

European SME Financing: An Overview

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This *Special Issue* constitutes an edited selection from the papers of a conference Financing SMEs, sponsored by Sweden's NUTEK and held in Brussels in September 1995. The conference program was structured to include a significant proportion of the papers by policy-makers from both the public and the private sectors, the remainder to be contributed by the academics. Some 50 participants from seven European countries attended over a two day period and 14 papers were presented. The purpose of the present volume is to present an edited selection of the more academically oriented papers to the readers of *Small Business Economics*.¹

The next section outlines some of the themes that emerged from the conference and is followed by the papers themselves.

The themes²

In this overview we adopt as a working definition of the small business the European Commission's employment criterion for an SME: any business that employs less than 250 people.³ This will therefore include all Sole Traders, and the majority of Partnerships and Private Limited companies.

1. Differences in the financial structure of small vs. large businesses

It is now well-known that small businesses are not 'scaled-down versions' of large businesses. The process by which a large business has achieved its

current size is of course one of evolution rather than scaling, and this process of evolution will involve major changes in management structure and functioning, in particular in the methods by which the business is financed (Penrose, 1959). The simplest and most readily available representation of a firm's finances is to be found in the firm's accounts data.⁴ Hughes' excellent scene-setting paper in this Issue begins with an analysis of a large U.K. sample of small business accounts. He shows that, as predicted, there are indeed major differences in account structure between small and large businesses.

Hughes, who also surveys a large body of other U.K. research, finds (*inter alia*) that smaller businesses have (a) lower fixed to total assets ratios; (b) a higher proportion of trade debt in total assets; (c) a much higher proportion of current liabilities to total assets (and in particular a much greater reliance on – especially short term – bank loans to finance their assets); (d) are heavily reliant on retained profits to fund investment flows; (e) obtain the vast majority of additional finance from banks (with other sources, in particular equity, very much less important); (f) are financially more risky, as reflected in their relatively high debt-equity ratio and in their higher failure rates (for the latter result see e.g. Evans (1987a, b); Storey et al. (1987) and Cressy (1996b)).

These differences are fascinating, and call for explanation. Some of these facts, as Hughes argues, can be explained by the Pecking Order hypothesis (POH) of Myers and Majluf (1984), derived in the context of what we might now call 'large firm analysis'. The POH asserts that under conditions of asymmetric information, firms will choose finance sources for their business in a particular order that minimises interference and ownership dilution. This implies that internal sources (trade debt and retained profits) are

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utilised first, followed by bank debt and then outside equity. On this theory we should expect, for example, that smaller firms would have higher reliance on bank and trade debt than large, since they are at an earlier stage of financial evolution, in conformity with Hughes' empirical evidence cited above. We should also expect that they would rely on retained profits as the main source of new equity, with new owners only adopted as a last resort, also in line with Hughes' evidence.

Without detracting from this paradigmatic paper, there are questions about the extent to which the POH can explain the small firm financial data Hughes presents. For example, the POH relies on the assumption that the only role of share ownership is that of maximising shareholder wealth. Can the hypothesis therefore account for the existence of owner 'control aversion' unrelated to profitability? This, some might argue is the typical situation for the small firm. The POH would also seem not to account for external constraints due to size, where the constraints occur for reasons unrelated to profitability (e.g. due to firm size and the consequently higher riskiness of the business).⁵ Finally, some alternative, perhaps ad hoc, explanations already exist in the small business literature for some of these perceived finance structure disparities.

Firstly, the lower fixed assets ratio of smaller businesses may partially reflect a *sectoral bias* to small business enterprise: smaller businesses have a much greater concentration in the service sector (see ENSR, 1993, 1994, 1996). The service sector has a smaller need for fixed investment than manufacturing, since, by the nature of the sector, investment in plant and machinery is relatively low, especially at the lower end of the firm size range.⁶

Secondly, lower fixed investment may also characterise the differences in growth strategies between large and small firms. Where the firm's growth strategies and startup capital are limited (often regarded as the typical case), fixed investment may be minimised by entering sectors or developing products where these requirements are low.⁷

Thirdly, the POH assumes no market power on the part of financial market players. However, the higher proportion of trade debt in smaller companies' balance sheets may reflect in reality both

their lower product market power⁸ in commanding payment for goods supplied and imperfections in the market for long term debt which favour larger firms. Thus, the greater bargaining power conferred by size⁹ will result in shorter payment periods from smaller customers, and longer payment periods for large firm suppliers.¹⁰ It will also be likely to result in smaller borrowing power from the banks because of the firm's shorter track record and higher debt-equity ratio. The last point is emphasised by Hughes.

Fourthly, the high proportion of (short term) bank debt is also likely to reflect smaller firms' lower growth potential, since the ability to raise external equity usually depends on the capital gain expected for the external investor. Debt, for example, in the form of overdraft facilities,¹¹ is primarily needed by the smaller firm to cover working capital requirements, with intermittent need to finance replacement or expansion investment. Smaller firms in general, as is now well known, do not generally wish to grow beyond what economists call the 'minimum efficient scale' (MES)¹² – the level of sales prerequisite for survival in their chosen industry. Their owners have low growth motivation,¹³ being run by 'lifestyle'-oriented managers rather than strategic, growth-oriented, dynamic entrepreneurs. They may grow to the level required to achieve the lifestyle the managers were previously accustomed to, but often no further. This may be termed *The Target Income Hypothesis* of micro-business growth.¹⁴

Fifthly, young, small firms, often being run by novice entrepreneurs, are by their nature evolving organisms, and so involved in a *learning experiment* (Jovanovic, 1982). This means that their sales will tend to fluctuate around the mean more than their larger counterparts as they adjust sales to levels appropriate to their estimates of costs. This, however, provides income risk, in addition to capital risk, to their potential financiers which may deter outside equity investors ('angels' in the literature – see **Harrison and Mason** below) who have safer prospects on offer, thus raising the debt-equity ratio.¹⁵ Recent empirical evidence has found support for this in several European countries and the United States (e.g. Mata (1994), Mata and Portugal (1994), Reid (1996), Cressy (1996b)).

Finally, the smaller firm suffers from *financial scale disadvantages*. It has little need for variety

in sources of finance, due to the factors mentioned in the POH but due also to its relatively limited prospects for growth, scope for product diversification and product/process development. This also implies a reliance on retained profits, trade credit and a single bank, in turn reinforcing the credit market power of the banking system. Scale economies in debt collecting, tax avoidance (Davis and Henrekson, 1995; Gandemo, 1996), and financial monitoring (larger firms can justify using outside agencies or employing an internal credit controller) also provide the larger firm with advantages.

2. Financial demand and supply constraints

One of the most important themes arising in the papers of this Issue is the distinction between demand-based and supply-based financial constraints. We define a *supply side finance constraint* as a capital market imperfection that leads to a socially incorrect supply of funds to projects (e.g. deficient funds as in the case of rationing) or the incorrect interest rate charged on funds.¹⁶ The concept implies a misallocation of resources so that a reallocation would make society better off in some well-defined sense. We can expect in particular that this kind of imperfection will be something completely outside the control of the individual (small) firm. Thus for example, when a bank rations credit, the small firm is incapable of reversing the bank's policy. The existence of supply-side financial constraints, in particular of credit rationing, has long been acknowledged, and its importance amongst smaller firms well documented.¹⁷

We define a *demand-side financial constraint* as a situation as a capital market imperfection in which performance of a firm is adversely affected by a factor *internal* to the firm. Thus for example, if the firm's owners would *like* to grow the firm faster, but the only way they can do this is to relinquish equity, *and they refuse to do so*, we may say the firm's demand for funds is demand-constrained. Whilst the existence of control aversion has been recognised as part of the small firm culture, until recent years little attempt to evaluate the role of this in business performance has been attempted.¹⁸

Are demand side constraints so called market

imperfections requiring policy intervention? From a theoretical perspective, this is very much a grey area. In a perfect market, for example, the firm whose performance was low as a result of owner control aversion would be replaced by another who met this criterion, or (if were marginal) it would simply be forced to close. However, small, closely-held firms do not necessarily get taken over if their managers do not relinquish control at the appropriate juncture, and may in fact be protected from competition by entry barriers. There may therefore be imperfections in the market for corporate control, or in entry conditions to the industry, and this manifests in what we call a demand-side finance constraint: these firms remain, but to maximise social welfare they should be driven out of the market.¹⁹

How do we recognise the existence of financial supply and demand constraints? This is not an easy question to answer, and the contributions of the present *Special Issue* provide us with some choice. However, since the conclusions for policy may differ according to the criteria selected, this is an important empirical issue. For example, a strand of the U.S. literature adopts the criterion for credit rationing as the existence of a relationship between cash flow profits and investment. In a perfect capital market this would not occur, since internal and external funds would be perfect substitutes and in infinite supply relative to the firm's needs. Only 'real' factors would then induce a change in investment behaviour. **Audretsch and Elston** in this Special Issue examine the evidence for rationing in Germany using the cash flow-investment criterion.

Another strand of the economics literature identifies a relation between switching into self-employment and assets as evidence of credit rationing (see Cressy (1996a) for references). Still other writers adopt a questionnaire approach to the identification problem', where the firms are asked to rank in order of importance the various constraints under which they see themselves as operating under. This may then be matched up with 'objective' criteria such as credit rating by outside agencies. For example, **Egeln Hornle and Licht** (EHL) use this approach in another German study in this *Issue* – see below for the details.

As the reader will discover, the present Issue contains several papers contributing to the criteria

for financial constraints and elaborating specific instances of these types of constraint. In the next sections we introduce the remaining papers by describing these in detail.

3. Operationalising the supply and demand constraints

Cressy and Olofsson in a recent survey of director attitudes towards new owners in Sweden show that these often exemplify an extreme degree of control aversion – here defined as aversion to the sale of equity to outsiders. They find that this aversion is present in varying degrees in most firms and in all sectors. However, it is found to be more important for smaller firms than larger, and for Manufacturing industry than Business Services. Control aversion is moreover found to imply a lower level of performance measured by growth of the business. Thus we have some hard evidence of a finance demand-side constraint with a ‘real’ impact. They find one extreme type of control aversion manifested in the fact that almost half of their sample of 285 firms display a preparedness to *sell* the firm rather than to take on new owners!²⁰

Cressy and Olofsson find that debt preference (the preference for using debt over equity identified as a *demand*-side constraint) applies, perhaps obviously, for firms that have no *desire* to grow. Here, of course, it is easily misconstrued as a supply side constraint, which might well operate in parallel.²¹ However, more disturbingly they find that debt preference applies also to significant number of firms whose owners *did* wish to expand their businesses. The form of the questions asked enables them to conclude that potential growers were *aware* that by retaining control their performance would deteriorate, but were not prepared to face the tradeoff implicit in the decision to allow external equity holders to play a role in the company. To characterise this phenomenon, the authors draw an analogy with a patient who is advised by the doctor to take medicine for his condition. The patient, whilst being aware that the medicine will improve his health is more pre-occupied with the side effects of the drug and refuses the treatment. Consequently his health deteriorates.²²

The Cressy-Olofsson analogy thus serves to

highlight the conflict implicit in the growth process of SMEs and identifies constraints on growth operating from the *demand* rather than the more familiar supply side. The costs of growth, frequently identified as financial, are often at base managerial and psychological. Critically, availability of outside finance will not in itself solve the problem.²³

Egeln-Hornle and Licht study of the role of supply-side financial constraints on the formation of firms in the enlarged Germany. Using a large panel dataset they find that firm startups in the German districts are positively correlated with some 13 factors. The most highly correlated variable with regional formation rates is the region’s share in employment of establishments with 2–49 employees (‘small firms’). Paradoxically, they find that the wage level in the region is positively related to the rate of firm births. Whilst the wage might be seen à la Evans and Jovanovic (1989) as being the opportunity cost of starting in business, they are able to cogently explain its positive sign. The wage is in fact acting a proxy for human capital of the entrepreneur: a higher wage level, the more likely it is that the employee has some managerial experience and is capable of running a business. Thus human capital is in some real sense a constraint on business formation. This has recent echoes in studies from other European countries.²⁴

However, holding human capital constant in this way **Egeln-Hornle and Licht** (EHL) are still able to identify the existence of financial supply side constraints on business formation. They also address the problem from the point of view of perceptions of the entrepreneurs themselves of these constraints, using a survey-based approach. This is cross-checked with ‘objective’ credit scoring data from another source. They find that in firms’ perceptions of financial constraints the experience of the *importance* of the constraint is greater for small firms and firms with higher R&D intensity. They conclude that the innovative firm is faced with a particular disadvantage viz a viz its more standard counterpart. This result is in accordance with intuition and the theory of moral hazard first enunciated by Arrow (196x) in the States, and finding recent empirical confirmation in the work of Himmelberg and Peterson (1994).

This, then, is an important finding, both con-

sistent with other empirical studies and also very much in line with the findings of **Audretsch and Elton** in this *Issue*, who examine finance constraints specifically for the German *Mittelstand* population. They argue strongly for the existence of supply side finance constraints in the German economy, in particular at the startup stage, and like EHL, for innovative small firms. Whilst in the Egelh-Hornle Licht case, the constraint is identified in collateral availability, or its absence; in Audretsch and Elton it is identified in the *dependence of investment decisions of German firms on their cash flow profits*.²⁵ But in both cases the conclusion is the same: SMEs are disadvantaged vis a vis large firms.

Binks and Ennew's contribution, like Cressy and Olofsson's also identifies the existence of demand as well as supply constraints on the development of businesses. There are three main sources of demand and supply side constraints identified, namely management (as in Cressy and Olofsson), labour skills and access to finance.

The methods of evaluation used by the banks to assess small business loans may be a source of finance constraints on business. In a perfect market all projects with positive net present value should be funded. However, banks tend to argue either that the assessment of future cash flow is impossible or that they, as lenders, are not equipped to assess it. Moreover, as lenders, who share in the downside risk but not in the upside gain of the business, they have little incentive to do so. **Binks and Ennew** argue convincingly that the income gearing approach to bank lending, which looks at cash flow to loan size, is preferable to the traditional capital gearing method (relating loan size to collateral) since it relies on the current *and future performance* of the business rather than on the provision of security for the loan. However, Binks and Ennew note that the ability to *evaluate* cash flow depends on *information flow* – from both sides of the deal. Thus the bank needs to understand how the business and its markets operate and the business needs to provide the bank with up-to-date information on the business' accounts, etc.

Binks and Ennew argue that constraints facing small firms, whilst manifesting as financial, arise in fact from underlying informational problems. Recent survey evidence from a very large number

of small businesses is presented to demonstrate a strong positive association between 'participative' relationships of firms and banks and 'good' perceptions of banks by their client firms. They suggest a 'virtuous circle' of information and communication could be established if the parties were to cooperate in a systematic process of business risk assessment. But how to evade the suboptimal outcome engendered by Prisoners' Dilemma reasoning? This is a more tricky question to answer. However, attempts at 'role reversal' between banks and firms seem a promising starting point. Such schemes make the other party (in particular the bank) aware of the nature of the other's business and the incentive structure operating against communication, thus helping to break down barriers.

The evidence from firm-bank relationships notwithstanding, **Hughes'** work in the U.K. mentioned previously, using both the subjective and objective approaches to constraint identification, concludes that the evidence for *general* equity or debt gaps in the U.K. is weak. If anything Hughes argues, SME funding was too easy in the boom of the late 1980s.²⁶ His response is to ask for policy that targets specific areas of concern, rather than to promote a general support scheme for SME finances. Consideration could be given to the promotion through seedcorn funding of SME co-operative or mutual guarantee schemes to reduce information asymmetry in U.K. credit markets. Mutual guarantee schemes, for example, very popular in the southern states of continental Europe, but unknown in the U.K., provide a privately organised 'insurance system' for lending banks by groups of firms, usually within a specific industry, that enables the banks to rely less on the assets of individual companies within the group in making loan decisions. The pooling effects of this system reduces the risk to the bank of default and also reduces informational asymmetries between the banks and the firms. Hughes' point is that the market solution provides not merely a guarantee, but also an incentive for members of these mutual societies to *divulge* information to the society that they would hesitate to provide to the bank.

4. Finance constraints and size

We saw above that the existence of finance constraints has a size dimension. But what about the extent of such constraints? How hard do they bite on the small and large firm?

If finance constraints are of any importance to the economy, they should impact on performance. Most studies in this area discuss survival as the measure of performance. However, we should expect finance constraints to impact on survival via profitability. Is there evidence that surviving smaller firms, supposedly more constrained than large, are also less profitable?

Hughes cites some interesting evidence on the profitability of small versus large U.K. companies over a 20 year period. He finds that historically there are indeed differences in the profitability of large and small U.K. companies measured by return on total assets. These differences, seemingly contrary to the rationing hypothesis, favour the *smaller* firm. Moreover, there are industry effects: the differential is highest for the non-manufacturing sector. However, he shows that there have been important trends in relative profitability over the period. Small companies were more profitable in the 1970s than large, but this gap narrowed steadily over time, being finally *reversed* in the late 1980s. Thus in recent years, smaller companies have become less profitable than large. Nonetheless, this result should be interpreted with some caution: Hughes goes on to show that small firm profitability is also more volatile than large, with the effects of recession much more damaging on small than large firms. The upshot of this for the financial constraints issue is that perhaps mean profitability is not the only parameter of interest when discussing the effects of financial constraints by size: such constraints may also impact on the variability of profits.

Audretsch and Elston, examining German data, and consistently with the differences in the financial structure discussed in the opening paragraphs, show that whilst constraints seem to exist for all sizes of firm, the extent of the constraints faced by firms is itself size-dependent, and in particular that there are advantages conferred by size. Their paper, in this respect, demonstrates that the increasing body of evidence from the United States²⁷ on the variation of capital constraints with

size has also a European counterpart. Further cross-country analysis in Europe may, we believe, reveal it as a pan-European phenomenon.²⁸

The rationale of this finding is not difficult to establish. As firms get larger, we have noted that they have need for and able to obtain access to a larger range of finance sources including their own retained profits (this greater access of course may itself be part of their growth process). In turn this makes them less dependent on the banks for support, and any attempt by once source (e.g. the banks) to limit their funds can be more easily circumvented. Moreover, as we shall see below, funds tend to come in *packages*, and larger firms' openness towards, and access to, equity investment by outsiders allows them to increase capitalisation *without* increasing the debt-equity ratio.

This is a theme also taken up by EHL. They conclude that this constraint (measured by firm beliefs about shortages) is monotonically decreasing with firm size measured by employees. Furthermore, this relationship is mirrored in the credit rating agencies assessments of the firms, providing an 'external' or market oriented confirmation of their results.

5. Real and financial interdependence: the role of policy/product 'packages'

Often the existence of a financial constraint in one area is alleviated by relieving a corresponding constraint in another. In a perfect market indeed we should expect this substitutability between funding sources to be legion. In this circumstance it is of course possible to solve one potential 'constraint' by addressing the other. Thus for example, the rationing of debt may be alleviated if an outside owner can be brought in to provide needed equity. Because the firm's financial health (debt-equity ratio) is now more sound, the banks are more willing to provide funds.

The same principle, however, may apply if the firm requiring finance is not prepared to relinquish equity on its own, but if the package offered trades equity for material advantage of some kind. For example, in the case of the small firm, *management* skills might be part of the finance deal. These features are often ways in which the market circumnavigates apparent imperfections, but are not always forthcoming in sufficient quantities to

allow a frictionless financial environment. Then government has to step in. This is exemplified, for example, in the government's role as marriage broker for firms and business angels in some countries. This Special Issue has much to say on the subject of such 'packages', see especially the paper by **Mason and Harrison**.

Cressy and Olofsson's paper identifies the most important constraint on SMEs as not simply finance as such (i.e. debt and equity) but as the *package* of finance (specifically equity finance) and *expertise*. Businesses were more likely to be willing to relinquish finance if the compensation were in the form of the *provision of management* skills (business angels) or of *market knowledge* (other firms in the industry). However, the general aversion to control loss was evident in the majority of businesses surveyed, especially the smaller businesses and in the manufacturing sector. Businesses in the upper size groups and in Business Services were less prone to this kind 'equity xenophobia'. They were however, more realistically aware of the financial costs (reporting requirements etc.) involved in the process of flotation.

In the finance literature there is too often a separation of the issues of debt and equity financing, so that the jointness of the problems of equity and debt shortages is ignored. However, professional experience in this area suggests that a bank was often found willing to invest in a business that it had formerly refused funding, provided a business 'angel' (informal venture capitalist) could be found to put up extra equity.²⁹ This behaviour highlights the interdependence of the two types of constraint. It also makes economic sense from two points of view: The bank's perceived riskiness of the proposition after an injection of equity is now lower due to (a) the confidence of the 'me-too' approach that can now be adopted, and to (b) the lower actual risk afforded by the lower debt-equity ratio that the business investor was able to generate in the project at the point of bank lending.

The implications of removing the continuing informational deficiencies in the market for informal venture capital identified in **Mason and Harrison** is therefore a key to unlocking *both* equity and debt for the small business. They argue that Business angel networks (BANs) provide a

channel of communication between private venture capital investors (business angels) and entrepreneurs seeking risk capital. The economic *raison d'être* of BANs is to plug an information gap in the funds market that the private sector has no incentive to fill, but social efficiency requires. Most of these organisations therefore operate locally on a not-for-profit basis, with their costs underwritten by the public sector. Recent establishment of BANs by private sector organisations in the U.K. has naturally led to questioning of the government's continuing role in the financing of BANs. Their paper, however, demonstrates in response to this issue that there are in fact significant differences between public sector and other not-for-profit BANs and private sector, commercially-oriented BANs in terms of the investments that they facilitate. Private sector BANs are primarily involved with larger, later stage deals whereas investments made through not-for-profit BANs are generally smaller, involve start-ups and other early stage businesses and are local. The emergence of private sector BANs has therefore not eliminated the need for public sector support for locally-oriented networks.

Manigart in a set of 18 case studies of the financing of hi-tech startups in Belgium finds in conformity with recent U.K. and U.S. work that the personal equity of entrepreneurs plays a larger role than bank financing, and that in the larger startups outside equity is critical. Measured by the proportion of the sample of *companies* using a single source of finance she finds that one in six used personal funds alone, with one in eight using bank finance alone. Of those that used dual sources, about half used personal funds in conjunction with bank loans. The variety of funds used, as expected, is an increasing function of total capitalisation. Interestingly, almost all the businesses recorded negative earnings in their first year, making debt financing problematic and some kind of venture capital intervention crucial. She finds in consequence that one third of companies received injections of outside equity either from private individuals ('angels') (about one in six of the sample) or from venture capital companies, other companies or universities (in aggregate the same proportion). These 'outside equity based' (OEB) starts were the larger subsample of one third of the businesses – their average capitalisa-

tion being many times that of the remaining two thirds. The OEB subsample then used three sources of startup finance, much more than would be the case for the typical startup (about 3–4% of businesses in the U.K.). The process by which these companies acquired the outside equity seems to have been serendipity rather than any rational, systematic search procedure. This recalls the arguments of **Mason and Harrison** elsewhere in this volume, where the process of matching investors with investees in the U.K. and U.S. seems to have been a largely chance-based affair, despite the efforts of various government and privately funded agencies to develop ‘marriage bureaus’ to facilitate the process.

7. Do European funding gaps exist? If so, what is their nature?

The papers in this volume suggest clearcut answer to this question. What becomes clear as we read through the Issue is that there are *both supply and demand* constraints in *some* European countries. However, the evidence also suggests that in others the gaps are confined to specific financing modes (debt or equity), to specific sectors/types of firm (e.g. hitec), and that they may also be a function of the state of the economy (recession or boom). The association of perceived funding gaps with other ‘real’ factors like management skills, discussed in the volume, also weakens the argument for governments simply ‘throwing money’ at the problem. Analysis of entrepreneurial perceptions of the nature of the problem often shows their judgements to be faulty. (S)he may often be only subliminally aware, if at all, of the true nature of the constraint facing his business; namely, him/herself. With this in mind, the role of government in the personal and professional development of the entrepreneur, specifically that of developing management and team building skills, of strategy formulation and above all, the enhancement of entrepreneurial vision, may assume a more central place in the future debate over finance availability.

Notes

¹ For a full report of the conference and the contributions of the policy makers, the interested reader is referred to the NUTEK publication *Financing SMEs: A Comparative Perspective* (Cressy, Gandemo and Olofsson, 1996).

² The interpretations expressed of other authors’ views in this Introduction are entirely those of the Editors and should not be attributed to the authors themselves.

³ This is a recent definition. Prior to 1995, the definition of an SME used by the Commission was that of a business employing less than 500 people.

⁴ Needless to say there are important aspects of the firm’s finances which do not generally appear in the published accounts of the firm. For example, the firm’s investment decisions between functional categories such as marketing, R&D, and so on. Also regarding what is required by law to be published, the smaller firm has in some countries been allowed, in the interests of reducing the administrative burden on the entrepreneur, to publish less information than its larger counterparts. Thus in the U.K. for example, Limited Companies can now submit summary account information which does not have to include a P&L. But of course the majority of firms, being Sole Traders or Partnerships, do not publish accounts at all. Thus we can only infer their financial structure by proxy measures.

⁵ Hughes shows his awareness of the first point of criticism, when he points out that the greater role of debt, particularly short term debt, in smaller companies may also reflect ‘the wishes and strategies of their owners’ as much as ‘constraints placed on them by the suppliers of finance’. This is a potential demand-side constraint as we shall call it below.

⁶ This first point is borne out by Hughes’ charts which show that the large/small firm differential is highest in non-manufacturing.

⁷ The bespoke software consultancy starting from home and graduating to rented premises is a perfect example of a business requiring low fixed investment to total assets. Many other examples in the burgeoning European Business Related Services sector could also be adduced to support the argument. See ENSR, for a pan-European survey of BRS.

⁸ This feature of the small business was actually part of the definition of the small business used in the Bolton Committee (Bolton, 1971), and most economists would easily identify the small firm of classical competition among the price taking SMEs discussed here.

⁹ There is a straightforward explanation why should size confer bargaining power. A larger firm will normally have access to several competing suppliers of finance – the number of sources used increases with size of firm even from startup (Cressy, 1993). Thus, if a given supplier refuses credit terms he can use another who will be prepared to undercut the first. Only by collusion amongst suppliers can this large firm strategy be circumvented. However, such collusion may have costs that outweigh the benefits resulting in the classic Prisoners’ Dilemma outcome.

¹⁰ The Bolton report (Bolton, 1971) in the U.K. appears to have first noticed the disparity of payments periods across small and large firms. Recent European evidence (e.g. Grant

Thornton, 1993) confirms that this is very much a current and pan-European phenomenon.

¹¹ The overdraft facility is the equivalent of 'revolving credit' in U.S. terminology.

¹² See e.g. Hay and Morris (1991) for the role of MES in the industrial economics literature.

¹³ See e.g. Hall (1994).

¹⁴ See Cressy (1996) for the U.K. evidence on The Target Income Hypothesis.

¹⁵ The Capital Asset Pricing model of the finance literature would tell us that a firm's risk-return combination would be adjusted by the market (by raising and lowering the firm's share price) to ensure that all firms lie on the Market Line. This would imply that in equilibrium, there would be no reason for one firm's risk, given its return, being different from another's, thus seemingly vitiating the argument that this is a problematic phenomenon. However, the vast majority of small firms are close, unquoted companies, with shares that are not tradeable on the market.

¹⁶ The price and quantity of funds are of course not independent. Also, one might apply the imperfection criterion to any of the many features of finance contracts in operation, including e.g. security requirements, and loan duration. To keep things simple, we concentrate on the price and quantity aspects.

¹⁷ See the reports of the Radcliffe, Bolton, and Wilson committees in the U.K. referred to in Stanworth and Gray (1992).

¹⁸ In practice, economists have treated such factors as part of the 'technology' of the firm, here an issue in incentive structures. Thus if the incentive scheme operated by the firm does not maximise shareholder wealth, so the argument goes, the firm would be disciplined by the market. (This assumes, as we have noted, that there is a market for the firm's shares.) If however, firms take time to adopt the right incentive scheme, this is also for a good reason: information is costly. (The rate of adoption is thus socially optimal at any given point in time. However, the argument also assumes that there are no externalities to 'technology' adoption, which some would argue is a false assumption). Finally, it is not clear that this is simply an issue in incentives. The owner-manager that fails to grow may not do so simply because of lack of incentive, in the economist's sense of the word. He may actually fail to *perceive the need* to change management structures in order to grow. This is a concept not at the level of *behaviour* (as economists would describe it) but at the level of *beliefs* and *consciousness*. Change in consciousness or beliefs is a precondition of a change behaviour.

¹⁹ This case is to be distinguished from the more common one where the firm has no desire to grow. Here we should not describe the situation as demand constrained, since it does not constitute a market imperfection. Such firms may or may not find that this behaviour is life-threatening, depending on the market context in which they operate: growth as such does not necessarily imply greater survival chances. In the Europe and the U.S. for example, we are witnessing the destruction of the high street retailers alongside the vigorous growth of small Business Services firms. The former is occurring partly through the advantages of large scale in the retailing industry,

and the latter partly through the advantages of smaller scale in certain kinds of consultancy activity.

²⁰ This finding exemplifies well the point made earlier in connection with the POH. An entrepreneur is apparently prepared to sell his whole business to gain pdv of profits x , rather than to share a fraction $kx < x$ with an outsider, which might result in a growth g in his own profits to $(1 - k)(1 + g)x > x$, valued by the entrepreneur at say $r(1 - k)(1 + g)x$, $r < 1$. The condition for induction of New Owners ("NOs") rather than total sale is of course that $r(1 - k)(1 + g) > 1$, or $1 - k > 1/r(1 + g)$. In other words for the entrepreneur to relinquish equity the value of the fraction relinquished from induction of NOs must be greater than the revalued higher profits the NOs are expected to generate. Of course, if the NO brings nothing to the party ($g = 0$) the condition cannot be satisfied. However, even if (s)he did contribute ($g > 0$), this contribution must be significant in relation to the control aversion factor, r , of the preexisting owner for the induction to be privately optimal for the entrepreneur. It would be interesting indeed to establish whether empirically this condition actually holds in practice, although of course we should need to obtain a convincing proxy for the control aversion term to do so.

²¹ The *supply-side* constraint discussed above that requires the firm to grow for the NO to consider investing equity.

²² Whilst the authors are unaware of previous studies reporting this finding, interestingly, there is an (independent) echo in the paper by Manigart in the current *Special Issue*. She also finds the same reluctance to share equity despite anticipated adverse effect on growth in the a study of hitech startups in Belgium. See below.

²³ Perhaps a solution, now under consideration by certain well known European Business Schools, is that of *counselling* for owner managers with growth potential. This sort of solution may provide a means of addressing a problem of firm development in terms of the personal development of the managers who run them. After all, if business is a learning experiment, any blockage to the learning process may conceivably yield benefits in excess of training costs. However, only those owner-managers who are alive enough to *perceive* the existence of a problem will attend such courses.

²⁴ Cressy (1996c) argues in a study of U.K. startups that the role of the wage rate in business survival in the U.K. is that of a human capital proxy, rather than an opportunity cost of entrepreneurship.

²⁵ In the absence of external constraints on funds firms would be indifferent between using retentions and outside capital to fund investment. This predicts no relation between cash flow and investment decisions.

²⁶ See also Cressy, 1996c and Cressy and Cowling, 1994, for a similar conclusion using two entirely different approaches.

²⁷ See e.g. Fazzari, Hubbard and Peterson (1988).

²⁸ See ENSR, 1993, 1994, 1995 and 1996 for more details.

²⁹ We are indebted to Colin Mason for this point.

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