Nevertheless, many of the recent developments in the provision of banking services to small businesses in the UK have attempted to deal with this weakness, particularly through the introduction of specialist small business account managers.

In the absence of close working relationships between banks and small businesses there remains the potential for finance to constrain entrepreneurial activity. In the absence of detailed micro-data of the sort that ideally would be supplied to the banks, it is impossible to measure objectively either the extent to which businesses are constrained or the extent to which viable growth has been lost. However, from the perspective of the owner manager, it may not be the real extent of the constraint that is relevant but rather the perceived extent of the constraint. Where an owner manager perceives his/her business to be constrained by the bank, this may in itself be sufficient to act as a disincentive to growth plans.

It is not possible to measure the extent to which finance gaps constrain entrepreneurial activity, but the effect of such gaps will tend to be greatest on small firms with growth potential, in part because it is here that a close relationship with suppliers of finance and a good flow of information are particularly important in order to incorporate future income prospects in the investment decision. A closer relationship, and consequently more accurate information exchange, would *ceteris paribus* increase the income-gearing element of project evaluation and reduce the loan gap. This is not a smooth process however, since the collection of information over and above simple descriptive statistics causes a discrete and disproportionately large rise in costs to the financial institution concerned because the assessment of more qualitative aspects such as management skills is more time consuming to perform and requires a much higher level of investment in the training of those undertaking the evaluation.

IV. MODEL SPECIFICATION

As the previous sections have argued, the performance and growth of smaller businesses may be constrained by restrictions on access to finance. Such restrictions may vary from the limited availability of credit through to the availability of credit in insufficient quantities or on inappropriate terms.

The previous section has discussed the nature of these financial constraints and has argued that the source of such constraints lies essentially with problems of information availability and processing. While recognizing that many of these information problems have no realistic solution, it can be argued that the nature of the relationship between banks and small businesses can either ameliorate or exacerbate such problems. Thus the nature of the banking relationship can be seen as a crucial element in the provision of finance to business in general (Turnbull & Gibbs, 1987) and small firms in particular (Watson, 1986). A good banking relationship will improve the quality and quantity of information flows and thus may be expected to reduce the extent to which businesses are or feel constrained by banking practices. This does not mean that a good banking relationship leads to the acquisition of finance more than a poor banking relationship, but rather that in a good banking relationship, the flow of information is such that both parties will have a better understanding of each other; banks will make more informed decisions and firms will be more aware of the reasoning behind those decisions. Thus the firm that is refused access to finance and has a good banking relationship may feel less constrained than a counterpart with a poorer banking relationship since the former should have some "ownership" of the decision.

Formally, we suggest that the following model may be employed to understand the way in which bank service may constrain a business:

$$CONSTRAINT = f(\text{Relationship}, \text{Product Characteristics}, \text{Business Characteristics})$$

Since the true extent to which a business is constrained by its banking relationship cannot be directly measured, the model focuses on the degree to which a business is perceived to be constrained. In the absence of any clear grounds for selecting functional form, the hypothesized relationships are assumed to be linear.

The quality of the banking relationship is expected to reduce the degree to which a business feels constrained by the policies of its bank. While there is a clear focus on the nature of the banking relationship in this model, the potential for other factors to affect the degree to which a business is constrained is explicitly recognized. Since most firms will already have some bank financing, perceptions of constraints may be affected by the characteristics of the products currently being provided and particularly by the interest rate payable, the collateral requirement, and the availability of appropriate amounts of debt. Other things being equal, more attractive product characteristics should reduce the degree of perceived constraint. Finally, it may be argued that additional firm specific characteristics may

affect the banking relationship and thus influence perceptions of constraints. In particular, age of firm may affect the perceived constraint because older firms will 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, it can be argued that turnover may affect constraints given that the costs of information collection and processing will tend to be lower as firms get larger. Finally, the performance of a particular business may also affect the perceived degree of constraint in that more successful businesses may be expected to have a better relationship with their bank than less successful businesses.

V. 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, & Reed, 1993). Approximately 16,000 questionnaires were distributed to the entire membership, along with a follow up reminder after three weeks. This resulted in 6101 usable responses which represents a response rate of 37.5 percent. A comparison of the sample with the national population of small businesses reveals some biases. Specifically, the sample has a higher than expected proportion of manufacturing firms and a lower than expected proportion of agricultural firms and there is some bias within the sample towards firms located in the southeast of England and away from firms located in the southwest 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 UK market, the uneven distribution of respondents between southeast and southwest 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 range from very small businesses through to those which would be considered as medium rather than small. Thirty percent of firms had a turnover of less than £150,000 per year and the majority of these (22%) had a turnover between £50,000 and £150,000, with only eight percent reporting a turnover of less than £50,000. Seventeen percent reported turnovers between £150,000 and £250,000 and a further 20 percent between £250,000 and £500,000. It is noticeable that 17 percent 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. Around 47 percent of firms in the sample reported a profit level

of between zero percent and 10 percent as a percentage of turnover. This contrasts with a figure of 40 percent for this profit category in a similar survey in 1990 (Binks, Ennew, & Reed, 1990). Reasons for this change are almost certainly linked to the prevailing recession. Perhaps surprisingly, therefore, the proportion of firms reporting profits in excess of 20 percent against turnover is almost exactly the same as in 1990, with figures of 29 percent in the present survey as against 31 percent in 1990. However, average profit for respondents in the current sample was 16.7 percent, which was significantly lower than the 1990 average of 18.2 percent. Such a fall was to be expected given recessionary conditions. The fact that the reduction in profitability is 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 were experiencing low or negative-growth rates, as might be expected given the prevailing economic climate. Again this contrasts sharply with the results from a previous survey. In 1990 only nine percent of firms reported a decline in turnover over the previous three years. The corresponding value for 1992 is 48 percent. In 1990, 30 percent of firms reported growth in excess of 20 percent per annum. The corresponding figure for 1992 was 9.4 percent. Firms currently declining or growing slowly typically expect to follow similar patterns in the immediate future, and it is only among the firms which are currently fast growth that there is 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 empirically to test the model suggested above.

In order to measure the extent to which a business is constrained, respondents were required to score seven aspects of bank practice which might constrain their business, namely collateral requirements, interest rates, availability of credit, bank charges, competence of manager, speed of service and term of loan. These items were combined to form a scale which measured at an aggregate level, the degree to which respondents believed that their business was constrained by banking practice. Each aspect of constraint was scored on a scale from 1=no constraint to 5=severe constraint; summing across all items produced a dependent variable (CONSTRAINT) with values in the range 7 to 35. Higher scores on the constraint variable

indicated that respondents perceived their business to be highly constrained by bank practices. Cronbach's alpha of 0.86 indicated that this scale was reliable.

Three specific aspects of the bank-business relationship were measured; the importance attached to aspects of bank service, the quality of provision and the attributes of bank managers. Each aspect of the relationship was measured using a set of multi-item scales. All these items were measured on the basis of respondents own perceptions and a list of the scale items is presented in the Appendix. To identify the underlying dimension for each aspect of the relationship, each set of scale items was subject to a factor analysis using principal components extraction. This resulted in the identification of three underlying dimensions for each aspect of the relationship.

The importance aspect of the relationship measured the respondents assessments of the importance of particular aspects of bank service. Factor analysis suggested that three underlying dimensions were present and these three factors accounted for approximately 70 percent of variance in the original data set. The first (IMPK) measured the importance attached to bank knowledge and advice; the second (IMPPE) measured the importance attached to personalization in the service delivery process and the third (IMPPR) measures the importance associated with more specific product characteristics such as interest rates, charges, and range of services. For a given quality of provision, respondents who identify certain aspects of bank services as important are more likely to feel constrained by the service provided than respondents who identify these aspects as less important.

The quality aspect of the relationship was measured using an identical set of scale items. Again the factor analysis identified three underlying dimensions based on knowledge (ACTK), personalisation (ACTPE) and product characteristics (ACTPR). These factors accounted for 74 percent of the variance in the original data set. The extent to which respondents perceive their businesses to be constrained is likely to be negatively related to their perceptions of the quality of service provided. For each of these six variables, higher values are indicative of higher importance and higher quality.

Finally the nature of the relationship between the respondent and their manager was measured across a range of statements scored on a 5-point Likert scale. Factor analysis suggested three underlying factors which accounted for 60 percent of the variance in the original data set. The first was concerned with the absence of trust and confidence in the relationship (BMT) with higher scores being indicative of a lack of trust and confidence. The second factor concerned the degree of approachability and equality in the relationship (BMA) with higher scores indicating that managers were

more approachable. The final factor concerned information flows (BMI) with higher scores on this factor indicating a reluctance to provide information on the part of respondents.

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 (ODCOL) 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 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. Additionally, given the differences in type of collateral taken, a dummy variable (COLTYPE) was included which took a value of one where respondents were required to provide personal collateral and zero where business or no collateral was required. A priori, the decision to take personal collateral, because of its implications for limited liability status, might be expected to result in respondents feeling that their business is more constrained by bank practice.

Finally, four firm-specific characteristics, namely age and size, profitability, and growth rate were identified as potentially influencing the perceived degree of constraint. Age of firm (AGE) entered the model directly as a continuous variable as did profitability (PROFIT). Size of business (TURNOVER) and rate of growth (GROWTH) entered the model as ordinal variables covering nine size categories and six growth categories respectively.

Age was hypothesized to have a negative effect on the perceived degree of constraint as suggested by Sharpe (1989). Similarly size, growth rate, and profitability were expected to have negative effects in that the larger more successful firms were expected to have better relationships with their banks on the grounds that, in an objective sense such firms should be considered good risks.

VI. ESTIMATION AND RESULTS

The model was estimated using ordinary least squares regression, with the basic estimated form as follows:

$$\text{CONSTRAINT} = F(\text{IMPK}(+), \text{IMPPE}(+), \text{IMPPR}(+), \text{ACTK}(-), \\ \text{ACTPE}(-), \text{ACTPR}(-), \text{BMT}(+), \text{BMA}(-), \text{BMI}(-), \\ \text{ODUSE}(+), \text{ROI}(+), \text{ODCOL}(+), \text{COLTYPE}(+), \\ \text{TURNOVER}(-), \text{GROWTH}(-), \text{PROFIT}(-), \text{AGE}(-))$$

with the signs in parentheses indicating the *a priori* expectations about the direction of the relationship. The dependent variable, although based on a simple interval scale, was constructed in such a way that it could take a value in the range 7-35. The spread of values was such that this variable could effectively be treated as continuous for the purposes of statistical analysis¹. Visual inspection of the residuals suggested that the linear form was appropriate and that neither heteroscedasticity nor non-normality were present.

The unrestricted model specified above contains relationship variables, financing variables, and firm specific characteristics. Two further restricted models were estimated. In Model 2, it was assumed that the coefficients relating to firm specific characteristics were not significantly different from zero. Model 3 incorporated the further restriction that the coefficients on variables relating to current financing arrangements were also not significantly different from zero. *F*-tests were used to test the acceptability of these restrictions. The results for each of these three models are contained in Table 1. In both cases, the null hypothesis that the coefficients are equal to zero is rejected; neither set of restrictions is valid and we should focus therefore on the unrestricted model.

On the basis of the estimated equations, the extent to which owner/managers believe their business to be constrained by banking practices is dependent on the nature of the banking relationship, financing conditions, and firm specific characteristics. Specifically, the perceived degree of constraint is positively related to assessments of the importance of various aspects of bank services and negatively related to assessments of the quality of provision of those services. The magnitude of the impact of each of the significant variables differs, with knowledge and personalization appearing to have a greater weight than product features. In the case of the quality of provision variables, product related aspects appear to be of much greater importance than personalization or knowledge variables. Lower levels of trust and confidence in the bank manager tend to increase the degree of perceived constraint while the approachability of the manager tends to reduce the degree of constraint. Higher rates of interest and higher levels of overdraft use tend to increase the degree of constraint. Interestingly, the sign of the coefficient on the variable measuring collateral ratio is counter to what was expected, although the estimated coefficient is not significantly different from zero. The dummy variable for personal collateral is clearly

Table 1
Unrestricted and Restricted Models (OLS)

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	<i>Coefficient</i>	<i>T Ratio</i>	<i>Coefficient</i>	<i>T Ratio</i>	<i>Coefficient</i>	<i>T Ratio</i>
CONSTANT	17.31	13.83**	16.84	14.27**	20.41	17.79**
IMPK	0.26	9.6**	0.26	9.69**	0.27	10.08**
IMPPR	0.07	1.42	0.06	1.32	0.05	1.09
IMPPE	0.19	5.15**	0.19	4.58**	0.21	6.06**
ACTK	-0.15	-4.01**	-0.15	-4.08**	-0.17	-4.43**
ACTPR	-0.35	-7.78**	-0.35	-7.63**	-0.40	8.63**
ACTPE	-0.28	-8.40**	-0.29	-8.58**	-0.29	8.52**
BMT	0.25	7.75**	0.25	7.88**	0.26	7.97**
BMA	-0.26	-5.03**	-0.26	-5.05**	-0.27	-5.38**
BMI	-0.11	-1.59	-0.14	-1.93	-0.16	2.26*
ODUSE	0.49	3.96**	0.49	3.94**	—	—
ODCOL	-0.01	-1.15	-0.01	-1.41	—	—
COLTYPE	1.59	7.81**	1.63	8.13**	—	—
ROI	0.56	5.75**	0.53	5.71**	—	—
PROFIT	-0.02	3.03**	—	—	—	—
TURN-OVER	0.06	1.11	—	—	—	—
GROWTH	-0.10	-1.74	—	—	—	—
AGE	-0.01	-2.25*	—	—	—	—
R ²	0.432		0.428		0.399	
F	118.19	P=0.000	151.89	P=0.000	194.55	P=0.000
F (Restrict)			5.37	P=0.000	33.86	P=0.000
N	2620		2620		2620	

Notes: *Significant at P = 0.05
**Significant at P = 0.01

significant and positive indicating that in situations in which entrepreneurs are required to provide personal collateral the outcome is likely to be a much greater perceived constraint in that business.

Of the firm specific variables, size and growth rates both display the expected signs but neither coefficient is significantly different from zero. Profitability and age do appear to affect the perceived degree of constraint. As was suggested, older firms with a longer track record and typically a

longer banking relationship tend to be less constrained and similarly, the more profitable firms also perceive themselves to be less constrained.

VII. CONCLUSIONS

Information asymmetries and transactions costs inevitably mean that the bank/small business relationship will occur under conditions of imperfect information. Imperfect information is, in turn, one of the main reasons why firms face constraints in the market for finance. The nature of the relationship between banks and businesses can affect the extent to which businesses are constrained because of its effect on the flow of information. The extent to which a business finds itself constrained in relation to access to finance is difficult to measure directly although a useful indicator can be obtained from self assessed degrees of constraint. Using such a measure, this paper examined the links between degree of constraint and aspects of the banking relationship. Initial results suggest that most dimensions of the banking relationship do have a significant impact on the extent to which businesses feel constrained. Furthermore, the extent to which these constraints are apparent is also related to financing conditions and firm specific characteristics. Age and profitability tend to reduce the degree to which a constraint is perceived to exist, although the taking of personal collateral, high levels of overdraft usage, and high interest rates all tend to increase the perceived degree of constraint. While this latter result may not be unexpected and might in many instances reflect simply the risk-return characteristic of a project, the importance of the relationship variables is indicative of the significant role played by the less formal aspects of banking in the development of a strong entrepreneurial small business sector.

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NOTE

1. A similar approach was adopted by Scherr, Sugrue and Ward (1993) for categorical data in the range 1-11. In such situations OLS may result in higher standard errors and thus fewer significant results, but the approach is generally deemed to be acceptable on the grounds of computational simplicity.

APPENDIX

Scales Used in Measuring the Banking Relationship

- a) *Importance attached to dimensions of the banking relationship.*

How important is each of these services to you?

(Ranked on a scale from 1 = not important to 5 = very important).

IMPK

Knows your business

Understands your industry

Understands your market

Offers helpful business advice

IMPPR

Offers wide range of banking services

Competitive interest rates

Competitive/predictable charges

IMPPE

Speed of decision

Tailors finance to needs to business

One person deals with all credit needs

Easy access to loan officer

- b) *Quality of Service Provision*

How well do you think your bank supplies these particular requirements?

(Ranked on a scale from 1 = very poor to 5 = very good).

ACTK

Knows your business

Understands your industry

Understands your market

Offers helpful business advice

ACTPR

Offers wide range of banking services

Competitive interest rates

Competitive/predictable charges

ACTPE

Speed of decision

Tailors finance to needs to business

One person deals with all credit needs

Easy access to loan officer

- c) *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.

BMT

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.

BMA

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.

BMI

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.

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