

The Financial Conditions for Swedish SMEs: Survey and Research Agenda

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ABSTRACT. This paper shows that in two important sectors of Swedish industry in the early 1990s the existence of finance *demand* (internally generated) constraints in addition to the familiar finance *supply* (externally generated) constraints on businesses are a significant empirical phenomenon. Firms are aware that relinquishing some control would improve performance. However, the returns in growth, profits and survival are not sufficient to offset the utility of control loss. Owners of younger firms, especially in Business Services, regard very favourably the added expertise of new (preferably angel) equity holders, with one in three such firms having actively sought new owners. Equity finance is therefore to be regarded as a 'package' from the viewpoint of the smaller firm, with transfer of management skills from venture capitalist to firm sweetening the bitter pill of control-loss.

1. Background

Recent years have seen a debate in Sweden over risk capital provision for SMEs, together with the financial conditions in which they operate. A concern for government has been the extent to which the requirements for equity and loan capital are met by the Swedish financial community, and the extent to which business financial conditions provide the basis for a competitive Swedish industry. Against this background, interest has focused on the provision of risk capital (primarily equity) to SMEs. Questions of importance here are: Do SMEs have a desire to increase the equity

of their businesses? If so, has it been possible for the financial community to meet their needs? If not, are there market/institutional deficiencies that can be remedied by intervention?

Historically in Sweden interest has focused on the financing of the Manufacturing sector, not least because of its importance for Swedish exports. Over the last decade or so, however, the growth of professional/business services has changed this focus – for example, new technology-based firms (NTBFs) are now recognised as assuming a special role in the renewal of Manufacturing industry.¹ Yet although small hi-tech consultancy services or software firms are considered to have the greatest economic potential, they now seem to be experiencing difficulties in obtaining finance on the risk capital or loan markets. Given this background, both Manufacturing and Business Services firms were considered central to the study.

2. Aims of the study

It is natural to ask of course whether there are *differences* between the Manufacturing and Business Services sectors in terms of the desire for, as well as access to, relevant finance – controlling for the size and other relevant dimensions of the firms. We should expect such differences both to exist and to be important, and this question will be addressed at an early stage in the analysis. However, a more central aim of this study is to describe and analyse SMEs' perceptions of the financial climate in Sweden in conjunction sectoral characteristics, finance usage and economic performance. Armed with this data we are then in a position to ascertain the extent to which the needs of SMEs are being met and to assess the role and importance of different

Final version accepted on November 13, 1996

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financial agents in the process of business investment and performance. Finally, we will attempt to identify policy measures necessary to improve the financial situation for such businesses.

Definitions of SME and the two sectors

In this study we define the term 'SME' to include firms with less than 200 employees and exclude firms with less than 5 employees. Our focus is on incorporated businesses, due to the requirements for availability of accounts data. All Swedish Manufacturing sectors are included in the definition of manufacturing, the exception being newspapers/publishing houses. The Business Services sectors used here include Computer consultancy and software and Other technical services; and Consultancy services in company organisation/rationalization. Company security services are the only sectors excluded from the definition of Business Services.

3. Sample, questionnaire and response rate

The research described below is based on the results of a questionnaire administered to Swedish businesses in 1993. This section describes the sampling rationale, sampling procedure, the nature of the questionnaire and questionnaire response rate.

Why Business Services?

The analysis of Davidsson et al. (1996) demonstrates the increasing importance of the Professional Services sector in the Swedish

economy. Also in a previous study by Olofsson and Wahlbin (1993) it was shown that a subgroup of Business Services, university spinoff firms, provide 40% of R&D purchases of Industrial firms. Thus, although only minor *direct* contributors to employment in Sweden, this study suggests that their *indirect* impact on employment may be considerable, operating through technology transfers from the universities. Many of the industrial categories in the broader services sector are, however, quite traditional. A focus of interest on the Business Services subsector rather than on all service sectors therefore seemed appropriate.

The sample

A sample of 550 SMEs was extracted in October 1993. After exclusion of firms outside the target group the sample consisted of 510 firms (see Table I) It may be noted that the sample-to-population ratio increases with firm size and that for the two largest size groups in the Business Services sector (which is very small) the sample includes all firms.

The questionnaire and response rate

The 510 businesses left in the sample were sent a postal questionnaire covering 6 aspects of the business (see below). This resulted in a 55.9% response rate, i.e. 285 usable replies (see Table II) The distribution of responses between different strata is generally good. The one exception is the size group 100–199 employees in Business Services, for which the response rate was only 25 per cent. To raise the within-stratum absolute sample size and response rate the two largest

TABLE I
Sample by size group and industry sector

Sector	Size group							
	5–19		20–49		50–99		100–199	
	n	N	n	N	n	N	n	N
Manufacturing	93	5493	92	1548	96	536	88	225
Business services	46	1135	45	200	38	38	12	12

N, n = population and sample numbers respectively.

TABLE II
Response rate within different strata (%)

Sector	Size group			
	5–19	20–40	50–99	100–199
Manufacturing	55	53	51	60
Business services	67	58	55	25

size groups were aggregated to a single group of 50–199 employees in.

4. Background characteristics of the businesses

Data on the background of the sampled firms were recorded. This includes data on employment, turnover, debt/equity, export ratios, and ownership patterns by size class and sector, for 1991, 1992 and (expected) 1993. Some simple comparisons across sectors, size classes and across time now follow.²

Size groups are expected a priori to differ in terms of age structure with smaller firms on average being younger (Evans, 1987). This is confirmed in Table IIIa which shows that the median year of business start for the smallest size group is 1982, while the corresponding value for the largest group is 1957, a twenty six year difference. We can also see that, again as expected (ENSR, 1993, 1994) export shares follow business size, with larger firms having a higher export propensity.

Regarding sectoral differences, Table IIIB shows that the median Manufacturing firm in 1993 was eighteen years older than the comparable Business Services firm. This may be explained partly in terms of the relatively high death rate amongst the service industry firms over manufacturing, since it has been widely established that the death rate of businesses is negatively correlated with business age (e.g. Evans (1987a, b), Storey et al. (1987) and Cressy (1996c)). Also, for reasons to be explored later, the death rate of Business Service firms may be expected to be higher than average for all sectors, adding to the difference in age due to the other factors. Finally, we find that in Manufacturing, firms are on average over twice the size of those in Business Services as measured by turnover. This might be expected if there are greater relative economies of scale in the Manufacturing sector over services.

Moving next to measures of financial risk, we should expect from other studies that larger firms would be more financially diversified than small, and to exhibit a lower degree of financial risk (see

TABLE IIIa
Year of start, no. of employees, turnover and export share by size group

Size group	Mean			Median		
	5–19	20–49	50–199	5–19	20–49	50–199
Year of start				1982	1977	1957
No. of employees						
1991	17	32	118	10	26	103
1993	15	37	105	8	30	90
Turnover, MSEK						
1991	15	29	111	5	19	90
1993	14	40	111	6	23	91
Export share, %						
1991	7	10	30	0	0	20
1993	10	17	35	0	5	25

TABLE IIIb
Year of start, no. of employees, turnover and export share by industry sector

Industry sector	Mean		Median	
	Manufacturing	Business services	Manufacturing	Business services
Year of start			1965	1983
No of employees				
1991	76	42	54	22
1993	67	44	53	30
Turnover, MSEK				
1991	74	34	40	16
1993	74	38	43	20
Export share, %				
1991	24	5	10	0
1993	29	9	16	0

MSEK = million Swedish Krona.

Prais, 1983 for early U.K. work in this area). Table IIIc in fact shows, in line with expectation, that the equity/debt ratios³ tend to rise with business size, or in other words, financial riskiness declines with size.⁴

Viewing the situation by industry sector (Table IIId), we find that firms in Business Services have

TABLE IIIc
Equity-debt ratio, 1992, by size group. Share in per cent

	Size group		
	5–19	20–49	50–199
Equity-debt ratio 1992			
< 10%	22	16	15
10–20%	26	22	19
20–30%	18	35	27
> 30%	33	27	40

TABLE IIId
Equity-debt ratio, 1992, by industry. Share in per cent

	Industry	
	Manufacturing	Business services
Equity-debt ratio 1992		
< 10%	18	15
10–20%	24	17
20–30%	28	23
> 30%	31	45

rather higher equity-debt ratios than manufacturing firms. (Table IIId shows, for example, that over 55% of Business Services firms have a ratio less than 30% whereas the corresponding figure for Manufacturing is 69%.)

Finally, regarding share ownership patterns as a measure of openness (Table IIIe, available from the authors) we find that family ownership is higher in smaller firms and in Manufacturing over Business Services. The size effect in this finding is predicted by the nature of the lifecycle of firms, in that small closely held firms will need to open up equity to expand. However, there is also some explanation for the sectoral element in the finding: the likelihood of family held *startups* is also smaller in Business Services than in Manufacturing due to the nature of the technology itself the implied education levels and corporate culture of the founders. Family businesses are not typically started by teams of wizkidd university graduates with global aspirations via the Internet, for example.

5. Questions and hypotheses – an elaboration

Introduction

The questionnaire used in the survey was built around six areas of interest. Within these areas we now summarize the hypotheses that motivate the study. The areas of interest are:

- 5.1. Background characteristics (see also section 4)
- 5.2. Investments needs and outcomes
- 5.3. The firm's equity and control aversion⁵
- 5.4. Advantages and disadvantages of different owner categories
- 5.5. Finance used by the firm
- 5.6. Financial conditions and business development obstacles

5.1. Background characteristics

At this stage we formulate a simple hypothesis that uses the information presented in the previous section, and leave the fleshing out of details to the sections that follow. We anticipate for a number of reasons to be elaborated below that

- H1.1 The D/E ratio of Business Services firms is lower than that of Manufacturing firms.

The reasons we propose for propounding this hypothesis include:

- (i) the larger and older firms in Manufacturing (Table IIIa) will create a larger demand for debt. Debt is appropriate for both working capital – where equity will not suffice – and for fixed assets – where equity may substitute. This demand for debt will be more likely to be met by the financial intermediaries because of the superior collateralisable assets (land, buildings, machinery) of the sector – a supply side effect – subsequently referred to as an ‘S-constraint’.
- (ii) the higher proportion of family-owned businesses in Manufacturing (see above) will mean that they are less willing to open up their equity to outsiders (a demand side effect – subsequently ‘D-constraint’)
- (iii) Business Services firms are younger and smaller, and therefore lacking in management skills, but are also more open to learning (often coming from a learning culture) than their Manufacturing counterparts. Therefore they more likely to wish to make use of angels or corporate venturers who provide needed *expertise* in business management *in addition* to equity finance (a D-constraint)
- (iv) if Business Services firms are constrained in

their access to debt by lack of collateral (*supply-side* or S-constraint), they will, in the absence of adequate retained profits, either be *forced* to open up their equity to outsiders or to retain profits rather than distribute them to shareholders.⁶

Results

Looking back at Tables IIIc,d we can see that this hypothesis is consistent with the evidence: Business Services firms do indeed have a higher average D/E ratio than Manufacturing firms. Also, as predicted, this ratio is higher for smaller firms.

5.2. Investments needs and outcomes

Hypotheses

Here there are four hypotheses to be tested. Firstly, from the nature of the sector (their products, production processes, sizes and the relative ages of constituent firms)

- H2.1 Manufacturing firms face larger investment needs in machinery and ‘hard’ assets, while the needs of Business Services firms are more likely to be found in product development, market development, and (due to the younger age of firms and the nature of the sector) in education and training.

Experience of one of the present authors with the loan and the venture capital markets also suggests that financiers and investors are hesitant to invest in firms where the real assets are “going home at five o’clock”: the proportion of assets easily transferred into alternative uses is probably larger in Business Services. Thus, we claim

- H2.2 Manufacturing firms, by the nature of the sector, have greater access to fixed, collateralisable assets than Business Service firms and so (given the banks’ penchant for collateral) will have greater access to traditional loan financing.

Therefore,

- H2.3 Manufacturing firms are more able to *realise* their investment needs than Business Service firms – *insofar as the latter cannot make compensating use of*

equity (through the existence of either D- or S-constraints).

Finally, we hypothesise that

- H2.4 Faster growing firms, by offering the chance of capital gain to outside owners, a faster accumulation of retained profits, and greater human capital embodied in their owners, have greater investment (expansion) needs *but are also more able to realise them* than their slower growing counterparts.

Results

Respondents were asked to rank their investment needs in the various categories of Table IV on a scale of 1–5 (1 = very low; 5 = very high). In general, the Business Service sector does indeed express larger (subjective) needs to invest in education and training/staff development, and in lower needs to invest in ‘hard’ assets than the manufacturing firms, confirming hypothesis 2.1. The differences are least marked in the marketing area of investment, and strongest in area of land and buildings.

A similar set of questions were asked in relation to the realisation of investment needs by the businesses (Table not presented). It is clear from the combined analysis that to a very large extent firms in both sectors have been able to *realise* their investment needs. For the whole sample for example, we find 70 to 80 per cent of firms say

they have realised these needs across virtually all areas of investment. Deviations from the sample average, however, seem to occur as a result of (e.g.) smaller manufacturing firms’ needs to invest in buildings and real estate, and smaller Business Service firms’ needs to make market investments. In the latter case, in fact, 40 per cent of Business Services firms say that they have *not* been able to realize needed investments.⁷ We find, furthermore, a positive correlation both between turnover growth and investment needs, and between turnover growth and investment realisations (consistently with Hypothesis 2.4). Therefore it seems *not only that growing firms have larger needs but also that they manage to fulfill those needs*.⁸

5.3. The firm’s Equity and control aversion

Hypotheses

Whilst the facts of small business share ownership in many European countries are well known (e.g., that the vast majority of firms are closely held – Cosh and Hughes, 1994), much of the historical discussion of the provision of equity to small firms has assumed that the problem of deficiency is on the *supply* side: providers of finance do not *offer* enough funds to businesses who need them.⁹ From the small business research literature¹⁰ we are also aware, however, that entrepreneurs and small business people usually see equity partners as their last resort. This appears true of most European countries. (See e.g. Bolton, 1971; Stanworth and

TABLE IV
Investment needs of the business over the last three years (1991–1993). By size of firm and investment type^a

Investment type		5–19	20–49	500–199	All sizes	All groups
Buildings/Land	MG ^b	28	31	13	21	16
	BS	0	13	4	5	
Machinery/production equipment	MG	40	49	50	47	44
	BS	23	48	48	38	
Product development	MG	29	49	50	45	45
	BS	45	44	54	48	
Marketing/market development	MG	40	57	50	49	50
	BS	39	58	63	52	
Education and training	MG	35	44	45	42	44
	BS	32	54	71	51	

^a Percentages of responses in the top two rankings.

^b MG refers throughout to Manufacturing and BS to Business Services.

Gray, 1992; ENSR, 1993, 1994, 1995, 1996). Thus we hypothesise that at least part of the 'problem' may be that smaller firms are less likely to *want* external equity partners, so presenting a *demand* 'problem' rather than a supply one.

Operationalising this concept can take several forms. We suggest, for example, that smaller firms (especially *family*-owned businesses) will be more control-averse (Cressy, 1995) than large, so they will be less open to outside equity involvement than large. Thus,

- H3.1 Smaller firms, especially those in the Manufacturing sector, are *less* likely to *seek* and to *take on* new owners than large, and more likely to see borrowing as an alternative to loss of voting power.

Since the questions asked of our sample include whether the firm searched for new owners and whether the search resulted in new owner induction, we can test this hypothesis.

Finally (restating basis iii of H1.1 above) smaller, younger firms are more likely to be interested in a *package* of finance and expertise, particularly in the Business Services sector. Thus we assert

- H3.2 Business Services firms are more likely

than those in Manufacturing to wish to make use of outside owners who supply needed *expertise* in business management *in addition* to equity finance.

We expect, on the other side of the control aversion coin, that firms will often prefer to get the extra equity required by way of retained profits of the firm as it grows. We should also expect this attitude to be stronger as the firm gets older and larger, since by then it will already have accumulated reserves to make this option a realistic possibility. Thus

- H3.3 Firms will largely prefer to get extra equity from retained profits and this preference rises along with firm size.

Also,

- H3.4 Business Services firms are more likely to search for new owners than Manufacturing firms.

Results

Respondents were asked to measure their agreement/disagreement with a series of statements intended to elicit from various angles their degree of control aversion. Table Va shows the propor-

TABLE Va
Extent of general equity-control aversion. Percentages in agreement with the following statements about owner-partners^a

Statement	Sector	5–19	20–49	50–199	All sizes	Total
1. New owner-partners are largely advantageous for the development of SMEs	MG	23	52	40	39	44
	BS	65	61	43	57	
2. It is better to sell the company than to take on new owner-partners	MG	44	49	48	47	44
	BS	35	25	50	36	
3. The most important reason for new equity partners is financial	MG	41	49	46	46	45
	BS	48	35	50	44	
4. The most important reason for new equity partners is the expertise they provide	MG	68	67	71	69	72
	BS	72	79	91	80	
5. New equity should come from the profits of the company	MG	58	69	72	68	69
	BS	67	74	78	72	
6. It is preferable to borrow from the bank rather than to take on new owner-partners	MG	47	44	34	40	37
	BS	31	38	18	29	
7. The disadvantages of new owner-partners are greater than the advantages	MG	44	50	33	40	35
	BS	29	17	29	25	

^a Numbers in a given row of the table are the percentages of respondents 'Agree[ing] to some extent' or 'Strongly agree[ing]' with the corresponding statement in column 1 of the Table.

tion of respondents agreeing or strongly agreeing with the statements in the first column representing these attitudes to control. From the Table, the overall attitude among SMEs (69 per cent) is that new equity should come primarily from retained profits (Table Va, row 5). This attitude strengthens with firm size, as predicted by Hypothesis 3.3.

At the same time almost half the respondents believe that new owners are 'good for the development of SMEs' (row 1). Thus, the effects of new owners on business *development* are regarded as *favourable*, by almost half the firms. The belief in the advantages of new owners for development is however subject to sectoral variation, and is stronger in Business Services than in Manufacturing: row 1 shows that substantially less than half in Manufacturing but between a half and two thirds of firms in Business Services held this view. Furthermore, there is a size dimension to the attitude with some tendency for this confidence in outside owner-partners to *fall* with firm size in Business Services, though little trend is evident in Manufacturing. However, the kinds of owner partners considered may also vary with firm size.

To understand exactly how new owners are 'good for SMEs' we asked whether the financial or the expertise aspects mattered (rows 3 and 4). It emerges that both sectors consider it *more important that new owner should bring in new expertise than finance*, with as expected, the *Business Services sector emphasising the expertise component more than the Manufacturing group* (row 4). This partly reflects, as suggested above, the *younger age* of the typical firm in Business Services¹¹ and the *type of firm* in Business Services (less traditional, less family-owned). It is consistent with hypothesis 3.2 above. But it also reflects *the greater likelihood of demand-side constraints on debt provision in Business Services* discussed earlier.

However, these same people have a *strong opposition to actual power-sharing*: the extra performance (growth etc.) apparently isn't worth the subjective control loss. For example, about the same number of firms actually assert (row 2) that it's better to *sell the whole company* rather than get new partners as those who are positively disposed to new owners! This manifestation of

control-aversion is strongest in the largest business in Manufacturing, as asserted in Hypothesis 3.1.

Also, in general, as predicted (Hypothesis 3.2), respondents from Business Services are *more* positive to new owner-partners than are respondents from the Manufacturing sector (rows 1 and 7).

As suggested in Hypothesis 3.1, control-aversion is also, of course, reflected in the *search activity* of the firms' owners. This represents the most concrete expression of desire for outside equity involvement. To this end we asked respondents whether they had actively searched for new owners in the last five years. The responses reported in Table Vb show that the majority of firms did *not* actively search for new owners. For example, from Table Vb, less than one third of firms actively sought new owners in the last five years. The tendency to search is, however, as predicted (see Hypothesis 3.1), stronger in Business Services (1/3 searching) than in Manufacturing (only 1/5 searching).¹² There is some tendency for this search activity to rise as we move into the larger size classes, though in Business Services it seems to tail off after 50 employees is reached.

TABLE Vb
Recent Active search for new owners. Percentage of respondents actively looking for new owners in the last three years

Sector	5–19	20–49	50–199	Total
MG	16	15	23	19
BS	29	38	29	32

5.4. Advantages and disadvantages of different owner categories

We move on now to the detailed questions about the relative advantages and disadvantages to different types of new owners. We wish to know not merely how well disposed the business is to outside owners, but whether, for example, this attitude changes if the owner is another company, a venture capitalist or a business angel. There are as we have indicated reasons to suppose that this attitude will be conditioned by sector, size and complementarities this participation might bring.

Table VI shows (row 1) that only a minority (one in seven) of firms believe that risk capital

TABLE VI
Relative merits of the different types of owner-partners^a

Statement	Sector	5–19	20–49	50–199	All size groups	Total
1. Risk capital (equity) funds can provide market knowledge of importance	MG	4	9	10	9	14
	BS	41	29	14	29	
2. Risk capital funds lack the knowledge needed to become owner-partners in SMEs	MG	41	55	51	50	54
	BS	75	68	53	66	
3. Risk capital funds have too short a horizon in their investments	MG	56	69	54	58	60
	BS	67	79	53	66	
4. Risk capital funds make reasonable demands and exert reasonable influence as equity partners	MG	29	35	54	44	40
	BS	38	36	15	30	
5. The costs (broadly defined) of having risk capital funds as owner-partners are reasonable	MG	28	30	38	34	30
	BS	50	18	8	21	
6. If one looks for owners with a long term perspective other companies in the industry are a suitable alternative	MG	57	68	80	72	72
	BS	67	78	78	74	
7. As owners, other companies in the industry can provide important market knowledge for the companies in which they participate	MG	81	72	86	82	84
	BS	93	91	82	89	
8. Private individuals with a business background are suitable owner-partners for SMEs	MG	78	84	74	77	76
	BS	78	70	68	72	
9. It is good for business development to have employees as owner-partners in SMEs	MG	47	40	39	41	47
	BS	78	48	55	61	
10. Going Public is the least expensive way to raise equity for a small company	MG	28	23	29	27	25
	BS	17	15	21	18	
11. Going Public is no alternative for a small company	MG	50	68	57	58	60
	BS	79	53	56	64	

^a Numbers in a given row of the Table are the percentages of respondents 'Agree[ing] to some extent' or 'Totally agree[ing]' with the corresponding statement in column 1.

funds 'can provide market knowledge of value to SMEs'. This percentage rises to almost one in two of the smallest firms in Business Services.¹³ On average three times as many Business Services as Manufacturing firms agree with this proposition. However (row 2), almost half of firms feel that (even *despite* market knowledge in the case of the smallest Business Services firms) that risk capitalists are *not* suitable partners.

Perhaps this is due to the fact that (row 3), most firms (almost two thirds) believe that risk capitalists are short-termists, with little variation in this belief over firm size or sector. Firms seem to believe moreover (row 4) that such investors place unreasonable demands on the investee company and (row 5) are too costly. There is a strong preference (row 6) expressed for industry owner-

partners in the form of other companies as investors, apparently partly due to the strong belief (row 7) that such partners can provide important market knowledge. The same strong belief is held (row 8) with respect to angels performing this role.

5.5. Finance of the firm

Most established businesses, to avoid control by either the banks or by outside equity investors will, it is hypothesised, rely on retained profits to finance their operations. This is particularly likely in the case of hi-tec businesses in the services sectors where supply-side constraints may also exist. Thus we expect the most important single source of finance is therefore retained profits.

Likewise, many studies have showed that whilst bank finance is by far the most important source of *external* finance for the small firm, many small firms, particularly startups, often refuse to borrow at all from the banks with whom they have accounts. For example, Cressy (1993), in a large U.K. study, shows that only about a third borrow at startup and this proportion rises to about a half in three years. Binks (1992), also using U.K. data, shows that even amongst the mature small firms only 33% borrow on overdraft. Thus we expect in the early stages at least, owner equity to play a major role in business operations.

By contrast, most firms are not expected to rely on Venture Capital to fund their operations, for reasons outlined above, and covering both supply and demand side constraints. This is particularly so in the case of the typical startup. For example, Cressy (1993) found that less than 1% of startups had Venture Capital input. The size of U.K. startups using Venture Capital was also much larger than average startup. This reflects both the high fixed costs of formal (institutional) investment and the small likelihood of capital gain to the investors,¹⁴ together with the control aversion discussed above. Mason and Harrison (1991) estimate that Informal Venture Capital (angels) contribute significantly to the finance of a growth-oriented subset U.K. businesses, especially the faster growing ones.

The role of trade credit has been explored in a number of studies and found to be highly significant for the smaller firm. However, little work, especially in the European area, has been done to assess the role of customer credit, in particular in the financing of hi-tec firms. In this case we hypothesised that the more hi-tec smaller business would rely more on credit from suppliers than the more conventional business.

Hypotheses:

- H5.1 The most important source of finance for firms of all sizes is retained profits. This will be more so in Business Services than in Manufacturing and for smaller firms over large.
- H5.2 Smaller firms will rely more on bank finance than larger firms and this is true *a fortiori* in the Manufacturing than the Business Services sectors.

H5.3 Trade credit will play a more significant role for smaller than larger firms and for Business Services firms rather than Manufacturing firms.

H5.3 Formal Venture Capital will be unimportant for most firms, but of some significance for faster growth firms.

Results

From Table VII we can see the overwhelming importance attached by firms to retained profits in funding their operations. Eight out of ten firms (row 1) found them to be of importance or great importance, a higher proportion than for any other source of finance. There is the predicted variation in this ranking across sector (see Hypothesis 5.1). For example, 3 out of 4 firms find retained profits important in Manufacturing; but more than 8 out of 10 do so in Business Services. The differential may reflect both the availability of collateral and the uncertainty of the revenue stream in Business Services relative to manufacturing.

As predicted also (Hypothesis 5.1) in Manufacturing *bigger* firms use *less* retained profits. However, there was no size effect in Business Services.

The significance of bank finance is also apparent: half of the sample find bank finance important, with a significant difference again between sectors. In Business Services, only about a third make this assessment, but in manufacturing roughly *twice* this proportion. However, there is little size class variation contrary to what is predicted by Hypothesis 5.2: small firms do *not* seem on average to find bank finance any more or less 'significant' than large.¹⁵

Venture capital as predicted (Hypothesis 5.3) was significant in funding for only a tiny minority of firms, and more so for Manufacturing than Business Services, where *no* firm estimates it as of importance (even though some firms do actually use it).

An interesting finding is that (row 5) one in four businesses found finance from suppliers to be important in funding their operations, and that it was more so in the case of Business Services than in Manufacturing. An interesting point again to be speculated upon is that successful small businesses may actually find their prime shortage is of

TABLE VII
The importance of different sources of finance in recent years^a

Source	Sector	5–19	20–49	50–199	All size groups	Total
1. Company profits	MG	80	79	71	75	78
	BS	84	85	83	84	
2. Bank loans	MG	50	67	57	58	51
	BS	32	38	37	36	
3. New equity from the owners	MG	17	37	21	24	25
	BS	29	23	29	27	
4. Funding from business suppliers	MG	22	15	16	17	14
	BS	3	8	13	7	
5. Funding from business customers	MG	33	21	17	22	26
	BS	33	35	38	35	
6. Risk capital/ Venture capital funds	MG	2	6	4	4	3
	BS	0	0	0	0	
7. Regional fund loans	MG	18	26	7	14	12
	BS	6	8	4	6	
8. Government loans	MG	0	2	0	1	0
	BS	0	0	0	0	
9. Loans from other sources (NUTEK)	MG	6	15	8	9	8
	BS	3	8	4	5	

^a The scale used was 1 = no importance, . . . , 5 = very great importance, with the Table providing percentages answering in the top two categories.

customers rather than finance! In other words, once the *appropriate* customers are identified they can provide significant sources of funds to the supplying firms in the form of advances on products and (particularly) *services* they provide, thus obviating the need to rely on the more institutional forms of funding.

5.6. Financial conditions in Sweden and development obstacles

5.6.1. Bank-firm relationships

The usual complaint by small firms against banks is that the latter do not understand their business (see e.g. Binks, 1992, for U.K. evidence). This arises from a hands-off approach often adopted by banks who seem only to be interested in collateral cover on the firm's loan and often seem to largely ignore business cash-flow in assessing a project. Banks will, however, be concerned with the possibility of capital loss and therefore will consider the firm's debt-equity ratio carefully before making a loan. Understanding by banks

(other than specialist merchant banks) of hi-tec businesses (such as are often found in Business Services) is reckoned to be exceptionally poor due to the nature of the products and processes in question. In many countries banks constitute a powerful oligopoly with considerable ability to determine interest rates and charges over the small firm (e.g. Berger and Hannan, 1989). In turn, firms are fiercely independent and do not like bank interference in their activities, particularly disliking any form of equity stake (e.g. Bolton, 1971). Finally, for given loan size, interest rates will be likely to be higher for Business Services firms, as less collateral will be available for the loan (Cressy, 1996a). Thus we hypothesise:

- H6.1 Smaller firms, and in particular Business Service firms, will find bank finance 'more costly' than their larger and Manufacturing counterparts.
- H6.2 Smaller firms will complain more vociferously about lack of bank comprehension of their business, and more so in

Business Services than in Manufacturing.

- H6.3 Smaller firms applying for finance will find their D/E ratio problematic to the banks.

Results

From Table VIII, only one third of firms believe that the banks provide funds 'at a reasonable price', a figure reduced to one quarter in the smallest size class, and even to one fifth for Business Services firms (row 1), bearing out hypothesis H6.1. The firms, being aware of the differential in pricing of loans of similar size, confirm by a massive majority (8/10) a lack of competition between banks (row 6). In addition, a clear majority, more marked for smaller firms, believe that the banks do not understand their business (rows 2 and 4), consistently with H6.2. They also apparently ask for too much equity (owner funds) for the debt they supply (row 7), the more so if the firm is small, confirming H6.3. Moreover, this issue is not to be resolved by the banks taking an equity stake in these firms: almost 9 out of 10 firms refuse to consider this option (row 8).

5.6.2. Perceived constraints on SME development

Answers to the next set of questions allows us to investigate whether the firms in the sample viewed themselves as constrained, and if so, the specific form that the constraint might take: financial or 'real'.

Hypotheses

Smaller firms are likely to find that profits are a constraint on development if they have low collateral and are not prepared to open up equity to outsiders. Thus we hypothesise:

- H6.4 Small firms, and particularly BS firms, are more likely to see profits as a constraint on development, and this will be reflected in the debt equity ratio (regarded as too high by the banks).

Regarding non-financial constraints, if smaller firms are aware of deficiencies in the 'real' factors of management, product development, marketing etc., we should expect them to *perceive* these as a constraint on their growth. However, *if awareness itself is an increasing function of size*, this may obscure the outcome. Thus

TABLE VIII
Business attitudes to, and relationships with, the banks^a

Statement	Sector	5–19	20–49	50–199	All sizes	Total
1. Banks usually provide SMEs with finance at a reasonable price	MG	27	50	35	37	35
	BS	21	39	33	30	
2. The bank is very competent in business matters	MG	33	27	28	29	28
	BS	22	39	17	26	
3. Banks' demands for collateral are too onerous	MG	79	65	63	67	66
	BS	70	52	58	61	
4. The bank has little knowledge of SMEs	MG	53	51	38	45	46
	BS	62	30	53	49	
5. Banks are good at solving financial problems for SMEs	MG	20	20	24	22	21
	BS	12	27	11	17	
6. Banks should be competing more actively with one another	MG	85	76	72	76	78
	BS	85	87	81	84	
7. Banks usually demand too high an equity-debt ratio from SMEs	MG	65	52	52	55	56
	BS	64	57	58	60	
8. It is desirable for banks to take more of a stake in SMEs	MG	15	8	8	10	12
	BS	21	14	12	16	

^a Cell figures record percentage agreeing/strongly agreeing with the statements about banks.

- H6.5 Perceptions of constraints in the areas of marketing, product development and management have an ambiguous relation to firm size.

Results

Table IX shows that indeed low profitability and high financial risk (represented by the debt equity ratio and low liquidity – H6.4) are regarded by SMEs as their worst enemies (rows 1, 2 and 3), with lack of managerial, marketing and product development skills (rows 7, 5, and 4) as close seconds. The *complementarity* between finance and expertise deficiencies is not of course apparent from this table, but once more is an underlying factor – it is in fact a *leitmotif* appearing regularly through the present study. This lack of knowledge also, and interestingly, extends to *technical* know-how: almost two thirds of firms regard this as a significant constraint (row 6). However, the only quantitatively large differences in Table IX seem to be regarding certain skills shortages in the smallest size group (where the Business Services sector appears significantly disadvantaged in marketing and product development vis a vis Manufacturing); and for the group 20–49

employees in the area of technical know-how (where now Manufacturing are disadvantaged). Finally, smallness *per se* is regarded as seriously affecting their market image by somewhat less than half of the respondents (row 8). Thus, size does seem to play a role independently of the other factors identified.

5.6.3. Overall attitude to financial environment

The study wished not merely to assess attitudes to external owners both across sectors and size groups but also to get a view of the firms' overall view of the Swedish financial environment. The results of these questions are displayed in Table X, where the analysis is broken down by sector and size class.

Looking at the sectoral analysis in the upper panel, we find that in Manufacturing, almost half the respondents felt the quality of the environment was poor or very poor. One fifth felt by contrast that it was good; the remaining third concluded that it was about average. *None* concluded that it was very good, which is perhaps a rather sad reflection of the prevailing state of affairs and suggests there is considerable scope for improvement.¹⁶ A similar pattern was observed for

TABLE IX
Constraints on SME development^a

Factor	Sector	5–19	20–49	50–199	All sizes	Total
1. Low profits	MG	96	98	97	97	96
	BS	93	96	89	95	
2. High debt-equity ratio	MG	92	81	97	97	96
	BS	79	92	96	95	
3. Low liquidity	MG	92	81	81	84	83
	BS	93	92	73	82	
4. Lack of product development skills	MG	67	80	76	75	76
	BS	86	70	73	77	
5. Lack of marketing skills	MG	67	82	83	79	80
	BS	86	83	83	84	
6. Inadequate technical know-how	MG	60	71	55	60	59
	BS	63	48	53	55	
7. Deficiency of managerial skills	MG	83	83	82	82	84
	BS	80	92	87	86	
8. Poor market image due to smallness	MG	50	45	30	38	42
	BS	52	56	43	51	

^a Percentage of respondents finding the following factors important/very important constraints on SME development.

TABLE X
Overall satisfaction with the financial conditions for SMEs in Sweden, by sector (%)

Sector	Very poor	Poor	Average	Good	Very good
Manufacturing	8	36	35	21	0
Business services	11	43	36	11	0

Percentages by size class and sector viewing conditions as "poor" or "very poor"

Sector	5–19	20–49	50–199	All
Manufacturing	53	43	39	43
Business services	60	50	48	46

Business Services but with a higher percentage of respondents (54%) pessimistic i.e. judging the system to be below average.

There is, perhaps predictably, a systematic variation of these views as one moves down the size classes, with smaller firms in both sectors finding more dissatisfaction with the system, and larger firms being more content with the *status quo*. However, it is interesting that *a significant sectoral difference emerges*, with Business Services expressing considerably *more* dissatisfaction *especially at the upper end*, than Manufacturing firms. This suggests that firms in Business Services, because of the very nature of the sector, are suffering disproportionately from the existing setup than their counterparts in Manufacturing. That this relative disadvantage should appear to *increase* with size is however rather surprising.

6. Summary and conclusions

This paper showed that in two important sectors of Swedish industry in the early 1990s the existence of (internally generated) finance *demand* rather than simply the familiar (externally generated) finance *supply* constraints on businesses are a significant empirical phenomenon. We found that the firms were aware that relinquishing some control would improve performance. However, it seems that the returns in growth, profits and survival were not sufficient to offset the loss of control. Firms still felt that it was better to rely on retained profits for their funds, and to rely on the banks in the second resort. Policy measures

aimed at retaining capital in the business are therefore more important for the creation of growth incentives than measures aimed at providing external equity funds (e.g. venture capital).

However, the owners of younger firms, especially in Business Services, regard very favourably the *added expertise* of new owners, and indeed one in three such firms actively sought new owners. This finding emphasises the nature of equity finance as a 'package' from the viewpoint of the smaller firm: control-loss is more acceptable if accompanied by a compensating gain in needed management skills. It sweetens the bitter pill.

Overall dissatisfaction with the Swedish financial system was cogently expressed by the respondents in this study, and we found that smaller firms were the most vociferous. However, there was a differential between sectors, with the Business Services Sector being the most problematic. The differential between 'dissatisfieds' in the two sectors also seemed, paradoxically, to increase with size of firm.

The policy conclusions that emerge from this research are several. On the equity gap side, needless to say, a government policy of simply throwing money at the problem will not solve it: schemes which offer cheaper but hands-off oriented venture capital do not, in view of our evidence, seem promising – at least to the smallest companies. On the other hand, the idea of tax breaks for investors *who also wish to become directors* of companies (angels) seems in view of this research to be money well spent. This would enable firms lacking in expertise and finance to achieve both, and sweeten the bitter pill of control

loss. The U.K.'s recent Enterprise Investment Scheme (replacing the relatively unsuccessful Business Expansion Scheme) is one that might have applicability in the Swedish context. However, it is still very much in its infancy and needs proper evaluation before that could be considered a worthwhile 'transfer'.

Notes

¹ An analysis of the change in the structure of Swedish industry is provided in Davidsson, Lindmark and Olofsson (1996).

² The quantitative assertions made here and throughout the study rely on differences significant at the 5% level on a two-tailed test.

³ This ratio is what the Swedes call Solidity and is actually defined as $E/(D + E) = (E/D)/(1 + E/D)$, where E = equity and D = debt. Thus for example, $E/D = 0.40$ corresponds to $D/E = 0.29$. The E/D ratio obviously has a positive monotonic relationship with the equity-debt ratio.

⁴ For example, we find that the larger firms are more likely to have an equity-debt ratio in excess of 30 per cent than smaller ones, and around 50 per cent of firms in the smallest size group have an equity-debt ratio lower than 20 per cent, while the corresponding figures for the two larger size groups are 38 and 34 per cent respectively.

⁵ This term derives from Cressy (1995) but there it is used to describe aversion to bank control. Here we use the term more to cover aversion to equity stake holding by outsiders.

⁶ This is particularly so if the firms are growing firms.

⁷ This is consistent with hypothesis 2.2 that those investments required loan collateral that was inadequate in the that sector.

⁸ The statistics supporting these statements are available from the authors.

⁹ This is indeed a foundation of policy in most Western countries. See ENSR (1993, 1994, 1996).

¹⁰ This literature goes back to Bolton (1971), and a set of references for the U.K., for example, can be found in Stanworth and Gray (1990).

¹¹ This is consistent with the theory of entrepreneurship as a learning experiment propounded in Jovanovic (1982), so that if expertise of the founders can be supplemented at an early stage by outsiders, the chances of survival and growth may be enhanced.

¹² Cosh and Hughes (1994) in the U.K. also found the probability of search for external finance (of any sort) to be negatively related to age of firm, but positively related to size, and growth.

¹³ Curiously, the percentage of Business Services firms believing this is a monotonically declining function of firm size.

¹⁴ Most small firms do not grow appreciably over long periods. Storey et al. (1987) found that over a decade, the median growth rate was 0% and 50% of the jobs were provided by 4% of the firms.

¹⁵ It is not clear that this implies they use the same proportion of bank loans as large, which seems unlikely.

¹⁶ We must of course be aware that these judgements are relative, and that even in the best financial environments there may be relative misperceptions about the quality of the system.

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