Perceived Competence and Credit Access of SMEs: Can Trust Change the Rules of the Game?

Dr. Andrea Moro * and Dr. Matthias Fink b

---

* Centre for Financial Management
  The Open University Business School
  Walton Hall
  Milton Keynes
  MK7 6AA
  United Kingdom
  Email: a.moro@open.ac.uk
  (corresponding author)

b Institute for Small Business Management and Entrepreneurship
  WU Vienna University of Economics and Business
  Augasse, 2-6;
  1090 Vienna, Austria
  Email: matthias.fink@wu.ac.at
Abstract

Banks play an essential role in financing firms and especially small and medium enterprises (SMEs). The process used by banks to decide whether and how much to lend is complex and banks rely on different lending techniques. Relationship lending, by leveraging a variety of private information gathered through contact with the firm, its owner, and the local community, has a peculiar role and can benefit SMEs by providing them with easier access to credit. No previous research focuses specifically on the perceived competence of the entrepreneur or the owner/manager of the firm as well as on competence as a substitute of trust. The present paper tries to fill this gap.

The research is based on a panel of 535 entrepreneurial SMEs which operate in the widely studied and economically successful North East of Italy. The data were collected by administering a survey to bank managers of local community banks and of two national banks. The regressions show that competence is positively related to overall credit gained and negatively related to interest rate. In addition, in low trusted SMEs, credit gained is positively related to competence while the interest rate is negatively linked to competence. In highly trusted firms, these relationships are not significant.

Our findings support the point that competence is an important factor irrespective of the quality of the firm and that it is a substitute for trust in low-trusted SMEs. The findings have two major implications: banks should develop tools that are capable to catch the competence of the entrepreneurs irrespective of the performance of the firm depicted in the firms’ data; the entrepreneurs need to effectively communicate their competences to the relevant stakeholders such as the bank managers. Thus, perceived competence can play an important role during economic downturns when the performance of the firm is affected by hostile economic environment.

Keywords: Competence, Trust, SMEs, Credit Access
1. Introduction

Banks play an essential role in financing firms and especially small and medium enterprises (SMEs) since they can hardly access equity capital markets. The process used by banks to decide whether and how much to lend is complex involving risk evaluation of the firms. In doing this, banks rely on different lending technologies and they usually tend to use more than one technology at a time (Berger and Udell 2006). Among the various lending technologies, relationship lending has a peculiar role. In relationship lending, the bank relies on a variety of private information gathered through contact with the firm, its owner, and the local community in order to evaluate the firm’s riskiness (Petersen and Rajan 1994, Petersen and Rajan 1995 and Berger and Udell 1995). Small businesses can benefit from such a situation by getting easier access to credit. Previous research focuses the attention on a set of variables used to catch the effect of the relationship such as the length of the relationship, its closeness, the concentration of lending relationships on few banks and the quality of the relationship.

Interestingly, no previous research focuses specifically on the perceived competence of the entrepreneur or the owner/manager of the firm irrespective of the fact that literature stresses the key role of competences as a source of competitive advantage (Hamel and Prahalad, 1996). In addition, when a bank takes the decision to provide credit, even though it is a contractual relationship, it is underpinned by the assessment of trustworthiness of the borrower to repay the principal (and interest). Literature on trust stresses it can play an important role in reducing agency problems, moral hazard, adverse selection, and can help reduce transaction costs (Macaulay 1963, Nooteboom, et al., 1997) as well as the expenses of monitoring and control (Lewicki, et al., 1998). Thus, trusting relationship can benefit banks and SMEs: trust’s its role is theoretically supported by the model proposed by Howorth and Moro (2006). However, the role of trust has remained relatively under-investigated, although in recent times a growing interest is emerging (see, for instance, Saparito et al., 2004, Harhoff and Körtling 1998, Ferrary 2003, Saparito and Gopalakrishnan 2009, Howorth and Moro, 2010).

Present study is an attempt to fill this research gap by investigating empirically whether bank managers’ perceived competence in the entrepreneur affects the credit access (that is the overall credit gained and the interest paid by firm) irrespective of the data they can access about the firms’ performance. In addition, by extending previous research on the role of trusting relationship in accessing finance, we investigate whether competence is a substitute of trust when perceived trust is low. Thus, present research adds to Harhoff and Körtling,
(1998) and Howorth and Moro (2010) that looks specifically at the link between trust and collateral/interest rate by extending the investigation on the interchangeable role of trust and competence and how perceived competence can help SMEs in accessing credit.

Our econometric findings support the point that perceived competence is an important factor that helps credit access, irrespective of the quality of the firm as it emerges from the official data. In addition, competence complements trust by substituting it in low-trusted SMEs.

These findings have two major implications: firstly, banks should develop tools that are capable to catch the competence of the entrepreneurs/firm’s managers irrespective of the performance of the firm as depicted in the firms’ official data. Perceived competence can play an important role during economic downturns when the performance of the firm is affected by hostile economic environment. In times of crises, which are generally characterized by dynamic environments, risk evaluation based on firm’s data alone might not be reliable. This makes the perception of the entrepreneur’s characteristics decisive for the firm’s future performance which is in turn the basis for the bank’s decision to lend money to the venture. Thus, selecting competent entrepreneurs can be an effective and efficient approach. Secondly, the entrepreneurs/firm’s managers need to communicate their competences to the relevant stakeholders such as the bank managers. Additionally, the entrepreneurs should build up a trust relationship with the bank managers as this can compensate for shortcoming in the competence perception.

The rest of the paper is organised as follows: section 2 provides a brief literature review on relationship lending, competence and trust. Research question and the testable hypotheses are discussed in sections 3 while section 4 deals with methodology and variables description. Section 5 describes the sample used in the research. In section 6 the findings are discussed. Section 7 discuss the findings, draws the conclusion and identifies possible future areas of research.

2. Banks, SMEs, Competence and Trust

SMEs are often constrained in accessing additional equity from the current shareholders since they tend to invest the entire wealth in the venture from the very beginning (Avery et al. 1998). In the quest for equity, SMEs face problems linked to high agency costs (Manson and Harrison 2002, Landstrom 1992). Entrepreneurs do not like to access external finance since it implies a reduction in the freedom they have about how to manage the firm,
limitation in the possibility of accessing non-pecuniary benefits and implementation of additional control and management tools (Delmar 2000) which can be very costly. Thus, the potential investors can face major problems in valuing the venture and making investment decisions (Block and McMillan 1985). Scholars point out that SMEs rely on different sources of bootstrap finance (Wingborg and Landstrom 2000) which changes over time (Ebben and Johnson 2006). At the same time, these sources of finance can hardly cover all the financial needs. Thus, SMEs are forced to rely on bank debt.

The lending technologies used by the bank system, can be broadly grouped into four main categories: financial statement lending (based on the evaluation of information from the financial statement); asset based lending (based on the provision of collateral and its quality); credit scoring lending (based on statistical techniques) and relationship lending (Berger, 2006). The first three lending techniques are usually grouped together and labelled transaction lending because the risk evaluation is based on available factual and public information, collected independently from the quality of the relationship and include loans that are mainly spot-like and for non recurrent needs. Under the fourth category a key role is played by a variety of private information, which results from strong and long-term relationships (Berger, et al. 2001). Berger (1999) summarises that in relationship lending the information is gathered beyond relatively transparent data available in the official documents; information gathering is through a continuous process; information remains confidential to the provider of funds who uses it as a basis for taking further decisions. In relationship lending, the relationship between banks and businesses is assumed to improve the ability of banks to evaluate firms’ riskiness and increase the repayment rate of the loan (Brown and Zehnder, 2007). This in turn increases credit availability for SMEs even if firms which rely on relationship lending (that is on private information), are found to be charged a higher interest rate and to face increased risk of the information capture effect (Agarwal and Hauswald, 2008).

Because of its nature, relationship lending is complex but it is also worthwhile for the bank. As summed up by Boot (2000), it leaves room for flexibility and discretion to the bank. The mass of information gathered over a period of time, gives the bank an opportunity to exploit economies of knowledge in the long run. Relationship lending technology implies a different structure at bank level: the portfolio should not comprise a large number of small value loans to avoid an adverse effect on the manager’s ability to monitor them (Stanton 2002) and the bank has to delegate lending authority to the local loan officers (Stein 2002). Thus, relationship lending partially insulates the bank from pure price competition, although it is costly (Boot and Thakor 2000).
2.1 What Affects the Access to Credit and its Cost?

Literature on relationship lending investigates credit access by looking at the amount of credit gained by the firm. The role of the time spent in producing and collecting information is investigated: both the role of the length of the relationship (Petersen and Rajan, 1994, 1995) and the age of the firm (Angelini, et al., 1998, Akhavein, et al., 2004) are found to be positively related to credit access. In fact, only the latter provides the lender with private information since the former gives just access to a greater amount of public information. In addition, newer and smaller firms are considered to be the riskiest (Akhavein, et al., 2004): young firms have to survive the start up period of getting established and the potential lender is uncertain about the competence and skills of the management (Petersen and Rajan 1994, Berger and Udell 1995). As they become more established and gain reputation, the available information about the firm increases making it easier for the bank to evaluate the creditworthiness of the firm (Berlin 1996).

A long relationship provides banks with a great amount of private information giving them the possibility to spot those that present moral hazard and adverse selection risks (Diamond, 1984, Berger, et al. 2002). Greater accessibility to credit is also given because of pre-existing relationships – not necessarily linked with previous lending (Degryse and Van Cayseele, 2000). The closeness of the relationship is also a relevant factor: if scale economies exist in information production, and information is durable and not easily transferable, a firm with close ties to financial institutions should have greater availability of funds relative to firms without such ties (Petersen and Rajan, 1994). A large body of empirical evidence as well as theoretical models (Dell’Ariccia and Marquez, 2004) support this point.

The value of private information depends on its gathering on one (or few) bank(s), as the greater the concentration of the relationships, the more complete the information. Borrowing from multiple banks not only may generate higher costs for the firm but it may also be informationally inefficient for small businesses (Berger, et al., 2001). On the other hand, the concentration of credit can create a situation of information monopoly for the bank (Sharpe 1990). The difficulties in conveying an accurate picture of their performance, the time required to look for and evaluate potential new banks and the administrative effort involved in switching, is expected to represent a very high cost for smaller firms. If firms are trapped within sub-optimal bank relationships, and they are unable to obtain alternative sources of finance, they could be credit constrained (Howorth, et al., 2003). Thus, Detragiache, et al. (2000) argue that the choice between one or more banks depends on the balance between the
benefits of reduced cost linked to one bank relationship and the cost of being potentially credit constrained.

The quality of the information provided is also found to play a key role in accessing credit: the higher information quality, the easier for the bank to evaluate the riskiness of the firm, the easier the access to credit (Elsas 2005). Elsas and Krahnen (1998), find that banks that have more intensive information exchange are more supportive of the firm. Lehmann and Neuberger (2001), find a positive correlation between a set of variables that measure the interaction activity between the bank manager and the SME entrepreneur-manager and credit availability.

Research on the role of relationship lending on the cost of credit is less conclusive. Most studies have examined the association between the cost of credit and the length of the relationship. Berger and Udell (1995) as well as Elsas and Krahnen (1998) showed a negative relationship between the interest rate and the length of the relationship but other empirical studies by Petersen and Rajan (1994) and, more recently, Baas and Schrooten (2006) did not find evidence to support this. Keasey and Watson (2000) claim a negative relationship but use the firm’s age as a proxy for the length of relationship. Binks and Ennew (1997) argue that longer relationships can lead to increased cost of credit due to banks taking advantage of the firms’ lock-in to the relationship. Agarwal and Hauswald (2008) find that the exploitation of private information for the bank is associated to an increase in the cost of credit for firms which tend to suffer of information capturing effect. This does not necessarily means that firms are worse off since firms that rely on relationship lending are found to have an easier access to credit.

One reason for these inconclusive results is that longer relationships provide increased information and better understanding, leading to more accurate assessments of risk, but they do not necessarily reduce risks. The length of relationship cannot therefore be expected to have a linear relationship with the cost of credit. However, high quality, close relationships might lead to lower default and reduced risk, as the discussion below shows.

2.2 Perceived Competence and Business Relationships

Competence requires a fit between knowledge that is carried by a subject and task that is to perform as it only exists when the knowledge is matched with a specific task. Since competence implies an intention to achieve some desired result (goal) through action, and since action-taking requires some notions of cause and effect, knowledge and the application of knowledge through action are at the foundation of the concepts of skills, capabilities and
(ultimately) competence. Whereas capabilities fill the gap between intention and outcome, competence represent the ability to sustain the deployment of assets to achieve successfully the firm’s goals. Competences represent dynamic potentials rather than simply stock. In contrast to skills, competences can be aggregated and are less attached to a specific routine (Dosi et al., 2000, Hatak 2010).

However, the concepts have in common that they develop over time (Grant, 1991) and they are temporally linked to each other, because knowledge and the application of knowledge through action are the foundation of the concept of skills, capabilities and (ultimately) competence (Sanchez and Thomas 1996).

In our study, we focus on individual competences which are defined as set of knowledge, experience, skills and attitude attached to a person (Hatak 2010). This also serves as our working definition. Henceforth, for the sake of simplicity, we will refer to this construct as “competence”. However, also the concepts of individual and organizational competence are interwoven as most organizational competences build on individual competences (Doz, 1996). Interestingly, from the lending relationships point of view, to the best of our knowledge, no previous study on SMEs – banks financial relationship consider competence among the independent variables.

2.3 Role of Trust and Business Relationships

In relationships, trust as a variable is far too important to be overlooked (for a general review see Nooteboom 2002). Bromiley and Harris (2006) argue that excluding trust from relationship models partially reduces the quality of the models that is their explication power. Entering trust shifts the attention from the traditional approach linked to transaction costs economics and agency theory to a wider (and more complex) approach where interpersonal ties and relationship are taken into consideration (Barney, 1990). Interestingly, from the lending relationships point of view, to the best of our knowledge, only five studies consider trust among the independent variables. Harhoff and Körting’s (1998) research investigates the variables that affect interest and collateral; trust is simply one of them and is measured using a dummy variable. Ferrary (2003) investigates the role of trust in developing the social capital while Saparito and Gopalakrishnan (2009) investigate knowledge transfer in lending relationships. Howorth and Moro (2010) investigate the impact of trusting relationships on interest rate. Cassar et al. (2007) point out that trust among members of the relationship affect the repayment performance more than trust towards institutions.
Trust is a central concept in the management literature concerning the coordination of inter-firm cooperative relationships (e.g., Zaheer and Venkatraman, 1995; Lado, Dant, and Teleab, 2008, Fink and Kessler, 2010). As a matter of fact, the importance of trust in human relations is highlighted by various authors. In transaction-cost economics based analyses (e.g. Macaulay 1963), trust is a means of safeguarding against the risk of the partner’s opportunistic behavior under the conditions of bounded rationality, uncertainty and asset specificity (Smith et al., 1995). The principal advantages of trust compared to the market mechanism and hierarchical governance include its positive effects on information sharing, negotiations, and conflict resolution within the relationship (Dyer and Chu 2003, Luhmann 2000), its flexibility (Gulati 1995), its robustness to changes in circumstances (Doz, 1996); the reduction of agency problems (e.g. Ring and Van de Ven 1992, Lui et al. 2009); the reduction of expenses of monitoring and control (e.g. Zand 1972; Şengün and Wasti, 2009); the decrease of the use of legalistic remedies (Sitkin and Roth 1993). In addition, trust affects firm’s boundaries as defined by transaction cost economics (Langhfield-Smith, 2008). These advantages gain importance in complex and long-term oriented relationships such as inter-firm cooperation (Mohr and Speckman, 1994).

Our working definition of trust is the “willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer et al., 1995: 712). Further, this analysis focuses on interpersonal trust between the boundary-spanning agents, since “it is the individuals as members of organizations, rather than the organizations themselves, who trust” (Zaheer et al., 1998: 141).

Mayer et al. (1995) suggest that trustworthiness is based on three factors. The first factor is ability which looks at aspects such as skills and competence, it is domain specific and it cannot necessarily be generalised to other situations. Trust in the entrepreneur/manager’s business ability will reduce the bank manager’s perceived likelihood of default risk. The second factor is benevolence, which is defined as the extent to which a trustee is voluntarily believed to do good to the trusting party and is relationship specific. Nooteboom et al. (1997), by relying on Mayer et al. (1995) point out that trust requires familiarity and mutual understanding and, hence, depends on time and context, on habit formation, and on the positive development of a relation. Repeated interactions lead to the forming of habits and the institutionalization of behaviours: "habitualization." In the bank – entrepreneur-manager relationship habitualization and Mayer et al.’s (1995) benevolence can increase the expectation of the bank manager that the SMEs entrepreneurs-managers will meet the obliga-
tions (repayment plans, covenants, etc.). The third factor identified by Mayer et al. (1995), is integrity that is the trustor’s perception that the trustee adheres to a set of principles considered acceptable to the trustor. Nooteboom et al. (1997) argue that trust “is associated with the non-egotistic sources of cooperation: loyalty to a partner results from norms and ethics and from bonds of friendship or kinship rather than from coercion and material self-interest.” (Nooteboom et al., 1997: 313). Thus, they call this dimension of trust “institutionalization” of values and norms that constitute an ethics of transactional relationships. This is over and above competences and relationship and is an intrinsic part of individual’s commitments to moral principles. It is a personal characteristic of entrepreneur-manager. It can help to reduce the expectation of moral hazard, as well as increasing the perceived reliability of information supplied by the SMEs entrepreneurs-managers.

2.4 Competence and Trust

Competence is often discussed as factor that fosters the evolution of trust within business relationships (e.g Sitkin and Roth 1993, Abrams et al. 2003). In her recent large scale experiment Hatak (2010) revealed that competence has a highly significant positive impact on the likeliness of economic actors to show trust based behaviour, which supports earlier findings and argumentations presented e.g. by Sitkin and Roth (1993), McKnight et al. (1998) and Adler (2001).

Present research is based on previous literature on competence (Dosi et al. 2000; Doz, 1996; Hatak 2010) and on both Mayer et al. (1995) and Nooteboom et al. (1997) models. Firstly, we worked out a set of items to measure the perceived competence of the entrepreneur. Then, we worked out a different set of items to measure habitualisation/benevolence and institutionalisation/integrity (as a measure of overall trust). Then, we built up the competence variable by relying on competence items and a trust variable by relying on habitualisation/benevolence and institutionalisation/integrity items as explained in the methodology section.

3. Research Hypothesis

As illustrated in previous section, literature on perceived competence highlights the relevance of this factor for the successful development of business relations. The literature about trust points out its relevance as a mean of reducing transaction and agency costs. Literature on relationship lending stresses the importance of agency issues and moral hazard re-
duction to reduce risk and improve credit availability. The conflation of these three strands of research raises a general question. What is the role of perceived competence and perceived trust in accessing credit?

By focussing on perceived competence only, it is important to understand whether credit access is positively affected by perceived competence in the entrepreneur irrespective of the firm performance. According to the literature on competence, high level of perceived competence are supposed to support credit access. Thus, we develop the following hypotheses.

H1a: High perceived competence in the entrepreneur is positively related to the overall credit gained by the firm.
H1b High perceived competence in the entrepreneur is negatively related to the interest rate charged to the firm.

In addition, according to previous research (Harhoff and Körting, 1998, Howorth and Moro, 2010) a positive effect of trust in credit access is found. In addition, perceived competence in business partners tends to facilitate business relationship. Thus, perceived competence could be a substitute of trust when perceived trust is low. Therefore, we develop two related hypothesis:

H2a: In low trusted firms, perceived competence in entrepreneur is positively related to the overall credit access.
H2b: In low trusted firms, perceived competence in entrepreneur is negatively related to the cost of credit.

4. Research Method and Variable Description

Measurement of competence and trust requires collection of the perceptions and actions of the lending bank managers. The data on attributes of competence and on perceived trust were collected using a survey filled in by the bank managers. The main body of the survey was aimed at collecting information on managerial and financial aspects of the firm along with perceived competence factors and trustworthiness factors of integrity/institutionalisation and benevolence/habitualisation.
Factor analysis is employed to test whether a competence and trust’s factor could be derived from the vector of items that measure competence and trustworthiness factors, respectively.

Hypotheses 1a and 1b are then tested by regressing the independent variable (competence factor) and the control variables against the amount of credit gained and the interest rate charged by using ordinary least squares. Hypotheses H2a and H2b are tested by splitting the database in high(low) trust according to the value of trust factor and then regressing the independent variable (perceived competence) and control variable in the split dataset against the dependent variables (credit gained and interest rate). The findings were discussed with a panel of SMEs entrepreneurs-managers and bank managers.

4.1 Dependent Variables

The long and short-term debt the firm gains, are indicators of credit access. The survey filled in by bank managers collected data about both short- and long-term debt provided to the firm. The overall amount of debt was simply worked out adding up short- and long-term debt. Since the variable presents some problems of heteroskedasticity, in line with the previous research we entered in the specification the natural logarithm of the overall debt (LN_TOTAL_DEBT).

Bank managers are also requested to provide interest rate charged on the overdraft at the date when they filled in the survey. Traditionally, bank managers have some room of manoeuvre on the interest rate charged on overdraft. In addition, interest rate charged on long term debt is contractually determined at the beginning of the contract: since it is less subject to negotiation it could hardly reflect the current relationships between bank manager and firm’s managers/entrepreneurs. Thus, we use the interest rate charged on the line of credit (INT_LC).

4.2 Independent Variable

Competence is measured according to a vector of 4 items. The bank’s manager had to evaluate the items on a 5 point Likert-type scale between “I totally disagree” (1) to “I totally agree” (5). The competence items are reduced to one COMPETENCE factor using factor analysis. Each item was critically evaluated and pre-tested. Table 1 list the items. The factor COMPETENCE is expected to be positively related to LN_TOTAL_DEBT since it is expected to increase the amount of credit gained by the firm. COMPETENCE is also expected to be negatively related to INT_LC since higher perceived COMPETENCE should be
associated to entrepreneurs/managers that are perceived as less risky and therefore charged with a lower risk premium.

Table 1 – Competence items

<table>
<thead>
<tr>
<th>ab1</th>
<th>The entrepreneur/firm manager has very good knowledge of the market in which they operate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ab2</td>
<td>The entrepreneur/firm manager is able in identifying the needed resources</td>
</tr>
<tr>
<td>ab3</td>
<td>The entrepreneur/firm manager is able in managing the resources</td>
</tr>
<tr>
<td>ab4</td>
<td>The entrepreneur/firm manager understands the changing market conditions</td>
</tr>
</tbody>
</table>

4.3 Control Variables

Trust is measured according to a vector of 6 items that measure the two trust factors (benevolence/habitualisation and integrity/institutionalisation). The bank’s manager had to evaluate the items on a 5 point Likert-type scale between “I totally disagree” (1) to “I totally agree” (5) except for the last item (INT3) where they are asked to evaluate between “I totally advise against” (1) to “I totally advise”. Each item was based on previous trust inventories (e.g. Cummings and Bromiley 1996, Currall and Judge 1995) as well as items previously developed according to the proposed model, since they gave reliable results (see Mayer and Davies 1999, Jarvenpaa et al. 1998). In addition, they reflect the fact that trust relies also on previous knowledge (Duffer et al., 2009). Each item was critically evaluated and pre-tested. Table 2 list the items.

Table 2 – Trust Items

<table>
<thead>
<tr>
<th>ben1</th>
<th>The entrepreneur/firm manager adapts their interests to fit those of commercial partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>ben2</td>
<td>The entrepreneur/firm manager pays attention to the needs of the employees</td>
</tr>
<tr>
<td>ben3</td>
<td>The entrepreneur/firm manager is very involved in the community</td>
</tr>
<tr>
<td>int1</td>
<td>The entrepreneur/firm manager is totally honest in negotiations with commercial partners</td>
</tr>
<tr>
<td>int2</td>
<td>The entrepreneur/firm manager is consistent in his decisions and behaviour</td>
</tr>
<tr>
<td>int3</td>
<td>You would be happy to recommend the firm to a female friend to work there</td>
</tr>
</tbody>
</table>

The credit availability is a function of the market concentration (Petersen and Rajan 1995) proxied by the number of banks operating in the region (NBANKS). The greater the competition among banks, the greater the dispersion of information among them. Therefore, in concentrated markets, it is easier to raise finance for younger, smaller and marginal firms and they are expected to have greater access to credit. Since the dataset provides data from
local and large banks, a dummy variable (LOC_NAT) is used to control the kind of bank. Large banks (value 1) are supposed to be less supportive in providing credit. Thus, a negative relationship is expected between LOC_NAT and credit gained and a positive relationship is expected between LOC_NAT and INT_LC.

In general, a negative relationship between risk and overall credit gained is expected and a positive relationship with INT_LC is expected (Berger and Udell 1995). The first covariate that tries to measure the risk (at systemic level) is ECON. It is an index collected by Bank of Italy in accordance to the European Central Bank, which measures the expected change in providing credit to customers. It implicitly is a measure of the change in perceived risk linked to the change in economic climate. It is collected every three months through a survey administered to bank managers (no one of them is involved in the research) where they have to score on a five Likert-type scale between -1 (relaxing approach in providing credit to customers) and +1 (more rigid approach in providing credit to customers). The values used are those collected by the Bank of Italy in the quarter when the data were collected in each bank. Since positive values are associated with a more stringent credit policy, a positive relationship between ECON and INT_LC is expected and a negative relationship is expected between ECON and LN_TOTAL_DEBT. In fact, a more stringent credit policy implies either the refusal to provide additional credit or a possible reduction of the overall credit provided to the firms and the deterioration of credit access, accordingly.

Firms that use a greater percentage of the facility may be seen as higher risk and therefore pay a higher interest rate. In addition, since they are perceived as riskier ones, they can enter a dangerous loop where they face a reduced access to credit. A variable is included to measure the percentage of overdraft facility used on average (OVDUSE). The variable is expected to be positively related to INT_LC and negatively related to LN_TOTAL_DEBT. Riskiness is also linked to firm dimension: bigger firms need more finance on one hand and are considered less risky on the other. In addition, they have greater negotiation power as found by Lehmann and Neuberger (2001). In the regressions, the size of the firm is measured by the natural logarithm of the annual turnover, in line with previous empirical research (LN_TURNOVER): a positive relation with LN_TOTAL_DEBT and a negative one with INT_LC are expected. The covariates that cope specifically with the riskiness of the credit provided are PRIVATE_COLL (personal collateral provided by the entrepreneurs/shareholders) and FIRM_COLL (the collateral provided by the firm). They are dummies since no information about the value of the collateral provided is available. Collateral is considered to be a way to hedge the loss at default and to deal with various issues such as
moral hazard and adverse selection (probability of default). It is expected to be positively related to LN_TOTAL_DEBT. In addition, since collateral reduces the risk for the bank, it is expected to be negatively correlated to INT_LC. The overall amount of debt collected by the firm can affect the interest rate. In fact, on one hand greater credit can be a symptom of a greater negotiation power of the firm that can be able to negotiate a reduced interest rate; on the other, the firm provided with greater credit can be perceived riskier and therefore charged a higher interest rate. According to the characteristics of the firms in the database, the latter relationship is expected and therefore a positive relationship between INT_LC and LN_TOTAL_DEBT is expected.

The relationship provides the banks with additional information that helps to increase the knowledge of the firm. As pointed out by some theoretical models, borrowing constraints become less strict with time because of the increased reputation of the borrower (Martinelli, 1997). At the same time, when firms are small, they can face hold up problems (Howorth, et al., 2003). In line with the previous empirical research, the log of the length of the relationship (LN_LENGTH) is entered in the regression. Because the characteristics of the firms (SMEs) the bank capture effect is likely to prevail over the information production effect: thus, a positive relationship with INT_LC and a negative one with LN_TOTAL_DEBT is expected. If the firm has more than a simple lending relation with the bank, it has the possibility to give the bank a lot of additional information about its performance (Degryse and Van Cayseele, 2000). MULTI is a dummy variable that controls it. When the information is held by few bank managers or even only one, its dissipation is reduced: a positive relationship between the number of people involved in the relationship at bank level (BANKMAN) and interest rate charged (INT_LC) is expected whereas a negative one with LN_TOTAL_DEBT is expected. The lending relationship is influenced by the bank manager’s perception of facing a situation with reduced information asymmetry. Previous research (Berger et al. 2001) stresses the importance of the frequency the bank manager meets the firms: this increases the acquisition of private information and helps in better evaluating the firm’s risk and, from the firm’s point of view, in accessing credit (FREQMEET). The same effect is expected for FREQREV which measure the reassess activity.

5. Sample Data

The analysis focuses on South Tyrol and Friuli. These areas, together with Veneto, represent the widely studied and economically successful North East Italy. Both Friuli and
South Tyrol are considered rich in terms of contribution to the national GDP. They are characterised by a large number of very small, usually family-run firms, sometimes grouped into small industrial districts (e.g. the Manzano district for the production of chairs or Spilimbergo for cutlery) where expertise and knowledge is easily transferred and widely shared. In both areas the local government is very supportive of investments to improve exports and research. Both areas have ethnic and linguistic minorities: South Tyrol lies on the Austrian border and is historically strongly influenced by German culture; more than half of the population is German speaking; the area has a special legal status that gives to the local government a lot of autonomy. Friuli Venezia Giulia is located next to the Austrian and Slovenian border. Until 1989, this province has been the door towards the Communist block; there is a Slovenian and Croatian speaking minority and a small German speaking community; also this region has a special legal status that gives great autonomy to the local government.

South Tyrol has a concentrated banking system: two local banks (Sparkasse and Volksbank) cover the whole area together with the Raiffeisenkassen. The system of small local cooperative banks (Raiffeisenkassen) consists of 51 strongly localised very small cooperative banks that totals 191 branches. Sparkasse, Volksbank and the Raiffeisen system cover around 80% of the banking activity. The Raiffeisen system’s strategy avoids competition among the local cooperative banks as each of them covers a different area. Large national banks operate only in the urban areas and target only major firms. Friuli Venezia Giulia has a competitive banking system with 16 small cooperative banks called Banche di Credito Cooperativo which totals 168 branches and that serve an area of 1.2 million inhabitants. On average, each cooperative bank in Friuli Venezia Giulia has a higher number of branches and volume of deposits than in South Tyrol. Moreover, in some places there is competition among these banks since the same area is served by two or more local cooperative banks. All the major national banks and many large regional banks operate successfully in this area.

5.1 Data

The data are collected mainly from local community banks that have the legal form of the Banche di Credito Cooperativo/Raiffeisenkassen. The sample is represented by six Raiffeisenkassen and two Banche di Credito Cooperativo. In addition, data was collected from local branches of two national banks.

A sample of non agricultural SMEs firms was selected for each bank. The firm is considered to be an SME according to the European Community standards, i.e. firms with a turnover smaller than € 50 million and with less than 250 employees. The sample was built by
selecting randomly firms in the banks’ portfolios. They represent between 10% and 20% of the overall number of firms that had a credit facility with these banks in the case of local banks; for large national banks the sample represents less than 1% of the entire population and around 5% of the local population of customers. The agricultural firms were excluded from the sample because of the uniqueness of the sector: the firms are quite small, in the form of the sole trader and, among them, there are a large number of part time farmers. In addition, the agricultural sector is widely supported by grants from the local governments. These aspects can bias the results.

Table 3 – Descriptive Statistics

<table>
<thead>
<tr>
<th>Description</th>
<th>Variable name</th>
<th>Average</th>
<th>St. Dev.</th>
<th>Min %</th>
<th>Max %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of total debt provided to the firm</td>
<td>LNTOTALDEBT</td>
<td>529,552</td>
<td>1,053,752</td>
<td>5,000</td>
<td>14,400,000</td>
</tr>
<tr>
<td>Used debt (in percentage) = percentage of the rolling credit facility used</td>
<td>OVDUSE</td>
<td>60.672</td>
<td>35.619</td>
<td>0</td>
<td>132</td>
</tr>
<tr>
<td>Typology of Bank (0 = Local; 1 = National)</td>
<td>LOCNAT</td>
<td>NA</td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of banks in the area</td>
<td>NBANKS</td>
<td>6.930</td>
<td>4.037</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Private Collateral (0=no collateral; 1=collateral) personal guarantees</td>
<td>PRIVATE_COLL</td>
<td>NA</td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Firm Collateral (0=no collateral; 1=collateral) firm assets</td>
<td>FIRM_COLL</td>
<td>NA</td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Bank of Italy coefficient about expectations in increasing (positive) or reducing (negative) rigidity in providing new/additional credit</td>
<td>ECON</td>
<td>0.060</td>
<td>0.392</td>
<td>0</td>
<td>0.17</td>
</tr>
<tr>
<td>Turnover of the firm for the most recent complete financial year</td>
<td>LNTURNOVR</td>
<td>2,205,061</td>
<td>4,629,984</td>
<td>13,000</td>
<td>46,900,000</td>
</tr>
<tr>
<td>Length of the relationship in years</td>
<td>LNLENGTH</td>
<td>10.344</td>
<td>7.722</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Frequency of reviewing = number of reviewing in a year</td>
<td>FREQREV</td>
<td>2.042</td>
<td>0.483</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Frequency of meetings = times of meetings in a year</td>
<td>FREQMEET</td>
<td>2.95</td>
<td>1.227</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Number of bank managers involved in the relation</td>
<td>BANKMAN</td>
<td>1.589</td>
<td>1.155</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Multiple relationship with this bank (0=no other bank products, 1=other bank products)</td>
<td>MULTI</td>
<td>NA</td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trust (Factor) - standardised PCA</td>
<td>TRUST</td>
<td>3.1E-09</td>
<td>1.000</td>
<td>-4.3512</td>
<td>2.3908</td>
</tr>
<tr>
<td>Competence (Factor) - standardised PCA</td>
<td>COMPETENCE</td>
<td>1.52E-09</td>
<td>0.891</td>
<td>-3.3838</td>
<td>1.6342</td>
</tr>
</tbody>
</table>
The initial list contained 535 firms that provided a final dataset of 457 useful observations (85.44%) with a turnover between € 13,000 and € 46,900,000. The overall response rate is homogeneous among the different banks. Average turnover of sample firms is € 2.2 million. The average used overdraft is 60.67%. The loans given to the firms of the sample are also widely collateralised (81.53%) but differences are found in the collateralisation since 24.78% of the credit is collateralised with firm assets while 80.26% is pledged with personal guarantees (clearly there are many facilities that are collateralised with both firms assets and personal guarantees). Summary of the data are reported in table 3.

The frequency distribution of the length of the relationship has the mode in the class 10 years (28.66% of the obs.). More than 25% of the observations has a relationship shorter than 4 years, 44% of the sample has a relationship shorter than 9 years while 75% has a relationship up to 12 years: the SMEs’ entrepreneurs-managers tend to establish long term relationships with the bank. Bank managers’ review the firms’ line of credit once a year in 9.62% of the observations, while the review is carried out on semi-annual basis in 76.58% of the observations. Bank managers meet 19.91% of the SMEs entrepreneurs-managers once a year and 52.95% of the customers at least four times a year. These data suggest that the bank managers have frequent contacts with the firms and carry out a stringent monitoring on them.

### 5.2 Competence Measurement

Perceived competence was measured according to a vector of four items. The mode is the score 4 (I partially agree) for each item. The average of each item is above 3 which stands for neutral except for the item “the entrepreneur knows very well the market in which she/he operates” that averages 4.

#### Table 4 – Factor loadings (pattern matrix) and unique variances

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>COMPETENCE</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>ab1</td>
<td>the entrepreneur knows very well the market in which she/he operates</td>
<td>0.8091</td>
<td>0.3454</td>
</tr>
<tr>
<td>ab2</td>
<td>the entrepreneur is good in selecting the needed resources</td>
<td>0.7878</td>
<td>0.3794</td>
</tr>
<tr>
<td>ab3</td>
<td>the entrepreneur is good at managing the resources</td>
<td>0.8278</td>
<td>0.3147</td>
</tr>
<tr>
<td>ab4</td>
<td>the entrepreneur is good in understanding the market evolution</td>
<td>0.8073</td>
<td>0.3482</td>
</tr>
</tbody>
</table>

Kaiser-Meyer-Olkin measure of sampling adequacy: Overall 0.7426
Principal components analysis was employed to reduce the vector of four items in one factor (Cronbach Alpha 0.8218). COMPETENCE factor was extracted. Table 4 presents the results of the one component PCA. Factor scores were saved and used in the regressions.

5.3 Trust Measurement

Trust was measured according to a vector of six items. The mode is the score 4 (I partially agree) for each item except for the item “The entrepreneur pays attention to the needs of his/her employee” and “The entrepreneur is very involved in the community” where the mode is score 3 (neither agree nor disagree). The average of each item is above 3 which stands for neutral.

Principal components analysis was employed to reduce the vector of six items to one factor. BEN3 (involvement in community) had a low communality and was dropped from the PCA. Thus, PCA was run on five items (Cronbach Alpha 0.8027). The PCA results indicate that perceived trustworthiness in this context appears to be a single complex entity and this is in line with previous research (Nooteboom, et al., 1997) that found it difficult to distinguish empirically between benevolence/habitualisation and integrity/institutionalisation. TRUST factor was extracted. Table 5 presents the results of the one component PCA. Factor scores were saved and used to discriminate between high trusted entrepreneurs (TRUST>0) and low trusted ones (TRUST<0).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>TRUST</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>ben1</td>
<td>the entrepreneur adapt his/her interests with those of his/her commercial partner</td>
<td>0.7856</td>
<td>0.3828</td>
</tr>
<tr>
<td>ben2</td>
<td>the entrepreneur pays attention to the needs of his/her employees</td>
<td>0.5190</td>
<td>0.7307</td>
</tr>
<tr>
<td>ben3</td>
<td>the entrepreneur is very involved in the community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>int1</td>
<td>the entrepreneur is totally honest during the negotiations with commercial part</td>
<td>0.7594</td>
<td>0.4233</td>
</tr>
<tr>
<td>int2</td>
<td>the entrepreneur is coherent in his/her behaviour and decisions</td>
<td>0.7715</td>
<td>0.4048</td>
</tr>
<tr>
<td>int3</td>
<td>if you know that the entrepreneur is looking for personal assistant, would you s</td>
<td>0.7439</td>
<td>0.4467</td>
</tr>
</tbody>
</table>

Kaiser-Meyer-Olkin measure of sampling adequacy: Overall 0.7948

6. Results

In order to test the hypotheses, we run first a set of regression where the dependent variables are overall credit gained and interest rate and we look at how overall perceived
competence impacts on them. Then, we split the dataset between high and low trusted firms and re-run the regression investigating whether the perceived competence impacts differently on overall credit gained and interest rate charged according to the level of perceived trust. T-test were run between the split dataset but no significant difference was found at 99% level on dependent variables and on LN_TURNOVER.

Table 6 reports the regressions results on interest rate charged. The first regression does not consider competence while the second one enters it. Such an approach gives us the opportunity to appreciate the impact of perceived competence. Regressions are run on 417 observations. Both regression have good R² and adjusted R² (above 0.2994) and are highly significant according to the F test.

Competence has the expected sign and is significant at 95% level. Also in regression not reported here, it maintains the same sign and is always significant at 95%. Thus, by looking at the regression evidences, we can derive that H1a is supported that is perceived competence impacts negatively on interest rate charged.

Table 6 – Regression Findings – Interest Rate

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LOC_NAT</td>
<td>.71832</td>
<td>.18031</td>
<td>***</td>
<td>.74551</td>
<td>.18003</td>
<td>***</td>
</tr>
<tr>
<td>ECON</td>
<td>3.30785</td>
<td>1.50515</td>
<td>**</td>
<td>3.15458</td>
<td>1.50065</td>
<td>**</td>
</tr>
<tr>
<td>OVDUSE</td>
<td>.00181</td>
<td>.00182</td>
<td></td>
<td>.00120</td>
<td>.00183</td>
<td></td>
</tr>
<tr>
<td>PRIVATE_COLL</td>
<td>.44182</td>
<td>.15422</td>
<td>***</td>
<td>.42511</td>
<td>.15378</td>
<td>***</td>
</tr>
<tr>
<td>FIRM_COLL</td>
<td>.28727</td>
<td>.15740</td>
<td>*</td>
<td>.27290</td>
<td>.15689</td>
<td>*</td>
</tr>
<tr>
<td>LN_TOTAL_DEBT</td>
<td>-.10503</td>
<td>.05298</td>
<td>**</td>
<td>-.10697</td>
<td>.05277</td>
<td>**</td>
</tr>
<tr>
<td>LN_TURNOVER</td>
<td>-.56022</td>
<td>.05946</td>
<td>***</td>
<td>-.54112</td>
<td>.05990</td>
<td>***</td>
</tr>
<tr>
<td>LN_LENGTH</td>
<td>.14587</td>
<td>.07887</td>
<td>*</td>
<td>.16109</td>
<td>.07887</td>
<td>*</td>
</tr>
<tr>
<td>FREQ_REV</td>
<td>.35024</td>
<td>.15255</td>
<td>**</td>
<td>.33174</td>
<td>.15217</td>
<td>**</td>
</tr>
<tr>
<td>FREQ_MET</td>
<td>-.08284</td>
<td>.05340</td>
<td></td>
<td>-.07650</td>
<td>.05327</td>
<td></td>
</tr>
<tr>
<td>BANK_MAN</td>
<td>-.04382</td>
<td>.05633</td>
<td></td>
<td>-.02422</td>
<td>.05687</td>
<td></td>
</tr>
<tr>
<td>MULTI</td>
<td>.43670</td>
<td>.13978</td>
<td>***</td>
<td>.41799</td>
<td>.13948</td>
<td>***</td>
</tr>
<tr>
<td>COMPETENCE</td>
<td></td>
<td></td>
<td></td>
<td>-.14365</td>
<td>.06850</td>
<td>**</td>
</tr>
<tr>
<td>CONS</td>
<td>11.86135</td>
<td>.84149</td>
<td>***</td>
<td>11.68036</td>
<td>.84240</td>
<td>***</td>
</tr>
</tbody>
</table>

* sig. at 90%
** sig. at 95%
*** sig. at 99%

By looking at other variables, it is interesting to point out that OVDUSE does not affect the interest rate charged pointing out the fact that leveraging debt is not perceived as a factor that impact the riskiness of the SMEs. FREQ_MET is not significant suggesting that
Improvement in information access through more frequent meetings does not reduce the interest rate charged. Also the variable that measure information dissipation among bank manager (BANK_MAN) is not significant suggesting that information is not dissipated. This can depend on the fact that the banks involved in the research are quite small and can effectively transfer information among the people who are involved in the relationship with the entrepreneur.

Other covariates have the expected sign except for collateral (both PRIVATE_COLL and FIRM_COLL), the amount of credit gained (LN_TOTAL_DEBT) and the frequency of reviewing activity (FREQ_REV). The unexpected relationship between interest rate and collateral can be explained by the fact that, possibly, collateralised SMEs are the riskier one and therefore those that are charged higher interest rate. In other words, collateral does not mitigate completely the perceived risk and is not able to generate a positive effect on the interest rate charged: it simply discriminate between riskier firms that are charged higher interest rate and low risk firms that are charged a lower interest rate. The positive relationship between interest rate and total debt can be explained with increased negotiation power of firms with greater debt: since firms with greater debt are more important as revenue producers for the bank, these firms are capable to negotiate better interest conditions. Finally, the positive impact on interest rate of the reassessment activity (FREQ_REV) could be explained with the fact the banks can partially transfer on to the customer increased costs linked to more intensive assessment activity: they do not transfer savings when they benefit of additional information.

In table 7 the findings about the regression on total debt are reported. The first regression does not consider competence while the second one enters it. Such an approach gives us the opportunity to look at the impact of perceived competence.

Regressions are run on 429 observations. Both regression have a high R² and adjusted R² (above 0.45) and are highly significant according to F test. Interestingly, competence explains more than 17% of the total variance and it has the expected sign and is highly significant. Also in regression not reported here, the independent variable maintains the same sign and is always highly significant (higher than 95%). Thus, by looking at the regression evidences, we can derive that H1b is supported that is perceived competence impacts positively on the overall credit gained by the SMEs.

By looking at other variables, it is interesting to point out that both LN_LENGTH and FREQ_MET (the number of times bank manager meets the entrepreneur) are positive (as expected) but they are not significant. This suggests that at least partially, improved access to
information does not improve overall credit access for SMEs. The variable that measure information dissipation among bank manager (BANK_MAN) is not significant signifying that information is not dissipated. This, again, can depend on the fact that the banks involved in the research are quite small and can effectively transfer information among the people who manage the relationship with the entrepreneur. Finally, credit access is not affected by the private collateral provided.

Table 7 – **Regression Findings – Total Debt**

<table>
<thead>
<tr>
<th></th>
<th>Number of obs</th>
<th>F(11, 417)</th>
<th>Prob &gt; F</th>
<th>R-squared</th>
<th>Adj R-squared</th>
<th>Root MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOC_NAT</td>
<td>-.43610</td>
<td>.14755</td>
<td>***</td>
<td>0.4696</td>
<td>0.4556</td>
<td>1.0033</td>
</tr>
<tr>
<td>ECON</td>
<td>4.63019</td>
<td>1.22615</td>
<td>***</td>
<td>0.4818</td>
<td>0.4668</td>
<td>.9929</td>
</tr>
<tr>
<td>OVDUSE</td>
<td>.00304</td>
<td>.00145</td>
<td>**</td>
<td>-.08358</td>
<td>.03614</td>
<td>.9929</td>
</tr>
<tr>
<td>PRIVATE_COLL</td>
<td>-.10595</td>
<td>.12750</td>
<td></td>
<td>.80920</td>
<td>.12191</td>
<td>.9929</td>
</tr>
<tr>
<td>FIRM_COLL</td>
<td>.38074</td>
<td>.03894</td>
<td>***</td>
<td>.37379</td>
<td>.03861</td>
<td>.9929</td>
</tr>
<tr>
<td>LN_TURNOVER</td>
<td>.80568</td>
<td>.12317</td>
<td>***</td>
<td>.37379</td>
<td>.03861</td>
<td>.9929</td>
</tr>
<tr>
<td>LN_LENGTH</td>
<td>.02025</td>
<td>.06547</td>
<td></td>
<td>.00107</td>
<td>.06508</td>
<td>.9929</td>
</tr>
<tr>
<td>FREQ_REV</td>
<td>.82754</td>
<td>.11645</td>
<td>***</td>
<td>.82896</td>
<td>.11525</td>
<td>.9929</td>
</tr>
<tr>
<td>FREQ_MET</td>
<td>.04898</td>
<td>.04386</td>
<td></td>
<td>.03963</td>
<td>.04351</td>
<td>.9929</td>
</tr>
<tr>
<td>BANK_MAN</td>
<td>.03089</td>
<td>.04675</td>
<td></td>
<td>.00632</td>
<td>.04694</td>
<td>.9929</td>
</tr>
<tr>
<td>MULTI</td>
<td>.70103</td>
<td>.10858</td>
<td>***</td>
<td>.70762</td>
<td>.10748</td>
<td>.9929</td>
</tr>
<tr>
<td>COMPETENCE</td>
<td>.17360</td>
<td>.05561</td>
<td>***</td>
<td>.17360</td>
<td>.05561</td>
<td>.9929</td>
</tr>
<tr>
<td>CONS</td>
<td>4.19530</td>
<td>.64893</td>
<td>***</td>
<td>4.33184</td>
<td>.64372</td>
<td>.9929</td>
</tr>
</tbody>
</table>

* sig. at 90%
** sign at 95%
*** sig. at 99%

By looking at the variable that are significant, all but ECON and OVDUSE have the expected sign. In the case of OVDUSE, the positive relationship with credit gained can be explained with the fact that SMEs which leverage their line of credit are very confident that the bank will be supportive of possible additional needs. Thus, they are not concerned with maintaining low levels of used credit in order to have a cushion in case of extra need. A different argument can be provided for the unexpected positive relationship between ECON and total debt gained. In fact, the relationship means that when the bank system reduces the offered credit, the SMEs of our sample gain more credit. This might be linked to the fact that bank system refuses credit to new customers but it supports the current ones by providing extra credit if they need it (and particularly in harsh times).
6.2. The Role of Competence in Low Trusted SMEs

Table 8 compare and contrast the regression on the split dataset: the first regression reports the findings for the firms where perceived trust is low; the second one, shows the results for firms where perceived trust is high. The split datasets are quite similar according to the overall number of observations (206 vs. 211). Both regressions are significant according to F test. The regression for high trust firms has the highest adjusted R² (0.3489 vs 0.2581). Interestingly competence is significant and has the expected sign when perceived trust is low. Such finding supports H2a where we state that competence complement trust and therefore entrepreneurs should leverage bank managers’ perceived competence when they are not strongly trusted by bank managers. In addition, the regressions show that when trust is high, perceived competence does not play any role on the interest rate: in this case trust seems to overwhelm the role of competence in reducing the cost of credit since there is no need that competence should compensate for low level of trust.

Regressions provide additional interesting findings. High trusted firms pay a higher interest rate when credit access reduces (ECON) and when they are pledged with both personal (PRIVATE_COLL) and firm’s collateral (FIRM_COLL). Larger (LN_TURNOVER) and possibly more indebted SMEs (LN_TOTAL_DEBT) are able to negotiate better credit.
conditions possibly exerting some power towards the bank: in fact, larger firms are considered less risky and more indebted firms guarantee an interesting stream of revenues to the bank since they pay a greater amount of interest during the year. Low trusted firms can benefit from the lengthening of the relationship (LN_LENGTH) and are as capable as high trusted SMEs to exert some negotiation power towards banks when they have a large bank debt (LN_TOTAL_DEBT).

Table 9 compares and contrast the regression on the split dataset where the dependent variable is overall credit gained: the first regression reports the findings for the firms where perceived trust is low and the second one, shows the results for firms where perceived trust is high. The split datasets are very similar according to the overall number of observations (217 – 212). Both regressions are significant according to F test. The regression for low trust firms has the highest adjusted R² (0.4935 vs 0.4565) even if the difference is small. Interestingly competence is significant when perceived trust is low. Such finding supports H2b where we state that perceived competence complement trust and compensate for low level of trust.

Table 9 – Regression Findings – Long Term Debt

<table>
<thead>
<tr>
<th></th>
<th>Low Trust</th>
<th></th>
<th>High Trust</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of obs</td>
<td>217</td>
<td>Number of obs</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>F(12, 204)</td>
<td>18.54</td>
<td>F(12, 199)</td>
<td>15.77</td>
<td></td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>0.0000</td>
<td>Prob &gt; F</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.5217</td>
<td>R-squared</td>
<td>0.4874</td>
<td></td>
</tr>
<tr>
<td>Adj R-squared</td>
<td>0.4935</td>
<td>Adj R-squared</td>
<td>0.4565</td>
<td></td>
</tr>
<tr>
<td>Root MSE</td>
<td>0.99605</td>
<td>Root MSE</td>
<td>0.94401</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LOC NAT</td>
<td>-.45324</td>
<td>.20571</td>
<td>**</td>
<td>-.51739</td>
<td>.20544</td>
<td>**</td>
</tr>
<tr>
<td>ECON</td>
<td>7.77506</td>
<td>1.74202</td>
<td>***</td>
<td>1.06541</td>
<td>1.66336</td>
<td></td>
</tr>
<tr>
<td>OVDUSE</td>
<td>.00504</td>
<td>.00230</td>
<td>**</td>
<td>.00195</td>
<td>.00185</td>
<td></td>
</tr>
<tr>
<td>PRIVATE COLL</td>
<td>-.26760</td>
<td>.16822</td>
<td>***</td>
<td>.37406</td>
<td>.19410</td>
<td>*</td>
</tr>
<tr>
<td>FIRM COLL</td>
<td>.73834</td>
<td>.16809</td>
<td>***</td>
<td>.83142</td>
<td>.17959</td>
<td>***</td>
</tr>
<tr>
<td>LN_TURNOVER</td>
<td>.39020</td>
<td>.05200</td>
<td>***</td>
<td>.27174</td>
<td>.06000</td>
<td>***</td>
</tr>
<tr>
<td>LN_LENGTH</td>
<td>-.04310</td>
<td>.09269</td>
<td></td>
<td>.06284</td>
<td>.09217</td>
<td></td>
</tr>
<tr>
<td>FREQ_REV</td>
<td>1.05623</td>
<td>.16630</td>
<td>***</td>
<td>.62334</td>
<td>.16522</td>
<td>***</td>
</tr>
<tr>
<td>FREQ_MET</td>
<td>-.13092</td>
<td>.06297</td>
<td>**</td>
<td>.22396</td>
<td>.06140</td>
<td>***</td>
</tr>
<tr>
<td>BANK_MAN</td>
<td>-.05457</td>
<td>.06503</td>
<td>***</td>
<td>.05434</td>
<td>.06759</td>
<td></td>
</tr>
<tr>
<td>MULTI</td>
<td>.79118</td>
<td>.15103</td>
<td>***</td>
<td>.53469</td>
<td>.15112</td>
<td>***</td>
</tr>
<tr>
<td>COMPETENCE</td>
<td>.25995</td>
<td>.11022</td>
<td>**</td>
<td>.09607</td>
<td>.07894</td>
<td></td>
</tr>
<tr>
<td>_CONS</td>
<td>4.22428</td>
<td>.90687</td>
<td>***</td>
<td>5.37219</td>
<td>.98107</td>
<td>***</td>
</tr>
</tbody>
</table>

* sig. at 90%
** sign at 95%
*** sig. at 99%

Thus, entrepreneurs should leverage perceived competence in order to gain credit when they are not strongly trusted by bank managers. In addition, the regressions show that when trust is high, perceived competence does not play any role on the interest rate. Also, in
this case trust seems to overwhelm the role of competence in reducing the cost of credit since there is no need that competence should compensate for low level of trust

Interestingly, by looking at other covariates, the major differences are about OVDUSE and PRIVATE_COLL: the former is positively related to credit access in low trusted firms; it is not significant in the case of high trusted ones. It means that when bank system tend to reduce credit access, low trusted firms can access more credit while high trusted are not affected in either way. This can happen simply because in harsh times, banks constrain credit access to newcomers while they are supportive towards current customers. PRIVATE_COLL is positively related to credit access in the case of high trusted firms (thus, when entrepreneurs provide the bank with extra collateral, they can access more credit). In the case of low trusted firms the relationship is negative (suggesting that when the bank asks for personal collateral in low trusted firms, the bank perceives these firms as risky and therefore does not increase the credit provided) even if such a relationship is not significant.

7. Discussion and Conclusions

Our econometric findings support the point that competence is an important factor irrespective of the quality of the firm and that it is a complement of trust by compensating for low level of trust in low-trusted SMEs. In fact, we checked whether perceived competence is linked to the quality of the firm by running some additional econometric test and by interviewing some bank managers and entrepreneurs.

We verify the correlations between COMPETENCE and traditional financial variables (equity, book value of assets, creditors, debtors and COGS). They are all between +0.12 and -0.05. Moreover, we run some additional regressions between the dependent variables and financial indicators, (equity, book value of assets, creditors, debtors and COGS). Neither the regression nor the covariates were significant. By looking at interviews conducted with bank managers, we find that they tend to stress the lack of data from firms, question the quality and reliability of data submitted and point out that balance sheets provide a very poor representation of the actual value of assets (“I do not rely on official facts and figures […] they are affected by the tax strategy. Asset value, work in progress, inventory […] are always adjusted”). The information asymmetry faced by bank managers is confirmed by interviews with entrepreneurs/managers: some of them declare that they do not disclose an accurate picture of the firm’s position (“I don’t want to give all the information about my firm, my strategy, new products and plans because I suspect that the bank manager can transfer this to my
competitors”). Finally, bank managers’ interviews provide direct support to the fact that perceived competence of the owner manager is important in valuing creditworthiness (“When one is good at his job, why should he not repay all his debts?”). Thus, information used to assess an individual’s competence is tacit and captured through networks.

Because of such an important role of perceived competence, banks should develop tools that are capable to catch the competence of the entrepreneurs irrespective of the performance of the firm depicted in the firms’ official data. At the same time, entrepreneurs need to effectively communicate their competences to the relevant stakeholders such as bank managers. This aspect assumes a peculiar role in harsh times. In fact, during downturns, on one hand firms’ performance tend to worsen; on the other the possibility for the banks to provide credit or additional credit shrinks (that is they have to be and are more selective). In this situation, it can be riskier to select firms according to (past) official financial data. On one hand these data can provide a wrong representation of the real firm’s current performance since they can be rapidly outdated. On the other hand, these data can hardly be used as a tool to forecast prospective performance and development of the firm. In this context, it is more important to look at the opportunities that the firm/entrepreneur has in front of it and its capability in addressing them. Further, it is more important to look at the prospective development and the prospective growth of the firm according to its market positioning and according to the competence the management has to exploit these opportunities. Thus, in this context competence assumes a core value for the future performance of the firm and banks should use it for selecting the proper firms to support. In fact, by selecting the right firms on one hand banks can reduce the risk to incur in defaults; on the other hand, they can support the growth of the economy and help its recovery. In fact, favourable development and growth of SMEs is the basis for any economic recovery.

The capability to select meritorious firms (and, for entrepreneur/manager, to develop show their competences and build up trusting relationships) is important when we look at an unexpected additional finding: the negative link between the restriction of credit provided (ECON) and overall credit gained (LN_TOTAL_DEBT). In fact, it provides support to the argument that banks are supportive of SMEs in harsh times. Banks might insulate SMEs during economic downturns from being adversely affected in accessing credit, possibly because the bank use a pecking order approach refusing credit to new (unknown) customers instead of reducing credit to the current (known) ones. By looking at the banks involved in the sample, we suggest that this approach is possible according to banks balance sheet strategies. Generally speaking, there are two main models in dealing with collecting funds and providing
credit. The first one is called originate-to-hold (OTH): the bank provides credit to customers and hold it in the assets side of its balance sheet. This strategic approach emerges by simply looking at the liabilities side of banks’ balance sheets where the largest part of the liabilities are savings accounts, certificates of deposit and bonds: they are the financial tools used to collect the finance available from savers. This is typically the model used in Continental Europe and is at a variant with the Anglo Saxon banking system which relies more on originate-to-distribute (OTD) that is provide credit, pack it with other credits and sell in the market as some kind of security. In the latter case, the provided credit will not be on the assets side of the originator bank but it will be an assets of the financial institution which buys it. In OTD strategy, the originator bank’s capability to provide finance is linked to its capability to raise finance in the financial market selling securities: if the financial markets freeze, the bank will be incapable to collect new finance and to provide new loans for the firms. The banks involved in the research rely on OTH for two main reasons: on one hand, they are constrained in their capability to collect funds at good conditions in the financial markets (Kashyap, 1998). On the other hand, traditionally, savers in the area under study are happy to invest in very-secure low-return financial tools provided by the banks (savings accounts and certificates of deposits) instead of investing in the stock exchange. Thus, the banks involved in the research might be less affected by difficulties in collecting finance in the financial markets during economic or financial downturns. They may transfer such a greater steadiness of funds on to the current customers according the pecking order approach: they guarantee credit even in economic downturn to current customers and constrain only the new ones.

However, in interpreting the findings of the study we need to take into account the limitations of the methods applied. First, since the measurement of trust and competence is context-specific (Dasgupta, 1988), it is possible that it grasps different constructs in different (e.g. national) contexts. Thus, comparison between different contexts have to be interpreted with caution. Second, since perceived trust and competence is a product of the actor’s assessment of their partners, it stands to reason that while these perceptions may influence outcome variables such as credit access and interest charged, it may also be the other way round (Ferrin, Bligh, and Kohles, 2008). In fact, the integrative trust model in Mayer et al. (1995) features a feedback loop from the outcome of the trust relationship to the strength of perceived trust and competence. Hence, the analyzed relationships suffer from the chicken-and-egg problem (Möllering, 2002). Third, given that concepts such as trust and competence are among the most difficult to handle in empirical research (Misztal, 1996), heterogeneity in operationalizations in prior research may provide a partial explanation to the discrepancy of
empirical results. Since scholars tend to develop their own scales, the results of previous studies are not directly comparable which restricts amassing cumulative knowledge on the performance impact of trust. Even though, our study relied on well established scales, in contrasting our findings the operationalization used always has to be considered.

In this study, we have been able to add another jigsaw piece to the understanding of the role competence and trust play in the credit access of SMEs. We showed that perceived competence changes the role of the game in favour of low-trusted SMEs, as competence can compensate for a lack of trust. However, one has to keep in mind the dark side of trust, which can be especially relevant in the relationship between entrepreneurs and bank managers. Here it is important that bank managers use their perceptions of the entrepreneurs’ competence and trustworthiness as additional information putting the firms’ data into context, but not as a substitute for a profound evaluation of the firms’ performance and potentials.

References


