Problems of Evaluating Small Firms' Quality as a Reason for Unfavourable Loan Conditions

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Abstract
The article substantiates the hypothesis that the profitability of small firms is above all determined by qualitative variables. In this respect a low standardization of goods and even more importantly, the high significance of governance structures play a crucial role rendering the quality of the firm's human capital, the flexibility of its machinery but also externalities of business networks, an appropriate integration of the family into business affairs as examples of qualitative information which also bear a high degree of privacy. Whereas the literature suggests relational contracts as a way how qualitative and private information can be credibly conveyed to the lender, it is shown that even in the German housebank-dominated financial system borrower-lender relationships of the kind recommended by the literature are hardly to be found. Rather, German banks, too, respond to information gaps with unfavourable loan conditions. As an alternative specialized information intermediation is briefly discussed.

Problems of Evaluating Small Firms' Quality as a Reason for Unfavourable Loan Conditions [1]

Introduction

Not withstanding the empirical finding that small and medium-sized firms (SME) contribute significantly to aggregate employment and growth, academic research has greatly ignored this firm group until recently. This changed attitude is certainly associated with large-scale releases of employees in large corporations and the hope that smaller firms might fill the gap. Alarming insolvency figures, however, raise the question whether SMEs will really be able to compensate for the macroeconomic employment losses incurred by the currently practiced strategies in large corporations. Among the entirety of SMEs the group of small firms is particularly interesting from a macroeconomic or even political perspective: Firstly, they are highly labour-intensive which qualifies them as significant suppliers of jobs. Secondly, they constitute an important part of urban areas enhancing local welfare and stability. Finally, current changes in labour markets imply that the traditional separation between entrepreneurial risks and the risk of getting unemployed are getting blurred, a recent example of this being the so-called "Ich-AG" forming an important part of the German employment program which relies on the idea that the acceptance of entrepreneurial risks by workers could provide an important way out of unemployment[2]. To offer a unique definition of small firms, however, is no easy task, and indeed manifold suggestions exist.[3]

Following a new definition planned by the EU[4] the differences between medium sized, small and smallest enterprises rest upon quantitative criteria concerning the number of employees and annual turnover or the balance sheet . It remains highly questionable whether such crisp quantitative criteria come up with the peculiarities of small firms that distinguish them from their larger counterparts. More important indeed are qualitative criteria like the missing

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[1] We are acknowledged to Andreas Mahlke for many helpful comments.

[2] Ich-AGs are single-person-owned firms allowing individuals living on earning-related benefits to draw an additional income up to 12 500€ by self-employed activities.

[3] An overview is given in Storey (1994).

[4] A revised proposal of the Commission Recommendation 96/280/EC in consultation since September 2002 defines the "small enterprise" as an enterprise: (a) which has fewer than 50 occupied persons; and (b) has either an annual turnover not exceeding 9 million euro, or an annual balance sheet total not exceeding 10 million euro, and (c) either does not belong to a group of linked enterprises. Instead, Cf. Article 5, the "micro-enterprise" is defined as an enterprise which has fewer than 10 occupied persons, and has either an annual turnover not exceeding 1 million euro, or an annual balance sheet total not exceeding 1,4 million euro, and either does not belong to a group of linked enterprises.

separation of ownership and control, the close relationship between the firm and the entrepreneur’s family and the close relationship between the entrepreneur and his employees (Behringer, 2002, Reifner, Größl und Krüger, 2003 forthcoming).

From their very beginning, small firms rely on loans, and this dependency on credit remains a distinctive feature all over their lives. Financial markets, as they are in all OECD countries though, do not facilitate small firms’ access to finance. Rather, they are considered as unattractive investors in terms of their profitability. This does not only explain small firms’ difficulties to obtain equity, but also loans. One important reason for this is that loans have to be repaid out of cash flows implying that small firms will only be able to service rather moderate loan volumes. Taking into account that lending incurs costs which are largely fixed, a low profitability on the part of the borrower will then match a low profitability on the part of the lender. Moreover customers are usually evaluated by their total utility for the bank since banking institutions make profits not only from granting loans but from a wider range of financial services. In this respect the profitability of a firm determines the income which a bank is able to achieve from cross-selling.

This article seeks to substantiate the hypothesis that it is not smallness per se which endows a firm with low profitability. Financial markets or better to say, banks as the main lenders, are only insufficiently capable to cope with the peculiarities of small firms which may lead to their ignoring important determinants of small firms’ profitability.[5] In the first place screening procedures heavily draw on financial ratios calculated from the balance sheets and profit and loss accounts. Small firms, however, do not usually follow profound book-keeping practices. But even if they did, in particular balance sheet ratios would give a much less incomplete picture of expected future profits as is the case for their larger counterparts.

Generally speaking the quality of financial ratios as good indicators of the future relies on the validity of the law of great numbers. This does not only require sufficiently long time series concerning assets, liabilities as well as expenditures and revenues but also a sufficiently high stability concerning the firm’s economic environment. Both conditions are hardly met by small firms. On average they are younger than large corporations and much less well diversified. This, however, is not the whole story. Compared to large firms the profitability of a small enterprise depends much more on qualitative as opposed to quantitative variables which cannot be found in the balance sheets. At this point it is worth mentioning that a

[5] Another explanation refers to the often deplored missing entrepreneurial capabilities of small firm owners. Recent surveys do not allow to deny this argument (APCE, 2001). Rather, the point is that even if small entrepreneurs were sufficiently skilled the standard screening procedures will in general not be able to signal their true profitability.

missing capability to evaluate a borrower's future profits also implies the inability to calculate risks. Hence the often heard argument that small firms are not only endowed with low profitability but also with high risk might to a large degree relate to problems lenders face in terms of risk calculation (Debreil, Esteban. and Friderichs,.2000; Belletante, Levratto, 1995).

The first part of this article is dedicated to substantiate this hypothesis. It will be shown that an important reason for the predominance of qualitative indicators is closely related to differences between small and large firms concerning their options to make profits and the ways how these options are captured. In this respect a lower standardization of produced goods as well as a small firm's capability to mobilize resources through a suitable governance structure will be shown to be pivotal.

The analysis does not only confirm the predominance of qualitative variables, but it also makes evident that information about these variables is to a great deal private. Since its revelation is often impairing the firm's competitiveness or interferes severely with the entrepreneur's family life, a lender faces severe barriers to acquire sufficient knowledge. But even if the borrower were willing to convey such private information, problems will remain. Qualitative information is expressed in linguistic terms being open to ambiguous interpretations and hence giving rise to difficulties in understanding which aggravates the problem of credibility. This leads to the another issue to be treated in the second part of the paper, namely the conveyance of information about these variables to the lender. In this context the role of relational debt contracts is examined, both from a theoretical and empirical perspective taking the German housebank principle as an example. Some empirical evidence is provided which reveals that typical features of the housebank principle might be missing with respect to small firms. The evidence also indicates that smallness in combination with the high number of heterogeneous borrowers which a bank typically encounters, provides one reason why it obviously does not pay for a bank to invest into the contractual relationship with a small firm. The third part of the article sketches briefly the role of information intermediation as an alternative.

What Determines the Profitability of Small Firms?

Following Salais and Storper (1992), firms differ with respect to how they make profits according to the world of production in which they are operating. A world of production being characterized by the product supplied, the market situation and the organization of production provides a particular set of options for a firm to achieve profitability. In order to evaluate a firm's profitability it is therefore necessary to specify its position in these worlds.

Which options a firm chooses, however, and to what extent the firm will be able to really exploit them depends crucially on its capability to mobilize the required real and financial resources. In this respect size fixes an absolute upper bound constraining the scale on which a firm is allowed to operate. Exceeding this upper bound is not possible without changing firm size. Below this constraint, a firm's capability to mobilize resources is highly associated with its *governance structure*. Here again firm size plays a role but not with respect to aspects of scale but of scope.

In the following these arguments will be elaborated further by offering first a brief sketch of relationships between the worlds of production and options to be profitable. In doing so it will be shown that the degree to which products are standardized, determines to what extent resources are required that have a value which is hard to quantify, primarily because they are not traded in markets. We then go on to extend the analysis of Salais and Storper (1992) by clarifying the role of corporate governance.

Options to be Profitable, and the World of Production

Referring to the worlds of production it is not enough to consider the branch of a firm in order to evaluate its profitability. The authors attach more importance to the type of product and to the market in which a firm operates, where in one and the same branch a multitude of different products can be found. Any product requires a particular technology and gives rise to a particular organization of the production process. Moreover the product and the market situation to be characterized by the intensity and kind of competition as well as by the degree of uncertainty, are closely intertwined. Salais and Storper use the term "world of production" to denote this triad of product, technology and market situation, where four worlds are distinguished: the Industrial World, the Network Market World, the Marshallian Market World, and finally the World of Innovation.

Every day a large variety of goods is sold in manifold markets. What makes products[6] different with respect to the way how a firm achieves profitability is above all the degree of their standardization. In particular this distinctive feature gives rise to different technologies, different kinds of uncertainty concerning demand, and different kinds of competition, i.e. to different "worlds of production". If the degree of standardization is such that the products become homogeneous, a firm's competitiveness will above all depend on the price it charges. Since competition is keen, the equilibrium market price will not be much higher (depending on the market power) than average costs. Profitability in this so-called *Industrial World* rests

[6] We use the terms "goods" and "products" interchangeably and implicitly enclose services.

on a firm's capability to produce large numbers at decreasing average costs. The options a firm can make use of are the choice of a technology allowing for scale economies, a just-in-time production allowing for a minimization of stocks, the minimization of expenditures on intermediate goods, a labour force allowing for flexible and low labour unit costs, and the forecasting of future demand using official statistics. The option mentioned last is closely associated with the kind of uncertainty prevailing in homogeneous markets. The highly standardized product covers the needs of large numbers of consumers implying that market demand and its development possess close ties to the macroeconomic development.

Contrary to the Industrial World, the *Network Market World* is marked by some product specialization such that heterogeneous consumer preferences are met at least to a certain degree. But still standardization is high enough for the emergence of large and comparatively anonymous markets. This is the world of preferential goods allowing for intra-industrial specialization. It is typical of this world that the exploitation of economies of scale still remains a profitable option but firms now can reduce their exposedness to a keen price competition by product differentiation which requires more sophisticated examinations of demand than suggested by official statistics. By consequence, more specialized machinery and more skilled employees with a capability to make out market trends in order to acquire market niches gain importance, too.

In the *Marshallian Market World* goods are produced that perfectly match the needs of individual customers. Competitiveness now crucially depends on the firm's capability to produce tailour-suited goods of high quality. This "individualism" exposes the producer to a kind of uncertainty that cannot be tackled through the use of official statistics. The options available to a firm in this world are the choice of a highly qualified and motivated personnel, the choice of a capital stock that can be used to cover the individual needs of different clients, and the realization of economies of scope. In order to correspond to changing preferences, information strategies have to be selected that rely heavily on direct communication with the customer.

In the *World of Innovation* a firm's profit will depend on both its innovative capability and its capability to find a predictable market for the innovation. In this respect, the collection of information made available by research centres and its "transformation" into innovative products achieved by highly skilled employees are as important options to make profits as the analysis of market trends allowing for an early adjustment of the product to market responses.

Depending on the world of production a firm has certain options to make profits. In order to evaluate profitability it is therefore necessary to make out variables which indicate to what extent these options have been exploited. In the Industrial World the development of average costs in relation to the market price, and the development of macroeconomic demand are as important as ratios gained from the balance sheets which convey information about the efficient use of the invested tangible fixed and flexible capital. It is thus in the Industrial World where quantitative variables are good indicators of a firm's (future) profitability. The situation changes if products become less standardized. Then the quality of the working staff, the quality of the used intermediate products and machinery, economies of scope, the quality of research, and the like become pivotal. It is in particular this predominance of qualitative aspects which explains why the value of certain ratios calculated from the balance-sheets or profit and loss accounts now have to be interpreted in a different manner. Whereas in the Industrial World for example low labour unit costs indicate a high profitability, this is not necessarily the case in the Marshallian Market World or in the World of Innovation. Here, economizing on labour costs bears the risk of adverse selection, and hence of a low quality concerning the firm's human capital. This also explains why for a firm producing in the Marshallian Market World or in the World of Innovation intangible assets are more important than tangible assets.

The reader might be attempted at this place to draw the conclusion that small firms will as a rule focus on less standardized products and that this offers an explanation for the high significance of qualitative information. This is certainly correct. We should not, however, jump to the conclusion that a low standardization provides the only explanation. Which options to make profits a firm is able to capture largely depends on the available real and financial resources. Smallness poses in the first place severe quantitative restrictions. Thus it is of course true that small firms will not be able to realize economies of scale by producing large numbers. Below this insurmountable quantitative restrictions, however, even a small firm possesses a considerable variety of available resources. Which resources are finally mobilized, and how efficiently they are used is indeed significantly affected by the prevailing *governance structure*. Profitability thus is closely associated with a firm's capability to bring the options given by the world of production into line with options offered by corporate governance structures. In the following section it will be made evident that the significance of governance structure does not only introduce further qualitative determinants of profitability but that governance also helps firms to overcome constraints dictated by smallness. This in turn explains why small firms operate in the Industrial World, too (Levratto, 2002a). It also explains why even for a small firm operating in the Industrial World financial ratios will not suffice to evaluate its quality.

Governance Structures in Small Firms

Following the literature, corporate governance describes the system by which companies are directed and controlled (Charkham, 2001). Up to the present governance theory has predominantly focused on principal agency problems in large corporations[7] where ownership and control but also entrepreneurial activities and employees' activities are separated. The central topic turns around the question how the incumbent management can be motivated so that it will use the firm's resources in order to maximize the shareholder value. The governance structure is even more important in small firms, however, because there good governance is mirrored in the firm's capability to overcome the scarcity of real and financial resources given by smallness.

Broadly speaking a firm can be characterized by a nexus of explicit and implicit contracts between various stakeholders. Among them are the equity holders, managers and employees which can be considered as inside stakeholders, but also outside stakeholders like lenders, suppliers, customers and other groups or individuals having a vital interest in the company. The design of these contracts decides on who affects a firm's strategies and how conflicts of interest between various stakeholders are solved. In order to find out the determinants of good governance in a small firm, some features which also make them very different from large corporations provide a useful point of departure, namely that

- ownership and control are not separated in small firms,
- family has a high impact on the decision-making process and on resources
- entrepreneurial activities and employees' activities are much less separated,
- outside stakeholders are much more important for the decision-making process of a small firm than is the case in terms of a large corporation.

In small firms ownership is very often held by a single person, the entrepreneur, who manages the company, too. It is typical of many of these firms that the entrepreneur also performs activities of an employee. A German word for such a firm is "Arbeitsunternehmen" a literal translation of this being "labour firm". Examples are given by artisans or brokers. Principal agency problems arising from a separation of ownership and control are largely absent in

[7] Among the vast literature cf. for example Jensen and Meckling (1976), Mirrlees (1976), Pratt and Zeckhauser (1985), Rees (1985), Shleifer and Vishny (1997).

these firms. Moreover agency problems arising from the delegation of work to employees are much less severe. Conflicts of interests, however, may remain giving rise to frequent disputes which may provoke inefficiencies. Most severe for such a Arbeitsunternehmen, however, are resource constraints. This does not only concern financial resources but also and may be even more importantly the dependency of the firm on the single entrepreneur who also takes an active part in the working process. Illness, death or other serious mishaps can seriously impair the firm's existence. Good governance in this respect mirrors the entrepreneur's capability to overcome resource problems by both establishing relations to his employees motivating them to identify themselves with the firm's profitability target and to take the entrepreneur's place if he has fallen ill or is otherwise occupied. A further capability refers to the establishment of appropriate relations to outside stakeholders which is in particular important with respect to knowledge as a major economic resource (Sparrow, Matlay and Bushell, 2001). In this regard lenders, customers, suppliers are important. Furthermore business colleagues, chambers, consulting agencies constituting a more distant environment of the firm should not be overlooked. These stakeholders can magnify the firm's resources by granting financial resources as is the case for lenders. The impact may, however, also be more indirect by providing valuable information without inducing high costs, by offering assistance in the decision-making process, but also by facilitating access to markets.[8] Relations to the firm's environment that go beyond purely business motives give rise to a social network with externalities that constitute some kind of social capital.[9]

The family of the entrepreneur plays an important role both as an inside and outside stakeholder. Family members may offer labour thus becoming employees of the firm, they may offer loans or warranties thus becoming lenders or they may even grant equity thus turning the "Arbeitsunternehmen" into a family business. With respect to their role as outside stakeholders the most important point is that family members live on the income earned by the company. Hence independent of their role as inside stakeholders, family objectives and business objectives will always be closely intertwined. No matter whether the family members hold formal control rights or not, they will have an important impact on the firm's objectives and strategies. The crucial point about this is that there exist some "natural" differences concerning objections and necessary abilities allowing families and firms to survive. Following Carlock and Ward (2001, p.5), families "… are concerned about emotions,

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[8] The relevance of so-called weak social ties for the survival of newly founded firms is emphasized in Brüderl et al (1996).

[9] Cf. Bourdieu (1986) for an individual approach of social capital, Putnam (1993) and Coleman (1990) for a collective one.

they focus inward and generally they resist change. Business systems must take the opposite approach if they are to survive – accomplishing tasks, focusing outward on the external environment and looking for ways to exploit change are key success factors for business systems.” It is not only a predominance of non-pecuniary motives that can impair a family company’s profitability. Conflicts of interest may also refer to pecuniary objectives. Family members might prefer a high level of consumption implying that they claim high incomes thus reducing the possibilities to use cash flows in order to finance investment. Moreover the desire to invest significantly in the children’s education may deprive the firm of internal financing funds. Finally, relationships between family members may even decide how conflicts of interest are solved within the firm. “When unresolved or recurring conflicts are allowed to diminish communication and trust in the family, it becomes difficult for family members to share ideas, discuss issues or make decisions effectively” (Carlock and Ward,. 2001, p. 5).

Good governance therefore also depends significantly on whether the family can be integrated into the firm so that it strengthens the firm’s resources rather than weakens them. Following Carlock and Ward (2001), this is the case if family and business systems can be brought into line They refer to a simultaneous planning of the business and the family’s shared future as an important contribution. In the first place, such a parallel planning will make individual values and goals visible to all owners and family members, and will facilitate the solution of conflicts between family and business needs. Moreover, written plans will increase family members’ commitment to promises which has proven to be a serious problem in family companies. In this respect, the existence of such a systematic parallel planning process which is documented in a written plan could serve as an valuable indicator of quality. Such a plan will, however, contain many linguistic components rather than crisp numbers raising their own problems of assessment.

A particular governance structure decides above all in which world of production a small firm will be profitable. Most importantly good governance may help to overcome barriers to specific worlds of production. Hence neither world of production can be excluded a priori as a suitable location for a small firm. As an example consider the Industrial World. It is true that a small firm will never be able to realize economies of scale, hence the result of a French empirical study according to which small firms in France overwhelmingly operate in the Industrial World appears confusing at first sight (Levratto, 2002b). A closer look reveals that this is indeed achieved by a governance structure involving subcontracting where the large corporation becomes the most important stakeholder who does not only provide financial resources but also interferes into the small firm's decision process. Alternatively one might conceive of a network of formerly competing small producers. Though remaining legally independent firms, a close cooperation involving joint decisions with respect to strategies and investment will now characterize their governance structure. Among the benefits for each firm not only an increased market power is worth mentioning but also a strengthening of resources achieved by the realization and joint utilisation of investment projects which are beyond scope for an individual small firm. Networks of small firms are also important in order to have an access to the Network World. Here large corporations being bound to a highly inflexible production apparatus and highly homogeneous human capital frequently delegate tasks to smaller firms that contribute to the development and trading of preferential goods. Networks or more precisely, network externalities, give rise to a further qualitative aspect of small firms' profitability. Their value for each participant can only be indirectly calculated by resorting to the underlying explicit contracts but also and probably even more importantly to the implicit arrangements[10].

In order to have access to the Marshallian Market World a small firm must dispose of resources that allow for a flexible adjustment to changing consumer preferences. This does not only require a highly motivated and skilled personnel. Beyond that employees should be interested in a long-term relationship with their employer because only then will they be able and willing to invest into the accumulation of the required customer- specific knowledge.[11] Equally important is the kind of relationship between the firm and each customer. In order to reduce the uncertainty with respect to the customer's present and future needs intense communication and a continuous exchange of credible information are necessary. The most important resource in this regard is *mutual trust* that encourages the customer to reveal business plans that have an important impact on its competitiveness and should therefore remain the private knowledge of the trading parties.[12] In the same way discussions about the production of the required commodity or service will convey information to the customer which he could use to play his supplier off to competing firms.

The World of Innovation establishes a somewhat special case. On the one hand an innovation shares with a specialized good that they can hardly be substituted by alternative products. On the other hand innovations are profitable whenever broad applications can be found. Moreover the entrepreneurs are very often the innovators themselves lacking entrepreneurial

[10] This has been cofirmed by Sako (1998) for Japanese supplier relationships and also by Baudry (1998).
[11] The relationship between transaction-specific investments and long-term contracts is at the core of Williamson's transaction cost analysis, cf. Williamson (1985).
[12] The role of mutual trust is elaborated further in the following section.

skills, and above all equity. This gap can be filled in by sharing ownership and control rights with a professional manager making it possible that unavoidable conflicts of interest between the engineer and the merchant can be solved in a profit maximising manner. In order to create new products and to find outlets for them, again relations to outside stakeholders will be useful. Different from the Marshallian Market World, now the most important stakeholders will not necessarily be the customers. Relations to members of universities or other technology centres being interested in a practical application of their new ideas may broaden the firm's innovative capabilities whereas relations to organizers of fairs may facilitate access to new markets. In particular with respect to complex technologies cooperations between several small firms on the one hand and research centres on the other have proved value increasing. Such is the case with, for instance, business incubation since, according to Enterprise DG grouping client firms as tenants within a single building allows cost-effective service delivery and promotes mutual support and networking.[13] Networking is now recognized as a critical element in business development: Well-defined admission criteria not only enable incubators to check the viability of potential client businesses, but also ensure compatibility - and, whenever possible, synergy - between them.

The above elaborations have made evident that the importance of qualitative as opposed to quantitative variables is largely associated with a low standardization of the supplied goods and with the significance of the prevailing corporate governance structure. To some extent we might even conclude that governance aspects are more important than a low standardization of goods since obviously small firms can survive in the Industrial World, too. But they will only have a chance if they find the appropriate governance structure. Good governance provides the small firm with resources that cannot be found in the balance sheets examples of this being its human and social capital. In order to assess their value a lender would have to analyse the entirety of prevailing explicit but also implicit contractual relationships between the entrepreneur and its stakeholders, and it is above all the high degree of implicitness that explains the significance of private information. In the following section the question is addressed to what extent the credible conveyance of complex and highly private information to the lending bank can be achieved by relational debt contracts.

[13] The survey undertaken in 2001 at the European level .highlights the place of SMEs in incubators. Indeed, a national comparison demonstrates that the number of incubators per ten thousands SMEs reach 0,7 in Germany but is less than 0,6 in France (Cf. Innovation and Technology Transfer, July 2002)

Ways to Reduce the Information Deficit between Lenders and Small Borrowers

Relational Contracts as a Solution?

We have already mentioned briefly that lenders also constitute stakeholders of a small firm. Good governance in this regard refers to a relationship between the lender and the borrowing firm that makes sufficient financial resources available, and this at bearable cost. It is in this way that lenders themselves affect the firm's profitability. On the other hand loan conditions are only one variable among others determining the borrower's income situation, implying that a loan can default. In order to evaluate this risk the lender will have to acquire and process information about present and future cash flows, and it is in this regard where the knowledge of qualitative and private information becomes relevant. In the literature relationship banking has been proposed as a way to solve the information problem (Berger and Udell, 1995, Boot and Thakor, 1994; Greenbaum, Kanatas and Venezia, 1989; Petersen and Rajan 1994; Rajan 1992). This literature is embedded in the broader context of relational contracts. In the following we will briefly present the different lines of research in this field.

An Overview over the Theories of Relational Contracts

There exist mainly two strands of economic research concerning contractual relations, namely the *incomplete contract theory* on the one hand and the *relational contract* theory on the other.[14] The common ground for both approaches is given by the view that a relational contract is typically marked by a long duration implying unforeseen contingencies. Both approaches differ, however, with respect to the significance of trust for the revelation of private information and the avoidance of opportunism.

The *theory of incomplete contracts*[15] is embedded in standard microeconomic theory and uses mathematical techniques. It is assumed that a long-term agreement allows the lender who typically is assumed to be bank to accumulate private information through experience. An example is given by Diamond (1989), where a bank initially is unable to associate the success of a young borrowing firm with its true quality since a project may be successful even if its expected present value is negative. Only gradually – by observing firms' failures – will the bank be able to separate good from bad quality borrowers. A related example is presented by

[14] This classification has been proposed by Furubotn and Richter (2000).
[15] Incomplete contract theory was originated by Oliver Hart. A good characterization is provided in Hart (1995).

Petersen and Rajan (1995). Notably in none of the models does the revelation of private information result from a communication process between the borrower and the lender.

Petersen and Rajan (1995) explain why a bank should have an interest in starting a long-term relation to its borrower. Within the framework of an intertemporal model they show that the degree of competition among banks is required to be low. The reason is that a bank has to charge a low interest rate in the initial contract in order to prevent moral hazard. This low interest rate constitutes a contract-specific investment which is only profitable if the relationship has a long duration. If the borrower happens to be successful with his investment project the bank faces a risk to lose him to competing banks rendering the contract-specific investment as sunk costs.

It is not the main interest of the incomplete contract literature to explain *how* private information unfolds in a long-run contract. Rather, the message is that information symmetry can somehow be obtained through long-run commitments. The main focus is on implications of unforeseen contingencies giving rise to later renegotiations which can be used in an opportunistic manner by the party whose bargaining power has increased in the meantime.[16] The main implication thus is that borrowers might possibly not experience an improvement of their financial situation at all (Gorton and Kahn, 1996; Rajan, 1992).

Relational contract theory does not cast any doubt at the incompleteness of a relational contract. Rather, it takes at issue the view that the trading partners are unboundedly rational. On closer scrutiny at least two lines of research can be made out. Transaction cost theory[17] has a focus on how trading partners being rational only in a bounded sense, cope with unforeseen contingencies and transaction-specific investments. In this respect Williamson (1985) views hierarchy as an important way to avoid opportunism by imposing rules of litigation. A second line of research has close connections to sociology and will therefore be named henceforth the *interdisciplinary approach* to relational contracts (Macneil, 1974; 1978; 1983; Lindenberg, 1988; Frank, 1990; Granovetter, 1985; Sako, 1998; Coriat and Guennif, 1998; Baudry, 1998; Lazaric and Lorenz 1998; Uzzi, 1999). According to this approach opportunism is not so widespread as incomplete contract theory might suggest. Furthermore greater emphasis is laid upon the question how trading partners can be motivated to exchange valuable information which bears a high degree of privacy, too. In this respect mutual trust

[16] This is in particular the case if the other party has undertaken contract-specific investments that cannot be verified by the courts.

[17] Transaction cost theory is closely associated with the works of O.E. Williamson. Cf. in particular Williamson (1985), (1993a), (1993b), (1993c).

defined as "… a belief or expectation held by one trading partner about another that the other will behave in a mutually acceptable manner" (Sako, 1998, p. 30) is not only considered as a prerequisite to avoid opportunism but also to release private information. Underlying the emergence of trust is a learning process which is marked by positive experiences with a partner's contractual behaviour. The parties start with agreements on small obligations allowing them to periodically assess their incurred risks and take appropriate actions. Trust and with it a reduction of information asymmetries is above all achieved by reciprocity and by enriching the initially purely business relation by personal ties. Reciprocity implies that a partner who offers something valuable to the other party is granted something in exchange (Coriat and Guennif 1998). Referring to the small borrower-lender-relationship, this means that a borrower providing the bank with qualitative and private information will be rewarded with favourable loan conditions. Positive experiences then give rise to increasing promises and obligations. By starting and intensifying personal relations the credibility of conveyed information is increased and the release of private information is facilitated. The exchange of gifts, visits, food as well as the exchange of information about the family have been found to play a role (Shell, 1991). Another important point is that the partners will not only learn about each other's behaviour, but that they also develop a private language allowing them to interpret complex and ambiguous information in a mutually accepted manner.[18] How mutual trust can facilitate small firms' access to favourable loan conditions has been shown by Uzzi (1999). The American sociologist draws on Granovetter's social embeddedness theory (Granovetter, 1985) according to which any economic transaction is embedded in social relations, where the intensity is highest in a relational contract and lowest in an arm chair's or, equivalently, transactional contract. His empirical study makes evident that only personal ties giving rise to trust in the banker's willingness to maximize common welfare will encourage a small entrepreneur to communicate private information because in return he can expect that the "large" lender will not exploit his bargaining power. This point is neatly explained by two bank managers:

> "[A] relationship [means] that you know a person like his family and you feel on a level with him – not pure friends – but that he trusts what you say. That you're taking care of him. … [So] the more I know a person, the more he understands why I'm asking these questions. He doesn't feel so defensive. Otherwise, with market ties it's a battle."

[18] This point has been emphasized by Baudry (1998) who refers to Granovetter (1985). Lazaric and Lorenz (1998) emphasize that this point makes trust different from reputation which concerns commitments made against a wider community thus bearing the quality of a public good.

"A relationship on a social basis tends to break a lot of ice and develop a multidimensional relationship that's more than cold facts, interest rates, and products. It's an emotion-based bond … that's so important to have … [because] the customer will let us know about problems early, so we can correct them."[19]

Relational contracts of this type are usually associated with the German housebank principle. That in particular the group of small firms might not have benefited from this housebank principal in the same way as their larger counterparts did, will be the topic of the following section.

Empirical Findings on Loan Contracts with Small Firms – The German Experience

Until recently, the German financial system has been dominated by the so-called housebank principle implying a relational contract culture (Größl-Gschwendtner, 1993; Hackethal, 2000). Not only small and medium-sized but also large firms preferred bank loans to taking debt in the organized financial markets. Long-run bank loans were even used as a substitute for equity (Hackethal 2000). Empirical investigations make evident that the presence of banks in the supervisory boards of large corporations fostered stakeholder principles (Früh 1999), whereas small and medium-sized forms enjoyed a generous availability of loans, even in times of financial distress (Harhoff and Körting 1998; Machauer and Weber, 1998.[20]

A closer look, however, reveals that the empirical investigations focus on a broad class of firms including also medium sizes earning up to 50 million euro that already share close similarities to corporations. Empirical investigations focusing on smaller sizes have obtained more differentiated results (Geisele, 1999, Hansmann and Ringel, 2001). The following analysis draws on their results. Furthermore the finding of a recent investigation undertaken by the Institute of Financial Services, Hamburg is taken into account.[21] The study investigates the behaviour of small firms and banks in situations marked by a financial crisis of the borrower. The analysis includes case studies based on both a questionnaire and reports underlying legal verdicts. As a major result it was found that small firms might not have benefited from the German housebank principle as much as larger firms did. In particular, there is evidence that banks have not been interested in establishing durable relations with their small clients that might have given rise to mutual trust. By contrast, the standard debt

[19] Uzzi (1999), p. 488.
[20] For a more critical view cf. Größl et al (2001).
[21] Cf Reifner, Größl and Krüger (2002), research project funded by the Volkswagen Stiftung forthcoming in August 2003.

contract offered to a small firm appears rather transactional, furnishing the bank with easy exit possibilities, whereas the small firm is more or less locked into the relationship.[22]

Explanations for this finding might of course be found in changes within the German banking system towards a higher market-orientation. We should, however, not jump to conclusions since empirical studies quoted above still draw a quite optimistic picture concerning the availability of bank loans at favourable terms to small and medium sized firms taken as a homogeneous group. Moreover, savings banks (Sparkassen) and credit unions (Genossenschaftsbanken) are still the most important lenders, and it is only very recently that these banking institutions have started a restructuring process.

Notably our case study observed common ground with other studies (Laub, 1994) in the following points: Banks are rather reluctant with respect to undertaking a thorough screening procedure before the conclusion of a contract. Instead they have a clear focus on collateral which allows to rid themselves from the risk incurred by the project to be financed. This together with a high bargaining power allows a bank to suit the contract to its own benefits. In this regard the case studies undertaken by the Hamburg Institute for Financial Services have made evident that banks have been rather reluctant to recommend their clients to apply for public subsidies like long-run loans granted by the Kreditanstalt für Wiederaufbau (Bank for Reconstruction) at interest rates being lower than their market level. The reason for this is that the granting of these loans, however, is made contingent on a screening procedure to be performed by the applicant's housebank. Up to now evaluation costs have been fixed independently of the loan volume, and have amounted to 750 euro per loan, where the housebank has received only 1% of the interest rate as a reward. Therefore the loan volume would have to exceed 75.000 euro in order to prevent the bank from suffering a loss. Small firms, however, are in most cases interested in much lower loan volumes – and this for good reasons. As an alternative banks typically provide small firms with fully collateralized short-term current accounts (Herter, 1991) granting the lender numerous rights to terminate the contract even before the regular maturity has been arrived. This alone of course does not prove a missing existence of relational contracts since many relations start with agreements that allow the parties to exit easily in order to make learning possible (Baudry, 1998). Then, however, *both* parties should be given this opportunity, whereas evidence indicates that small borrowers are locked into the contract from the very beginning. For example the case studies have revealed that small firms are frequently persuaded to take higher loans than they

[22] That the significance of relationship banking decreases with decreasing firm size is also confirmed by Hansmann and Ringle (2001).

demand, and this irrespective of public funding. Furthermore banks frequently encourage firm founders to start their business before the required public loans are granted, and this is achieved by providing expensive and short-term loans (Reifner, Größl and Krüger, 2003 forthcoming). Agreements like this support the emergence of financial distress implying an even higher dependency on the lending institution.

There are further indicators of banks' reluctance to form close ties with small borrowers. In the course of a firm's life the demand for loans changes both in size and structure. Firms face growth potentials, and in order to exploit them they have to undertake investments requiring long-term debt. Moreover unfavourable market developments might require a suitable change of the whole production programme. Finally unexpected events may give rise to a sudden financial distress. Evidence shows that banks are only willing to adjust loans appropriately if the firm can offer sufficient collateral. The full collateralization of debt remains a concern for the bank throughout the relationship[23] indicating that the small borrower-lender relationship is not marked by mutual trust. Furthermore there is evidence that small borrowers are exposed to frequent changes of their liable bank manager which of course does not support familiarity as a prerequisite for the emergence of a trusting relationship.[24]

Obviously even banking institutions operating in a "relationship-friendly" environment[25] fail in coping with small firms' peculiarities. An important reason certainly can be found in the fact that the establishment of personal ties is not free of costs. As Sako (1998) puts it, the evolution of trust requires a "… fair amount of resources in frequent communication and information-sharing between organizations,"(Sako, 1998, p. 26), and she continues to emphasize that this does not necessarily imply economizing on transaction costs. A bank manager's decision to engage in personal ties will probably be highly dependent on economic criteria. After all he has to dedicate much time and personal resources to each individual client. Considering the high number of small and heterogeneous borrowers a great many bank managers would have to spend many daily hours to establish and entertain a close relation including social attachments which have been emphasized by Uzzi (1999). The resulting increase in fixed costs would to all probabilities not be outweighed by additional benefits due to increased information about the borrowers' profit perspectives. This evaluation is further

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[23] This was confirmed by all the cases underlying the research project of the Institute for Financial Services, Hamburg.

[24] This has also been confirmed by Laub (1994), Hildebrandt and Quack (1995), Hansmann and Ringle (2001).

[25] Notably the German regulation of the financial system used to strengthen the role of banks as compared to financial markets contributing to a considerably lower degree of competition as compared to more market-based financial systems. Therefore German banks could much more rely on a long-term firm-customer relationship comprising all kinds of financial services. Cf. Größl-Gschwendtner (1993).

supported by the fact that the advantages of a financial intermediary as compared to individual lenders rely on the realization of economies and scope. With respect to the privacy of any individual relationship between a bank manager and his client, however, a sufficient realization of both economies remains questionable.

Information Intermediation as an Alternative

The empirical finding suggests that a solution to the problem of evaluating small firms' profitability can hardly been found within a banking institution the main reasons being rooted in smallness and heterogeneity. Both call for a standardization of the screening and monitoring processes in order to reduce cost. Typically banks resort to more or less simple scoring procedures where earned income assumes a central role as an indicator of quality. As we have seen this draws only a rather incomplete picture of small firms' true quality. Standardization should instead focus on ways how qualitative and private information can be gathered and made available to a large public in a more economical way without violating the firm's privacy and without decreasing completeness. In this respect information intermediaries could play an important role.[26].

First, information intermediaries specialize on accumulating and processing information implying that their income depends first on the quality and reliability of information they offer, and second on their willingness to treat private information in a highly confidential manner. If the first principle is violated they will lose suppliers of capital as their customers. Should they renege on the second principle they will lose investors of capital as their customers. This makes it valuable for information intermediaries to develop and apply more sophisticated techniques which allow to quantify qualitative information even if no market for the underlying asset exists.[27] These techniques make it also worthwhile for an information intermediary to constantly update information on the borrower's overall activity so that lenders and borrowers as well can position themselves appropriately.

Second the small firm will probably be less reluctant to reveal private information to an information intermediary than to a bank. One reason for this is that contrary to banks' business practices, the involvedness of information intermediaries with the affairs of their

[26] That information intermediaries may increase the availability of loans to small firms has recently been confirmed by Rajan (2000). In his article, however, Rajan emphasizes the benefits of a specialization in the accumulation of *quantitative* variables. Here, the view is taken that the benefits of information intermediation are much more pronounced with respect to qualitative indicators. This view is also taken by Levratto (2002c) and Paranque (2002). The authors extend information intermediation to comprising advisory services going beyond financial issues. Paranque, Rivaud-Dansetand Salais (1997) discuss information intermediation with respect to the evaluation of the risk of losing competitiveness.

[27] One way to achieve this is to develop expert systems based on fuzzy logic or neural networks.

customers will probably be much less pronounced. Moreover the release of private information to the bank can be avoided by condensing the multitude of available information into a single rating number.

By resorting to exogenous ratings, banks could indeed rid themselves of costly evaluation processes. Their faith in the reliability of conveyed information could be strengthened by receiving access to the methodology applied and, of course, by the reputation the information intermediary may build up in the course of time.

As is well documented by Shapiro (1983), reputation always conflicts with competition. And indeed, the small number of existing rating agencies validates this view. A low degree of competition, on the other hand, implies high prices which small firms will hardly be able to pay. In the face of their high macroeconomic significance on the one hand and their comparatively weak position in the financial markets on the other it is reasonable to render information intermediation the quality of a public good.[28] Instead of subsidizing interest rates or offering public warranties which may give rise to problems of moral hazard, subsidies paid on the provision of external ratings appear to be much more efficient. Indeed the beneficial effects go far beyond the improvement of small firms' creditworthiness. Small firms could become more attractive for potential equity holders, too thus decreasing risk and increasing their independence from the banking industry. And finally the external rating process if made transparent to the small applicants could provide valuable educational functions improving their business as well as entrepreneurial skills.

Summary and Extensions

The article substantiates the hypothesis that due to a predominance of qualitative determinants, even banks may fail in evaluating the true profitability of small firms. The predominance of qualitative factors can be explained firstly by the finding that small firms are better suited to produce less standardized goods. Secondly, and probably even more importantly, a small firm's governance structure has been shown to be crucial. Both aspects place the firm's human capital, the motivation of its employees, the flexibility of its machinery, economies of scope as well as the kind and quality of relationships between the entrepreneur(s) and various stakeholders into the centre. Contrary to large corporations where the quality of corporate governance is above all mirrored in a most efficient use of given resources, a good governance structure allows a small firm to magnify its resources thus

[28] For further elabourations on this point cf. Reifner, Größl and Krüger (2003) forthcoming.

shifting outwards the constraints given by smallness. In this respect explicit and implicit arrangements with the family and outside stakeholders like customers, suppliers but also other firms may provide the small entrepreneur with resources that cannot be found in the balance sheets. Among these are externalities of social and business networks, the identification of the entrepreneur's family with business objectives, and last but not least the degree to which contractual relations are trusting. The resulting determinants of small firms' profitability do not only bear qualitative features but also represent to a large degree private information. Following the literature on relational contracts this type of information can best be conveyed to lenders within contractual relations marked by mutual trust. The article makes evident, however, that even in the German housebank-dominated financial system smallness as well as heterogeneity render the establishment of close ties to small firms a costly undertaking for a bank. As an alternative the comparative advantage of specialized information intermediaries is briefly sketched. In this regard not only their higher incentive to develop and apply methods allowing for an appropriate evaluation of qualitative information is important but also aspects concerning small borrowers' refusal to release private information which might be less pronounced with respect to information intermediaries. It should not be overlooked, however, that external ratings only constitute a serious if a small firm can afford it. This calls for some public funding which in its turn can be justified by referring to information intermediation as a public good. Further research should focus on how qualitative indicators of profitability can be more easily quantified and how some standardization can be achieved reconciling aspects of efficiency and small firms' heterogeneity. In this respect the application of fuzzy logic allowing not only for a quantification of qualitative data but also for the design of "soft" classifications appears worthwhile. Finally further research should also address the question how the profitability of information intermediaries can be assured without burdening small firms with unbearably high costs.

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