

Analytical Issues in External Financing Alternatives for SBEs

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ABSTRACT. As the amount of information about an enterprise is generally not neutral with respect to firm size, financiers have problems to identify the default risk associated with a borrower or to have control over a borrower's investments. This review paper analyses how various control mechanisms are fit to reduce this information problem and how various types of capital suppliers are endowed to finance small business enterprises.

1. Introduction

This review paper focuses on financing alternatives for small business enterprises (SBEs). This focus is warranted as the financial conditions of small business differ from those of large business (Lucas, 1978). Small and young firms often have difficulty in signalling their creditworthiness. Informational asymmetries between lenders and borrowers and incentive asymmetries between owners and managers are more pronounced in the case of small firms than with large ones. Consequently, small firms tend to be disadvantaged over large business in terms of access to bank loans and they are very limited in the potential to issue stock. This paper aims at analysing these problems from a theoretical perspective.¹ In contrast to Chittenden et al. (1996), who study factors that may affect the financial structure of small firms, we focus on the alternative financing mechanisms and capital suppliers. Thus, we aim at complementing the discussion concerning SBE finance (see Reid, 1996; Bornheim and Herbeck,

1998). Section 2 highlights the informational asymmetries that arise in conjunction with external financing. Section 3 goes into the co-ordination mechanisms that exist to reduce the market imperfections. Section 4 analyses the financing alternatives, both within the context of the life cycle approach and in relation to the pecking order framework. The conclusion is in section 5.

2. Financial market imperfections

The financial market distinguishes itself from the real market regarding the fact that the exchange of money is intertemporal: the investor exchanges money at present against the promise of the entrepreneur that it will be paid back in the future. The transfer of finance from the investor to the entrepreneur depends on the question whether the promise of entrepreneurs is sufficiently credible. Credibility is endangered by conflicting interests between investors and entrepreneurs. Obviously, the entrepreneur has incentives to renege on the previous stated promise and to give in to opportunistic behaviour. The investor/lender does not know with certainty the chance that the entrepreneur reneges because he is less informed about the entrepreneur's actions and intentions than the entrepreneur himself. Moreover, the price mechanism does not resolve the investor's uncertainty because it still does not restrain the high risk entrepreneurs from applying for finance.

The effect of asymmetric information is that well-deserving investment projects may not be financed and undertaken at all or may not obtain funding at reasonable cost. It results in adverse selection in case of an ex ante information asymmetry between the entrepreneur and its financier with respect to its current operation, the quality of the project and/or its prospects (Leland and Pyle, 1977). If the management has more information

Final version accepted on July 20, 1998

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than outsiders, the outsiders cannot assess the true value of the firm and therefore can only assign average quality to this firm. As a result, the firm gets average terms of financing. This may induce high-quality firms to forego investments as they refrain from external financing. This is the classic mechanism in which only lower quality firms seek financing. Financiers will negatively adjust their financing terms, which ultimately results in a market collapse (Akerlof, 1970). Ex post information asymmetry creates moral hazard (Bryant, 1980). Entrepreneurs can alter their behaviour once they have gained access to a certain amount of financial funds. For example, they may increase the risk of their investment strategies or reduce their managerial effort. As this will be anticipated by investors, it will increase the funding costs and, therefore, result in underinvestment. To reduce uncertainties surrounding the true risk profile and ex post behaviour of the entrepreneur, the investor can undertake an assessment of the entrepreneurs investment intentions (screening) and the control of his behaviour during the contract (monitoring). This gives rise to transaction costs. In the case of many financial investors in a public market, there is an incentive for investors to minimise on screening and monitoring activities to avoid transaction costs as information in public markets is public information, which implies that the benefits of screening and monitoring are not individually accruable.²

One would expect that in economies with well-developed financial institutions and thickly traded financial markets, financial intermediaries emerge who specialise in resolving these informational asymmetries. For example, Levine (1993) shows that with increasing per capita income and wealth levels, more sophisticated financial institutions such as investment banks and venture capital firms may form to research production processes and mobilise resources to take full advantage of profitable production opportunities. With sufficiently high per capita income, agents choose to purchase services that involve researching firms, certifying the existence of worthy projects, and mobilising resources to fully exploit investment opportunities (Levine, 1993). When per capita income or wealth is not sufficiently high, agents find that the additional returns generated by these financial services are not worth the cost. In that case, they will stick

to financial institutions that “simply” reduce transaction costs.

Financing, in the presence of informational asymmetries, implies both a transfer of financial funds and a transfer of control. Then, how do the financial contract type (debt, equity) and the contract features (e.g. collateral) affect the informational problems which arise in conjunction with external financing? And what is the importance is the specific type of financier (bank, venture capitalist, financial market, government). Each of these attributes may have a different impact on the firm’s funding.

3. Contracting solutions and control mechanisms

This section reviews the control mechanisms that aim at reducing information problems in order to maintain the incentive to undertake efficient projects. We distinguish between ownership, collateral and covenants, relationships and reputation. These control mechanisms show that the “solutions” for reducing the information problem are not applicable to the same extent to all firms. Firm-specific features such as size, age, capital structure and range of business activity determine the feasibility of the institutional arrangements.

- *Ownership.* The entrepreneur becomes the owner of the enterprise by cutting down bank debt and repurchasing shares of stock. With the entrepreneur being the owner as well, the possibility of reneging the contract vanishes as the principal-agent relationship has ended. In practice, using internal funds as a source of investment finance depends upon the age and size of a firm. Small and young firms face huge problems in generating sufficient internal funds. The result often is that there is no external finance.

- *Collateral and covenants.* Bester (1985) argues adverse selection in case of debt financing may be reduced by posting collateral and covenants in debt contracts. This reduces the required interest rate and, therefore, mitigates moral hazard. With collateral, the entrepreneur provides an ex-ante payment to the investor that improves the ex post bargaining power of the investor. In a lending agreement this solution pertains to the firm putting

up collateral or covenants which functions as a “hostage” to the benefit of the bank: in case of default, the bank expropriates collateral from the firm (Bester, 1985). The possibilities of pledging collateral depend on the industry and on the asset specificity of the firm. The younger and smaller a firm, the less it is able to put up collateral. Also the more labour intensive the production process, the more liquid assets compared to fixed assets are present, and the less it can put up collateral for improving its borrowing capacity. Furthermore, small firms usually are less capital intensive than large ones. The intangibility of the assets – a major characteristic of start-up firms – also hampers this control mechanism.

- *Relationship.* The relationship between the entrepreneur and the financier is regarded crucial in financial intermediation (Fama, 1985): Complete contracts are difficult to write, contract enforcement is not ensured, and contract renegotiation may be attractive from the debtor’s viewpoint (Gorton and Haubrich, 1987; Boot et al., 1991). Long-term relationships between the financier and the entrepreneur open up the potential for contracts that let the intermediary produce information and enforce compliance more easily than direct monitoring or than the firm’s issuing of securities to investors. The entrepreneur and the investor improve the information flow about each other and become involved in a mutual private relationship (Fama, 1980). Improved dissemination of information is beneficial for both parties: the investor can make a better assessment of the risk associated with the entrepreneur (screening) and can control moral hazard; the entrepreneur benefits from a lower risk premium on finance and/or improved availability of credit. This relationship can develop in two financing options: a) in lending agreements with banks and b) in venture capital investments made by venture capital firms and informal investors (see section 4). Petersen and Rajan (1994) find support for the “relationship” argument as they show there are benefits in concentrating borrowing and in building relationships with a few lenders.

- *Reputation.* The entrepreneur can give a bonding signal of trustworthy entrepreneurship to the investor. In the private market, it especially is the

personal character and the entrepreneurs’ capabilities and skills and – if any – track record that make up a reputation. Lending agreements may signal that the firm is trustworthy as it has proved to be a trustworthy borrower who punctually pays interest and redeems obligations. For example, Cressy (1996) finds that for U.K. business start-ups human capital is key in determining SBEs access to bank loans. Reputation results from a repeated game. Here, a major self-selection device is the choice of loan-maturity (Diamond, 1993). Viable firms could choose – and repay – shorter maturity loans, thereby separating themselves from low-quality firms. The applicability of this device depends on the cash-flow patterns associated with the investment project, and signalling a trustworthy reputation will depend on age and size of the firm. Young firms do not have a reputation yet and are therefore limited in using signalling devices. Moreover, for small firms, the costs associated with these devices is relatively large, as there usually is some element of fixed costs in the fee structure. Lastly, in the public market this can be handled through the use of signalling devices, such as credit ratings, accountant statements, profitability track records, dividend policy, working and composition of the supervisory board, previous trustworthy behaviour, etc. (see Jensen and Meckling, 1976).

Table I summarises the feasibility of the control mechanisms for four types of firms (●● = very feasible; ● = feasible; ○ = weak or absent). It shows SBEs are more constrained in the use of the institutions than large firms as the latter also have the opportunity to attract direct finance (stocks, bonds).

4. Alternative capital suppliers

This section analyses alternative capital suppliers. First, we use the pecking order framework to investigate the role of alternative financiers with respect to the funding of SBE investment projects. Then, the life cycle is the frame of reference. Section 4.3 discusses the alternative external funding sources in relation to SBE finance.

4.1. Pecking order framework

To transform a blueprint into business reality, a crucial hurdle facing the aspiring entrepreneur is

TABLE I
Feasibility of control mechanisms to reduce the information problem

	Large healthy firms	Small- and medium sized enterprises		
		Healthy firms	Firms in trouble	Start-ups
Ownership	●○	●	●	●●
Collateral and covenants	●●	●	○	○
Relationship	●	●	●	○
Reputation	●●	●	○	○

securing the necessary resources. From the entrepreneur's viewpoint, the ideal structure for a new business would be one that requires no commitment of capital to secure the use of necessary assets, where customers pay for the product in advance, and where suppliers provide ready access to unlimited trade credit on generous repayment terms. In reality, entrepreneurs must consider thoroughly the financial implications of their business plans because financial resources are required for securing the use of assets in making the blueprint reality and for financing the on-going working capital needs of the business.

Myers and Majluf (1984) argue that in order to prevent the adverse effects of inefficient pricing of information-sensitive financial claims, firms may follow a pecking order of financing hierarchy in the funding of their investment projects. They prefer financing the project internally by retained earnings or other forms of financial slack. If financing needs cannot completely be satisfied by internal funds, external finance is required. Then, the firm will prefer debt to equity, since the former is less informationally sensitive than the latter. Hence, the firm may subsequently issue riskless debt, risky debt, mezzanine financing, and equity. The opportunities for using this pecking order depend on the stage in a firm's life-cycle and on the possibilities for building up retained earnings and financial slack. Small and young firms which generate low cash flows will be more restricted than mature ones, generating more stable cash flow patterns. In this respect, is it useful to report the evidence on the way in which investments actually are financed. Corbett and Jenkinson (1994) calculate the net sources of finance for four of the largest economies during 1970–1989 (see Table II).

Table II reveals that firms mainly rely on

internal funds as a source of financing their net investments. With respect to external finance, bank finance is the most important source, apart from the U.S., where bank and bond finance are of equal importance. Note that Corbett and Jenkinson use data that concern all firms, not only the ones with a stock market listing. Of course, for the listed firms the capital structure will substantially differ. But in the four countries in Table II, there are "only" 14,000 domestic companies listed.³ Only these companies have the opportunity to raise securities, which accidentally takes place.

The ways enterprises can raise equity capital are twofold: internally through retaining profits and externally through the issuance of shares. Regarding the potential to build up internal equity, smaller enterprises are generally disadvantaged over larger ones due to the fact that they usually have been shorter in existence. Small firms often are relatively young so they have not been able to cumulate retained profits. As a result, internal finance is available as a funding source only in the later investment stages.

As to external finance, we distinct informal finance, venture capital, market finance, bank

TABLE II
Net sources of finance, 1970–1989 (percentages)

	Germany	Japan	U.K.	U.S.
Internal	80.6	69.3	97.3	91.3
Bank finance	11.0	30.5	19.5	16.6
Bonds	-0.6	4.7	3.5	17.1
New equity	0.9	3.7	-10.4	-8.8
Trade credit	-1.9	-8.1	-1.4	-3.7
Capital transfers	8.5	-	2.5	-
Other	1.5	-0.1	-2.9	-3.8
Statistical adj.	0.0	0.0	-8.0	-8.7

Source: Corbett and Jenkinson 1994, p. 11.

finance and government support. Initial public offering is virtually impossible for small firms and start-ups. Even in the bulliest of markets, at least some track record is a *conditio sine qua non*. However, for ambitious entrepreneurs with promising projects other external finance mechanisms may be available. Informal investors provide risk capital to new and expanding enterprises. Sometimes, they also actively support the entrepreneur with their know-how and experience. Informal investors generally are individuals. However, in many developing countries, financing start-ups and small firms is enacted by quasi-institutions with a large social content, who make use of group pressure and who accept all kinds of collateral, for example even the borrower's labour force (Khandker et al., 1995). We distinct two groups of informal investors. First is the category of friends and relatives willing to support the entrepreneur in various ways: emotionally, technically and financially. Second is the wealthy ex-entrepreneurs who participate in young and expanding firms, often operating in a business sector in which they have build up experience ("business angels").

Venture capital is risk capital of specialised firms outside the organised financial markets. Venture capital firms are specialised financial intermediaries which act on behalf of their shareholders, such as banks, insurance companies, pension funds, enterprises, the government and private persons. It is their core business to get thorough insight into the risks associated with specific enterprises, such as starters or young enterprises, and specific economic sectors, such as high-tech. Venture capital is usually provided as equity or as a convertible or subordinated loan. Close relationships between firms and venture capitalists appear to be a feasible instrument for SBEs to raise finance. However, empirical evidence reveals that even venture capitalists actually extend relatively little finance to firms in the early stages. For example, in the U.S., only 12.7 percent of total venture capital investments were directed at the early stages during 1988-1994 (OECD, 1996, p. 21). In Europe, this figure was even smaller, namely 7.8 percent (see also Brouwer and Hendrix, 1998).

Market finance is the issuing of financial claims by firms in a public market. In market or direct

finance, the financial intermediary only very briefly takes a position between the borrower and the lender. The claims issued by the deficit spending unit are bought by the ultimate borrowers. Together with bank finance, it is the subject that gets most attention in the economic literature (see Bhattacharya and Thakor, 1993). However, market finance is available only for a relatively small number of firms. Markets provide incentives to gather information which is reflected in the pricing of the financial claims. Financial markets provide information about decision rules in corporations that may be superior to what is available through bank financing (Boot and Thakor, 1997). The market provides the opportunity of repeated checks of the firm's behaviour, whereas the bank only screens incidentally. This device is stronger for information-sensitive financial claims. But free riding is a threat here (see note 2).

Bank or indirect finance is the intermediation between surplus and deficit spending households (Seward, 1990). The financial intermediary is permanently in a position between the ultimate borrower and the ultimate lender. The intermediary issues (contingent) claims on himself and sells these to the borrower. At the same time, it holds (contingent) claims on lenders in return for (access to) funds. With bank finance, the intermediary acts as a delegated monitor. This is an efficient solution to free riding problems that arise in financial markets where the incentive structure to monitor the issuer of debt or equity is weak (Diamond, 1984). With large and well-diversified portfolios, banks can guarantee a yield to their depositors and can credibly commit themselves to monitor the return of their investment projects. Thus, fixed costs in monitoring are crucial to achieve economies of scale in gathering and processing information (see Williamson, 1987). It is much more efficient for one information specialist to screen and monitor a large number of firms than for a large number of individual lenders. The intermediary collects funds from the depositors/investors and promises them a fixed return. The intermediary diversifies these funds along various projects. Thereby it reduces risk (as returns on projects are not perfectly correlated) and offers diversification to those from which it lends. But just because of its role as delegated

monitor, the bank is very anxious in financing SBEs as this will – because of lacking track-records – be difficult to signal to the depositors as creditworthy business. Mutual and co-operative banks offer an opportunity for circumventing this problem as they will lend within a well-known socio-economically more or less homogenous group. But these may be hampered by smaller scale (implying less diversification opportunities and therefore higher risk). In many developing countries, we witness the emergence of similar informal financial institutions, for example rotating savings and credit associations (ROSCAs).

Government also is a supplier of capital to the business sector. As such, it may stimulate or repress initiative and innovation in the private sector (Mankiw, 1986). Furthermore, governments frequently provide subsidies and tax breaks. This support favours high risk, large-scale projects because of substantial fixed costs in complying with the government support and because of information costs. Government financing facilities generally are well-meant but usually have more goals than pure SBE financing (e.g. regional and sectoral policies) which makes them rather complex, meaning that transaction costs will be high. This may result in a prohibitive cost for SBEs. Note that public aid to SBEs has led to rather meagre results (OECD, 1995).

4.2. Life cycle approach

The differentiation of firm finance along various investment stages is a frequently used distinction. However, there are many alternative ways to sketch the life cycle and the various stages are hard to define exactly. We briefly discuss finance alternatives in each of the investment stages. In a recent survey, the OECD distinguishes (and defines) the following investment stages (OECD 1996, p. 20): *Seed*: The initial business concept emerges. Models of the products are researched, planned and developed. *Start-up*: Funds are provided for product development and marketing. The firm has not yet sold its product commercially. *Expansion*: The firm grows and expands and is building up a track-record. *Mezzanine*: Preparation for the (initial) public offering. *Buy-out (buy/in)*: Exit phase or acquisition; a buy-out involves

incumbent managers acquiring a significant equity stake, a buy-in involves external managers acquiring control of the firm. These funding stages resemble those of the venture capitalist and are quite normative. Most firms that survive the seed and start-up stages will end up somewhere in the beginning of the expansion stage and hardly expand at all, but merely survive. Each of the investment stages is assumed to be accompanied by different types of financing. Table III shows the key characteristics of the finance needs in each of the investment stages and mentions the financial intermediaries that are suited best to serve these needs.

In the early stages of the development of business, access to established funding channels (banks, leasing companies, private investors, capital markets) is restricted. To provide evidence that the business concept works and that customer demand exists, entrepreneurs must rely on their own resources, supplemented by funds from relatives and close friends. Outside parties cannot provide sources to support the development in the absence of any tangible support from the entrepreneur. Once the entrepreneur is able to successfully demonstrate that there is a profitable opportunity, the financing needs of the business will often change dramatically. The business' development needs investment in plant, equipment and working capital. For all business, it is desirable to get the money before it is paid out. But this is impractical, especially for new businesses. To induce customers to order, credit terms will often have to be offered. On the payables side, the venture may have to work on a cash-only basis, until the entrepreneur establishes a track record for prompt payment. As such, new ventures will often require additional up-front capital to finance working capital requirements in the early days to build credibility with key resource providers.

In the early phases, when uncertainty is at its height, investment must be financed primarily from internal resources. However, as internal finance is to result from retained earnings, this may pose a serious financing problem as especially in this stage earnings will be relatively small. Outside finance is usually concentrated in the latter part of the cycle, when uncertainty has subsided to acceptable levels. As a result, there is the constant danger of underinvestment and poor

TABLE III
Investment stages and financial intermediation

Investment stage	Finance	Financial intermediaries
Seed	Funds for business organisation and research	Informal finance; Government; Venture capitalists
Start-up	Funds for product development and initial marketing	Venture capitalists; Informal finance
Expansion	Finance increased production capacity, Market or product development: Provide additional working capital; build a track record	Venture capitalists; Investment banks; Commercial banks
Mezzanine	Business as usual; Bring in strategic shareholders; Change the capital structure as preparation for public offering	Venture capitalists; Investment banks; Commercial banks
Buy-out (buy-in) – Exit	Purchase of a firm or the operating division of a firm; Acquisitions; Leveraged buy-out	Venture capitalists; Investment banks; Commercial banks; Institutional investors; Stock exchange

project selection in the early investment stages (Berkovitch and Greenbaum, 1990): First, the concentration of investment on the two extreme phases of uncertainty may well deprive the product cycle of finance at the critical juncture between the early and later parts of the cycle. Second, complementarity between the different finance sources which come into play at certain points of the cycle is far from certain. There is a bias in public financing which supplements owner investment at the most precarious stages of the innovation process, but also between the main sources of external financing. SBEs suffer most as interest rates imperfectly balance loan supply and demand (see Jaffee and Stiglitz, 1990). Asymmetric information prevents suppliers of capital from engaging in price discrimination between riskier and less risky borrowers as higher interest rates attract borrowers with higher default chances. And as lenders have problems with identifying the true risk characteristics of borrowers, they rationally decide to limiting the loan-quantity at any particular interest rate.

4.3. External financing alternatives for SBEs

Table IV presents the key features of the main financing types and of their applicability to various borrower types.⁵ Informal finance is a very broad category and, in general, is characterised by intense monitoring (“hands on”). Search and infor-

mation costs are relatively low. A major drawback is that the scope for investment by the informal intermediary is relatively small (due to the limited size of the informal investor) and that risks are huge (due to the limited financial knowledge, esp. in informal finance based on social relations). Success and failure to a great extent depends on the individual attributes of the informal investor (see Khandker et al., 1995), and on the level of sociability that exists in the society (Fischer, 1998).

Banks invest in information production to screen borrowers *ex ante* and *ex post* (Leland and Pyle, 1977; Diamond, 1984). When banks hold a large and well-diversified portfolio of business loans, they may be able to solve incentive problems. The scope for diversifying depends on the degree of uncertainty. Part of this is exogenous and can be diversified away. Another part depends on the entrepreneur’s performance. This endogenous uncertainty is difficult to monitor. Diamond (1991) argues that new borrowers, therefore, will prefer bank loans, while older firms issue securities (probably mainly private placements). Firms with large R&D expenditure will have a wider scope for discretionary behaviour and monitoring them will be very costly for the bank. As bank financing allows for long-term ongoing relationships, it seems fit for financing finance-constrained firms. The bank may smoothen interest rates in the hope of gaining from the high potential of growth opportunities.

TABLE IV
Features of financing alternatives and borrower types

	Main features	Applicability to borrower type
Informal	Non-financial expertise and enforcement mechanisms Intense and low-cost monitoring Limited resources	Start-ups; R&D; High-risk New borrowers; start-ups; SBEs SBEs
Bank	Cost-efficient information production Development of long-term relationships and commitments Concentrated nature of financing facilitates renegotiation and refinancing	New borrowers without credit reputation / R&D firms; Firms in established industries with scope for moral hazard; SBEs Credit-constrained firms; High growth potentials; Firms potentially subject to moral hazard; R&D firms with proprietary information; Firms with poor prospects for future profits High credit risks; Firms with flexibility needs/in financial distress; Firms with small incentive problems
Financial market	Decentralised financing; no renegotiation No monitoring Allows efficient risk sharing – higher liquidity Information aggregation: Feedback role of prices to the real sector	Firms with low credit risk not subject to investor myopia; Large firms subject to incentive problems Firms with well-established management skill and good credit reputations, and good profit prospects Firms with high degrees of technological uncertainties Firms in highly competitive industries; High-tech and R&D firms
Venture capital	Information production and reusability Combination of risky financing and control Staging of commitment of capital	Small and information-problematic firms without collateral or track-records; Firms with growth potential Firms with uncertain entrepreneurial skill potentially subject to managerial discretion Firms with need for flexibility and scope for managerial discretion
Government	Multidimensional in orientation Guarantee structure Complementary with private finance	High-tech and R&D firms; Firms with large value-added Credit-constrained firms; High credit risks Credit-constrained firms; Firms with growth potential

A large number of widely dispersed investors provide financial market financing. Due to co-ordination and free-rider problems, they do not engage in renegotiation or in monitoring activities. However, they produce price signals with respect to financial claims that can be used for allocating investments efficiently (Allen, 1993). A prerequisite is that the firm has to ensure its credibility. The financial markets aggregate and centralise many opinions and give repeated – almost continuous – evaluations of the firm's behaviour. Allen (1993) argues that market financing is the preferred institution for capital allocation when information decays rapidly and new information arrives almost constantly. This refers to highly competitive industries with constantly changing

conditions as well as to industries where technological change is rapid. The issuance of equity in the public market seems suitable for firms facing large financing needs and for firms that face high interest rates. It greatly increases the bargaining power of the firm vis-à-vis its bank (Rajan, 1992).

Venture capitalists combine characteristics of banks and financial markets. When chances to obtain funding through other channels are restricted as a consequence of too high a risk profile, venture capital firms may complement the spectrum of financing instruments available to the private business sector (Kulicke and Wupperfeld, 1996). Venture capitalists are insiders, producing information about the prospects of new firms. Their contracts combine a high measure of control

with a risky claim on the firm's success. Because of the high fixed costs associated with the intensive monitoring of the venture capitalist, it is unlikely that it is an efficient financing alternative for all firm types. Due to these costs, especially small businesses are not attractive in warranting the attention and efforts of venture capitalists. Chan (1983) argues venture capital firms can facilitate the search of good projects by solving the problems resulting from informational asymmetries because of scale economies in information production and information reusability. The venture capitalist combines the role of financier and of partly owner and thereby tries to reduce agency problems (see also Kortum and Lerner, 1998). As the venture capitalist minimises information production cost but reneges from efficient risk sharing, it requires a higher premium than market financing (Chemmanur and Fulghieri, 1994). Therefore, it seems efficient for young, scarcely known, firms. But especially in these cases, search and information costs are substantial.

Informational problems hamper a smooth and efficient funding of business. Only in cases where the private institutional arrangements are mature, it seems likely that the process of business finance is well-assured (see Demirgüç-Kunt and Levine, 1996; Demirgüç-Kunt and Maksimovic, 1996). Imperfect information traditionally is a rationale for government intervention. Especially with respect to the financing of industry, we have seen a host of initiatives from the government, both in a national and in an international context (see e.g. Kindleberger, 1993). These initiatives range from establishing financial intermediaries (i.e. state-owned banks and venture capitalist firms) to introducing subsidised financial products that are – or at least intend to be – tailored to the needs of firms and industries that in the eyes of government have not access enough to private funding sources (e.g. guarantees, subsidised loans and credit). In many cases, there is some public-private partnership in the financing of industry, for example when private capital suppliers view the participation and involvement of government as a *conditio sine qua non* with respect to their own commitment. The major danger is that projects which would have a negative net present value without subsidised finance or tax breaks get into the black. This

distorts the efficient allocation of capital within the economy. A further weakness of government finance usually is the incentive structure and the danger of adverse selection with respect to the firms who gain access to this type of finance and of moral hazard, both with the entrepreneur and with private co-financiers. The government is not particularly organised and focused on selecting good risks. Therefore, there is the danger that firms who are denied finance by private capital suppliers on the basis of a thorough analysis try to acquire funds from the government. Furthermore, as there frequently are elements of guarantee in government finance, there is an incentive with firms and private financiers to increase risk.

Thus, informal finance is likely – and frequently the only way – when a track record lacks and when the entrepreneur has difficulty in signalling his abilities. Furthermore, it is an opportunity when non-economic aspects (social, psychological, cultural) are involved in the financial relationship. Bank financing seems to be an attractive funding source when asset substitution moral hazard is substantial and when borrowers do not have sufficient reputation (Diamond, 1989). Especially in these circumstances, bank monitoring might prove valuable. Another situation is when long-term financing commitments are effective in relieving the threat of underinvestment. Furthermore, it is an attractive vehicle when contract renegotiation is likely (see also Berlin and Mester, 1992). Here, it is the flexibility of bank finance that poses the comparative advantage. But when there are severe incentive problems for the borrowing firm and when banks are likely to use monopoly power, financial market finance is the most likely candidate. The financial markets provide additional ways to discipline management and as a result may decrease agency problems. However, SBEs in this case may be disadvantaged as they usually are without a track-record and as the fixed costs may be prohibitive. As the venture capitalist combines the role of capital supplier with that of controlling manager it may to some extent be regarded as a device to reduce – or at least to internalise – possible agency problems between owners and management. Especially in settings where entrepreneurial skill is highly uncertain and the role of a “backup manager” is potentially significant, the venture capitalist firm

may have a comparative advantage vis-à-vis banks in providing SBE finance. Note however that here too high fixed costs in monitoring by the venture capitalist may exclude the smallest businesses.

To conclude, businesses which are unsure of their management skills are expected to choose venture capital financing, whereas those with better skills but without credit reputation may successfully approach banks. Larger firms with both skilled management and a reputation for credit-worthiness are expected to opt for financial market financing. Especially in situations where entrepreneurial skill is highly uncertain and where the role of hands-on control is potentially significant, venture capitalist firms may have a comparative advantage over banks. However, as transaction costs in the venture capitalist firm and SBE relation are higher than with bank finance, venture capital firms may not be able to obtain this advantage. As a result, in practice, it will be the bank that turns out to be the most important external (formal) financier for SBEs. However, in the initial stages of investment, when information problems are most intense, informal finance is the most likely candidate, as here bank financing is still too risky and too costly.

5. Conclusion

Small is not always beautiful. For example, it reduces your attraction as an investment object. Firm size does matter in finance. In this review paper, we focused on two financial issues: control mechanisms and capital suppliers. SBEs are more constrained in the use of control mechanisms as ownership, collateral, long-term relationship and reputation than large firms to reduce the information problem. Therefore, it seemed that with respect to external financing decisions, the SBEs can only choose between building close relationships with banks and attracting loans vis-à-vis taking on temporary shareholders with a great deal of control (i.e. venture capital firms). However, there is no exact one-to-one relationship between control mechanisms and capital suppliers in that specific control mechanisms are monopolised by a particular capital supplier. Small firms are limited in the extent of their internal earnings and in their potential to issue equity. Therefore, they are more dependent upon bank loans. Yet

regarding bank loans, small firms may also be in a disadvantaged position compared to large firms. Venture capital seems a serious alternative when we only focus on control mechanisms that are related to this type of finance, but the transaction costs may prove to be prohibitive to reap the benefits from this comparative advantage. Then, informal finance may act as the *deus ex machina*. However, informal finance is not incorporated in modern finance theory very well yet as non-economic factors appear to play a decisive role in this type of finance. Furthermore, it is a channel that is hampered by scale and quality problems with the financiers, in contrast to the more formal intermediaries. Thus, there appears to be a niche in financing SBEs. The research by Chan (1983), Diamond (1991), and Levine (1993) in combination tends to suggest that this niche will only be filled when per capita income increase enough. Then, there is scope for thoroughly researching SBEs. As a result, the informational asymmetries can be reduced to certify the existence of worthy projects.

Both ex ante and ex post information asymmetries between lenders and borrowers and between owners and managers are more pronounced in the case of small firms than with large ones. In other words, as the amount of information about an enterprise, e.g. regarding managerial skills, investment opportunities, collateral or moral rectitude, is not neutral with respect to firm size, potential lenders have problems to identify the default risk associated with a borrower or to have control over a borrower's investments. Consequently, small firms are disadvantaged over large business in terms of access to finance. The disadvantage is predominantly translated into higher funding costs. But it also results in the foregoing of investments and thereby negatively affects economic welfare.

Acknowledgements

I thank Arnoud Boot and Dick van Wensveen and two anonymous referees for their comments and suggestions on earlier versions of this paper.

Notes

¹ For a recent analysis of empirical issues in SME financing, with a focus on Europe, see Cressy and Olofsson (1997), and Edwards (1998).

² In the case of a multiplicity of small investors with rational behaviour, nobody will therefore engage in costly screening and monitoring activities when he can also benefit from the efforts of others. This is the information paradox of Grossman and Stiglitz (1980). Thus, smooth and efficient information dissemination through price changes creates a free-rider problem. As investors can get information about firms by observing prices, there are only weak incentives to obtain information about listed firms. Increased liquidity may encourage myopia with investors, which weakens their commitment and reduces incentives to exert corporate control.

³ I.e., 700 in Germany, 2,387 in Japan, 2,046 in the U.K., and 8,851 in the U.S. at year-end 1997 (IFC, 1998, p. 24).

⁴ ROSCAs know many variations. The basis form combines a savings and credit arrangement in which participants make regular, fixed-amount contributions to a common pool of funds which is then given to each member in turn, usually by lottery. After each member has had access to the funds once, the procedure starts again. The first recipient of the fund gets an interest-free loan, while the last saves over the entire cycle without earning interest. The others alternate between the creditor and debtor position. The other main features are that the rules and procedures are easily understood by the population, there is a minimum of administrative formalities and hence of transaction costs, and a substantial degree of flexibility and variety. There is great originality in determining the order of rotation of the fund (OECD, 1991; Srinivasan, 1994).

⁵ Putting up this table - and part of the surrounding discussion - is stimulated by the research of Boot and Schmeits (1996).

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