



SOCIAL INTERACTIONS AND ACCESS TO CREDIT: THE CASE OF TUNISIAN SMEs

Marjene RABAH GANA

Higher Institute of Business and Accountancy of Bizerte (University of Carthage)

Lille School of Management Research Center

Regrettable Synda AYARI

Research Unit of Finance and Business Strategies, ISG Tunis (University of Tunis)

Abstract

The aim of this article is to test the relationship between social interactions and lending decisions in the Tunisian SMEs. Indeed, social interactions can be considered as a vector of additional information about the company and can solve the problem of information asymmetry for the banker, and thus the financing problem for SMEs. Using a sample of 300 Tunisian SMEs in 2008, we have shown that social interactions, as measured by the length of the credit relationship, act significantly on the access to credit but do not affect its cost. The gender of the firm's owner and its education also affect access to credit. The firm age and the borrower experience explain, for their part, credit conditions.

Keywords: social interactions, access to bank credit, credit cost, Tunisian SMEs.

JEL Classification: D82, G21, O16, L26, L14.

Introduction

Small and medium enterprises (SMEs) are facing several problems that make them difficult access to bank financing. Indeed, SMEs cannot provide enough information to document a credit decision. In addition, the reliability of the information they provide is limited, which makes them difficult to control by the banks. But it turns out that this type of structure is the dominant form of business organization and is a key source for economic growth. In Tunisia, the economic structure is characterized by the predominance of SMEs. According to the National Institute of Statistics, SMEs account for over 90% of the Tunisian economy.

The availability of external financing for these small structures, has been the subject of several studies. They try to find optimal solutions to the problem of credit rationing caused by information asymmetry that characterizes the opaque firms (Fama, 1985). According to Berger

and Udell (1995), the search for alternative methods of financing¹ can solve the problem. Other solutions to limit credit risk, have been proposed as part of the contract and the incentives theories such as the establishment of scoring systems and mechanisms for gathering information. In addition, a long-term relationship between the parties involved in the credit relationship may facilitate the acquisition of specific information and monitoring borrowers (Guille, 1994, Allen and Gale, 1995). As a result, social ties also facilitate access to credit and its pricing for the most opaque firms (Uzzi and Gillespie, 2002; Okten and Osili, 2004).

Most recently, Cotugno and Stefannelli (2011) and Lei (2013) confirm the importance of social relations in the decisions to grant credit in Italy and China. According to these authors, the banks that are geographically close to their customers present limited credit risk, as they are more efficient in their control on borrowers and hold an informational advantage over those that are located at farther distances. This is soft information that corresponds to any information obtained through the special relationship between the banker and the customer (Stein, 2002). Wang and Pirimsky (2010) analyze the decision-making process within banks in the corners of the information asymmetry and agency costs. According to them, interpersonal communication established between lender and borrower, social interactions and access to soft information generated by geographical proximity, benefit borrowers by facilitating their access to credit with favorable terms. In sum, and as highlighted by Lehmann et al. (2004), in addition to the theory of financial intermediation and the theory of the credit relationship, the theory of social interactions explains the availability of bank credit and its cost. Some authors like Guo et al. (2013) show that the relationship between lenders and borrowers allows banks to strengthen their competitive advantage and create value for shareholders.

It is in this perspective that our article fits. It aims to improve our understanding of the determinants of access to bank credit, considering the interest of social ties between Tunisian SMEs and their bank. Indeed, it is often through its relationships with lenders that the company obtains the money it needs. In addition, bank credit is considered the primary source of funding for younger firms. However, because of their high informational opacity and their limited financial resources, these companies are unable to access capital markets to finance their investment projects. Tunisian banks refuse generally to inject money into these companies whose future is doubtful. They also consider that SMEs are riskier than large companies with substantial assets, ensuring their solvability. So, having a special relationship with the managers of credit institutions can solve the problem for SMEs². It should be noted that one of the main characteristics of these firms, family ownership for the most part, is the centralization of their management. The omnipresence of the entrepreneur in the direction and management can explain the fact that relational networks of SMEs often identify with those of the owner.

Moreover, in Tunisia, geographical distances between economic agents are relatively short. This country is also characterized by the uniformity of its population in terms of cultural and religious components. These two characteristics promote regularity, sustainability and the multiplicity of social interactions between actors. In other words, geographical proximity and cultural proximity strengthen close relationships. On this basis, the objective of this study is to determine the impact of social interactions, as measured by the duration and multiplicity of the credit relationship, on access of SMEs to bank credit and its cost.

Several studies have focused on the impact of social relations on the banking business. They were developed mainly in the United States and some European countries such as France. The

¹Supplier credit, short-term debt with the state and leasing are considered alternative methods of financing for businesses.

²It is the social embeddedness.

case of emerging countries, especially that of Tunisia remains a field of research not yet explored.

The remainder of this article is organized as follows. Section 2 sets out the assumptions. Section 3 describes the data and the variables. Section 4 presents the methodology and section 5 exhibits the empirical results. We will conclude in section 6.

Hypotheses

Finding money for the creation or expansion of a business is the biggest challenge faced by many Tunisian entrepreneurs. SMEs are the ones who suffer the most from these funding problems. In response, the contractor may be positioned in a relational perspective. Proponents of social theory think that social capital, human capital and trust are variables that facilitate access to credit for SMEs (Granovetter, 1985; Ferrary, 2003). The empirical results of previous studies support the existence of a positive relationship between social interactions and the allocation of credit (Uzzi, 1997; Ravina, 2012; Moro and Fink, 2013). In the light of these arguments, we suggest the following hypothesis:

H1: Social interactions have a positive effect on SMEs' access to bank credit.

According to financial theory, banks require SMEs high interest rates due to the problem of information asymmetry. To minimize the cost of debt, a borrower can rely on the special relationship he has with his banker. According to the proponents of social theory, interpersonal relationships are conducive to the flow of information between contractors. This reduces the costs of control and the interest rates charged on loans (Uzzi and Gillespie, 2002). In this context, we formulate our second hypothesis:

H2: The established social interactions between an entrepreneur and banker reduce the cost of bank credit.

Data and variables description

In what follows, we present, first, the study sample. Next, the variables used to test assumptions are defined and methodology is exposed.

Sample presentation

Our database consists of 300 Tunisian SMEs. The data collected deals with information on their credit relationships with their banks during 2008. This information is collected through a questionnaire. It is a cross-sectional sample. Regarding the definition of SMEs, we use that advanced by the Financial Market Council (CMF). According to the bulletin of the CMF in May 2006, are considered small and medium enterprises, in accordance with the recommendations of the inter-ministerial council on Monday, 13 March 2006, companies whose criteria net tangible and number of employees do not reach the following thresholds, respectively: Four million dinars and 300 employees. Of the 300 SMEs in our sample, some companies have already benefited from a bank loan (200 SMEs) and others were denied their requests for credit (100 SMEs).

Description of dependent variables

To test our hypotheses, the two following dependent variables are defined:

ACCRD_i: Access of SMEs to bank credit *i*. This is a dichotomous variable that takes the value 1 if the SME has access to credit and 0 otherwise.

PREM_i: The risk premium charged by the bank to its customer. It is measured by the difference between the interest rate and the refinancing rate estimated from the money market rates. The risk premium is a measure used by several authors, like Lehman and Neuberger (2004).

Description of explaining variables

In what follows, the set of independent variables in our study is presented.

- Variables describing social interactions:

The existing literature measures the intensity of the relationship by its duration (Petersen and Rajan, 1994, Berger and Udell, 1995; Krahnén and Elsas, 1998; Harhoff and Körting, 1998). Indeed, the term is supposed to influence the stock of private information of the bank. The longer it is, the more the bank can improve the credit terms offered. Sociologists also measure the social commitment and the personal relationship between the entrepreneur and banker by the duration of the relationship and the various services requested (Uzzi, 1997). Previous research has demonstrated that the concept of social embeddedness increases with the duration of the credit relationship and multiplicity (Gulati, 1994). For our part, we define following variables describing social interactions:

DRC_i: The duration of the credit relationship between the bank and the SME_{*i*} measured in years. The time is considered a dimension to create opportunities to forge close personal ties between the contractor and his banker, outside the domain of the transactions. This dimension promotes access to credit and lowers the interest rate (Ongena and Smith, 2001; Degryse and Ongena, 2002). We expect that this variable will have a positive impact on access to bank credit and a negative effect on the interest rate charged.

MRC_i: The multiplicity of transactions between bank and SME_{*i*} is considered as our second explanatory variable. It refers to the number of services the client *i* took from the bank. Indeed, the interdependence between banking is at the heart of the long-term relationship between a bank and its client. Therefore, it is natural that bank encourages credit applications from clients who have contracted other services. The bank can then allocate its cost information more efficiently on several products (Petersen and Rajan, 1994 and 1995). We expect a positive relationship between this variable and the access to credit, while it is negative with interest rates.

- Variables describing the human capital :

With reference to social theory, the variables that describe the human capital of an entrepreneur are described as follows:

FEML_i: A binary variable that takes the value 1 if firm *i* is owned by a woman (when she owns 51% or more of the share capital of the company) or directed by a woman and 0 otherwise. Several empirical studies, like that of Alicia and Wolken (2002) argue that firms owned by

women are more risky. Bellucci et al. (2010) suggest that the supply of credit to women entrepreneurs is limited. Thus, women do not easily access to bank loans and pay higher interest rates.

EDUC_i: A binary variable that equals 1 if the person in contact with the bank in the company *i* (owner or manager) has a university degree and 0 elsewhere. The education of the contractor warrants good management and facilitates communication with its internal and external environment (Burt, 1995). We expect a positive effect of this variable on access to credit and negative with interest rates.

EXPR_i: The experience of the contractor. It is measured by the number of years spent in the firm by the person (owner or officer of the company *i*) in contact with the bank. The importance of the experience is most evident during the negotiation phase of the borrower with the banker (Coleman, 2004). The effect of this variable is expected to be positive on access to credit and negative on interest rates.

AGEP_i: Age of principal (proprietor or officer) of the company. It is measured in years. The more a principal is old, the more experienced he will be and the less risk he will present for the banker. Ravina (2008) argues that the age of the entrepreneur is an important component of its human capital which affects positively access to credit and negatively its cost.

- Control variables :

To improve the degree of external validity of our results, the following control variables are considered:

MAJO_i: A binary variable that equals 1 if there is one person who holds more than 51% of the share capital of the company *i* and 0 otherwise. We suggest using this variable as the organizational form influences the allocation of responsibilities and could thus affect the optimal level of debt in a company. Gallo (1996) found that companies with a majority shareholding held by one person tend to rely less on credit because of his aversion to risk. A positive effect of this variable on access to credit and a negative effect on risk premium are then expected.

AGEE_i: Age of enterprise *i*, measured in number of years as the difference between 2008 and the year of establishment of the firm. It is a measure of corporate reputation. During the startup phase, the need for business finance is important. However, for the bank, these new businesses, which do not have sufficient experience, are risky. In addition, a relationship along time allows these companies to be more known and more easily evaluated by bankers (Coleman and Cohn, 2000). This is why access to credit and the interest rates may be more encouraging to older firms. Thus, we expect a positive relationship between firm age and access to credit and negative with interest rates.

NEMP_i: The number of employees in firm *i*, measured by the natural logarithm of the number of full-time and part-time employees reported during the study year. The number of employees is considered a proxy for firm size. According to Cole and Wolken (1995) and Yildirim et al. (2013), large firms have easier access to credit than smaller ones.

LEGF_i: The legal form of the company is a binary variable that takes the value 1 if the firm is a corporation and 0 elsewhere. Unlike an individual enterprise, the company allows the bank to access to private owner assets in case of default (and Krahnens Elsas, 1998). The risk premium required by a bank to a company is then expected to be higher than that required by an individual institution.

ACT_i: The field of activity of the borrower SME. It is a binary variable equal to 1 if the borrower works in the service sector and 0 elsewhere. This variable has been advocated by Agarwal and Hauswald (2010). According to them, the probability of success of a project depends heavily on its activity sector.

Methodology: Regression Models

At first, to examine the impact of social interactions on access to credit we use a logit model. The first dependent variable (*ACCRD*) is a qualitative dichotomous variable. The estimated logit is expressed as follows.

$$ACCRD_i = \alpha + Z_i \beta + \varepsilon_i \quad (1)$$

where:

ACCRD_i equals 1 if SME_i have access to credit, and 0 otherwise

Z_i is the vector of explanatory variables for each SME *i*. They are variables reflecting the close relationship (*DRCI*, *MRCI*), the human capital characteristics of the entrepreneur (*FEML_i*, *EDUC_i*, *EXPR_i*, *AGEP_i*) and variables reflecting the characteristics of firms (*MAJO_i*, *AGEE_i*, *NEMP_i*, *LEGF_i*). It should be noted that the *DRC* and *MRC* variables will be considered successively, because intuitively, the more the relationship between the entrepreneur and the banker takes time, the more the services requested by the contractor with the bank increases. We have also taken care to check the absence of any serious problem of multicollinearity between the explanatory variables, after calculating the variance inflation factors (VIF)³.

ε is the error term.

SMEs are distributed among some who have access to credit and other who do not have access.

In a second step, to study the impact of social interactions on the interest rates charged on loans, we apply a linear regression using ordinary least squares on cross-sectional data composed by 200 borrowers. This regression is expressed as follows:

$$PREM_i = \alpha_i + \beta_1 \cdot DRC_i (MRC_i) + \lambda_1 \cdot FEML_i + \lambda_2 \cdot EDUC_i + \lambda_3 \cdot EXPR_i + \lambda_4 \cdot AGEP_i + \Psi_1 \cdot MAJO_i + \Psi_2 \cdot AGEE_i + \Psi_3 \cdot NEMP_i + \Psi_4 \cdot LEGF_i + \Psi_5 \cdot ACT_i + \mu_i \quad (2)$$

The *DRC* and *MRC* variables that describe social relations are considered successively in the regression model (2).

³The results are available on request.

The index i represents the borrower.

μ is the residual term.

Results and Discussion

Descriptive Statistics

Table 1 presents descriptive statistics of the above variables. Panel A shows that the average risk premium charged on a credit is equal to 2.61%. It varies between a minimum of 1% and a maximum of 6% with a median equal to 2.5%. In addition, the standard deviation is 0.0093. This means that this indicator is not too volatile across different companies. The duration of the relationship between SMEs and their banks is on average 11.183 years. The duration of the relationship is between 1 year and 32 years with a median equal to 9 years. This is a fairly high time that shows that Tunisian companies maintain long-term relationships with their bank. Increasing the length of the relationship between the two could well facilitate access of SMEs to certain privileges. The age of the entrepreneur varies between 29 and 75 years with an average of around 48 years. It is relatively different from one company to the other, with a standard deviation of 11.521.

The multiplicity of transactions, which reflects the number of services requested by the SMEs to their bank is on average equal to 6.211 with a standard deviation of 1.578. The number of services requested by SMEs included in our study is between 4 and 11 services.

Table 1 : Descriptive statistics

Panel A- Continuous variables

	<i>Mean</i>	<i>Median</i>	<i>Standard-deviation</i>	<i>Min</i>	<i>Max</i>
<i>PREM</i>	0.026***	0.025	0.009	0.01	0.06
<i>DRC</i>	11.183***	9	7.755	1	32
<i>MRC</i>	6.211***	6	1.578	4	11
<i>EXPR</i>	18.172***	16	11.521	1	50
<i>AGEP</i>	48.044***	48	8.856	29	75
<i>AGEE</i>	14.488***	12	10.497	2	49
<i>NEMP</i>	3.482***	3.55	1.206	0.693	5.32

PREM : risk premium, *DRC* :duration of the credit relation, *MRC* : multiplicity of transactions, *EXPR* : experience of the borrower, *AGEP* : age of the borrower, *AGEE* :age of the firm, *NEMP* : number of employees.

Panel B- Binary variables

	<i>Number of observations</i>	<i>Frequency in</i>	
		<i>%</i>	
		0	1
<i>ACCRD</i>	300	33%	67%
<i>FEML</i>	300	85%	15%
<i>EDUC</i>	300	58%	42%
<i>MAJO</i>	300	33%	66%
<i>LEGF</i>	300	10%	90%
<i>ACT</i>	300	61%	39%

ACCRD : access to credit, *FEML* : gender of the owner, *EDUC* : education of the borrower, *MAJO*: capital structure, *LEGF* : legal form, *ACT* : activity sector.
 *, **, ***: Significant respectively at 10%, 5% and 1% level.

The descriptive statistics for binary variables, presented in Panel B, show that 67% of SMEs in our sample had access to credit in 2008. In addition, only 15% of SMEs are owned by women against 85% of men. The person in contact with the bank has a university degree in 42% of SMEs. The results also highlight the family nature of Tunisian SMEs, since the majority shareholding held by one person is observed in 66% of our sample work. Finally, the majority of Tunisian SMEs operate in the services sector (61%).

Empirical results

The results of the regression model (1) are presented in Table 2. They show that the relationship between access to credit and the variable (*DRC*), which describes the duration of the credit relationship, is significantly positive at the 10% level. Our result is consistent with the implications of the theory of social interactions. According to this theory, the accumulation of information about the borrower, under a long-term relationship can be a source of mutual gains. The bank incorporates a promise not to ration the borrower that communicates the right information and businesses obtain financing more easily. Over time, the ability of the bank to judge the borrower improves. All this allows him to anticipate the likelihood of success of the project it finances and the ability of the contractor to meet its financial commitments correctly (Ferrary, 2003).

Variable (*MRC*) displays, for its part, no explanatory power on access to credit, indicating that a small number of application services with the same bank does not affect the chances of being granted credit.

We deduce that social interactions affect access to credit for businesses through the temporal dimension of the credit relationship.

Table 2: Effects of social interactions on access to bank credit for SMEs

Variables / Models	I	II	
<i>DRC</i>	0.434* (1.67)		<i>DRC</i> :duration of the credit relation, <i>MRC</i> :
<i>MRC</i>		0.889 (1.17)	
<i>FEML</i>	-0.432*** (-4.23)	-0.528*** (-4.89)	
<i>EDUC</i>	0.019*** (4.14)	0.079*** (19.27)	
<i>EXPR</i>	-0.141 (-0.43)	-0.007 (-0.02)	
<i>AGEP</i>	0.231 (0.16)	-0.232 (-0.16)	
<i>MAJO</i>	-0.167 (-0.44)	-0.147 (-0.39)	
<i>AGEE</i>	18.371*** (11.26)	18.276*** (10.77)	
<i>NEMP</i>	-0.028 (0.17)	-0.011 (-0.07)	
<i>LEGF</i>	-0.079 (-0.14)	0.050 (0.09)	
<i>ACT</i>	0.512 (1.34)	0.483 (1.28)	
<i>Constant</i>	-20.611*** (-3.41)	-19.93*** (-3.88)	
<i>Nb. obs.</i>	300	300	
<i>Wald chi2</i>	185.26	171.19	
<i>sign</i>	0.000	0.000	

multiplicity of transactions, FEML : gender of the owner, EDUC : education of the borrower, EXPR : experience of the borrower, AGEP : age of the principal, MAJO : capital structure, AGEE : age of the entreprise, NEMP: number of employees, LEGF : legal form, ACT : activity sector.

, **, *: Significant respectively at 10%, 5% and 1% level.*

Our analysis of the results for the variables describing the human capital of the entrepreneur shows that they have explanatory power for the endogenous variable. Indeed, the negative and significant sign (at 1% level) of the variable *FEML* indicates its explanatory power. In accordance with what was expected, for Tunisian banks, being a woman entrepreneur minimizes the chance of accessing credit. This echoes the result of Alicia and Wolken (2002) and Belluci et al. (2010) who argue that, for a bank, businesses owned by women are riskier.

The relationship between access to bank credit and variable (*EDUC*) is positive and significant at 1% level. As a result, the opportunity to access funding is greater when the

contractor has a university degree, probably because one has better ability to convince the banker. Our result is consistent with the predictions of social theory (Becker, 1974). The experience and the age of the entrepreneur are, in turn, not significant in explaining access to credit. Regarding the control variables, we find that only the variable *AGEE* is positively correlated with access to credit, reflecting the fact that older firms have easier access to credit, probably because of information asymmetry that might exist between the investment firm and the bank fades over time.

Table 3 presents the results for the regression model (3). It shows that the *DRC* variable which significantly explains access to credit does not reflect improved credit conditions, as it is not significant. The same is true for the variable describing the multiplicity of transactions. The results show that the acquaintance and the quality of the relationship with the banker does not reduce the burden of interest costs for SMEs.

Table 3: Effects of social interactions on the risk premium

Variables/Models	I	II
<i>DRC</i>	-0.00084 (-0.77)	
<i>MRC</i>		0.0049 (1.38)
<i>FEML</i>	-0.00095 (-0.39)	-0.0013 (-0.58)
<i>EDUC</i>	0.00005 (0.03)	-0.00066 (-0.40)
<i>EXPR</i>	0.00559*** (3.20)	0.00502*** (2.81)
<i>AGEP</i>	-0.0249*** (-3.35)	-0.02541*** (-3.34)
<i>MAJO</i>	-0.0021 (-1.19)	-0.00143 (-0.82)
<i>AGEE</i>	0.0014 (0.88)	0.00132 (0.86)
<i>NEMP</i>	-0.0018*** (-2.61)	-0.00194** (-2.55)
<i>LEGF</i>	0.0030 (1.28)	0.00306 (1.29)
<i>ACT</i>	-0.00031 (-0.20)	-0.00040 (-0.27)
<i>Constant</i>	0.1131*** (4.33)	0.1057*** (3.84)
<i>Nb. obs.</i>	200	200
<i>R-squared</i>	0.5917	0.5025
<i>Adjusted R²</i>	0.5700	0.4761

DRC : duration of the credit relation, *MRC* : multiplicity of transactions, *FEML* : gender of the owner, *EDUC* : education of the borrower, *EXPR* : experience of the borrower, *AGEP* : age of the principal, *MAJO* : capital structure, *AGEE* : age of the enterprise, *NEMP* : number of employees, *LEGF* : legal form, *ACT* : activity sector.

*, **, *** : Significant respectively at 10%, 5% and 1% level.

In addition, we note that the variables *EXPR* and *AGEP* have a significant effect respectively at 1% and 5% level. In this sense, the bank requires high risk premiums for the most experienced entrepreneurs, which is contrary to the intuition advanced by Harhoff and Körting (1998). Thus, even if the experience of the entrepreneur reflects one ability to develop its business, to make succeed its projects and to honor its commitments, it seems to be synonymous with taking greater risk that would justify a higher cost debt.

The variable age of the entrepreneur is also significant. The negative impact of this variable on the risk premium shows that the cost of capital is lower for older borrowers. In Tunisia, we note that most companies are founded and owned by people aged over forty. The age of the entrepreneur says, so the quality of the borrower and his ability to achieve projects. Like Ravina (2008), we conclude that the human capital of the entrepreneur is a fundamental attribute of the dependent variable.

Among the control variables, only the variable *NEMP* used as a proxy for firm size is significant in explaining the credit cost. When SME size increases, the cost of debt decreases. This is what Bhaduri (2002) and Brierly and Bunn (2005) argue with in reference to the framework dealing with asymmetric information. According to them, firms which are more likely subject to credit rationing are those that are small and young. Those with an important size are allowed to have access to better credit conditions. We note, moreover, the explanatory power of the regression model (2), which hovers around 50%.

Conclusion

The objective of this paper was to study the impact of social relationships on SMEs' access to bank credit and its cost, relying on the theory of financial intermediation and the theory of social interactions. The main results showed that the influence of social relations is only through the duration of the relationship between the entrepreneur and banker. Thus, to get a loan from a bank, the Tunisian entrepreneur of the SMEs should access the social network by establishing a long-term relationship with his bank. However, the fact that SMEs require more services from the same bank does not affect its chances of getting a loan. In addition, easier access to credit does not seem to involve better credit conditions in terms of cost. These are influenced by the firm age and the borrower experience.

References

- ALLEN F. and GALE D. (1995), "A welfare comparison of intermediaries and financial markets in Germany and the US", *European Economic Review*, Vol. 2, pp.179-209.
- ALICIA R. and WOLKEN J., (2002), "Firm, owner, and financing characteristics: Differences between female- and male-owned small businesses", *working paper*.
- AGARWAL, S., and HAUSWALD, R. (2010), "Distance and private information in lending", *Review of Financial Studies*, Vol. 23, pp. 2757-2788.
- BECKER, G. S. (1974), "A Theory of social interactions", *Journal of Political Economy*, Vol. 82, pp.1063-1091.
- BELLUCI A., BORISOV A. and ZAZZARO A. (2010) "Does gender matter in bank-firm relationships? Evidence from small business lending" , *Journal of Banking and Finance*, VOL. 34, pp. 2968-2984.

- BERGER, A. N. and UDELL G. F. (1995), "Relationship lending and lines of credit in small firm finance", *Journal of Business*, Vol. 68, pp. 351-382.
- BERGER A.N., FRAME W.S., and MILLER N. (2005), "Credit scoring and the availability, price, and risk of small business credit", *Journal of Money Credit, and Banking*, Vol. 37, pp.191-222.
- BHADURI, S.N. (2002), "Determinants of corporate borrowing: some evidence from the Indian corporate structure", *Journal of Economics and Finance*, 26(2), pp. 200-216.
- BRIERLY, P., BUNN, P. (2005), "The determination of UK corporate capital gearing", *Bank of England Quarterly Bulletin*, 45(3), pp. 356-366.
- Burt, R.S. (1995), "Capital social et trous structureaux", *Revue Française de Sociologie*, Vol. 36, pp.599- 628.
- COLE, R. A. and J. D. WOLKEN, (1995), "Financial services used by small businesses: Evidence from the 1993 National Survey of Small Business Finances", *Federal Reserve Bulletin*, Vol july, pp. 629-667.
- COLEMAN, S. (2004), "Access to debt capital for small women- and minority-owned firms: does educational attainment have an impact?", *Journal of Developmental Entrepreneurship*, Vol 9, pp. 127-144.
- COLEMAN, S. and COHN R., (2000), "Small firms' use of financial leverage: Evidence from the 1993 National Survey of Small Business Finances", *Journal of Business and Entrepreneurship*, Vol 12, pp. 81-98.
- CHRISTO, A. PIRINSKI C.A., WANG Q., (2010), "Geographic location and corporate finance: a review" *Handbook of Emerging Issues in Corporate Governance*, World Scientific Publishing.
- COTUGNO, M. STEFANELLI, V. (2011), "Bank size, functional distance and loss given default rate of bank loans", *International Journal of Financial Research*, Vol. 2, No. 1; March 2011, pp. 31-44.
- DEGRYSE, H., and ONGENA S. (2002), "Bank relationships and international banking markets", *International Journal of the Economics of Business*, Vol. 9, pp.401-417.
- ELSAS, R. and KRAHNEN J. P. (1998), "Is relationship lending special? Evidence from credit file data in Germany", *Journal of Banking and Finance*, Vol 22, pp. 1283-1316.
- FAMA, E. F. (1985), "What's different about banks?", *Journal of Monetary Economics* 15, pp. 29-39.
- FERRARY M. (2003), "Trust and social capital in the regulation of lending activities", *The Journal of Socio-economics*, Vol 31, pp. 673-699.
- GALLO, M.A., (1996), "The role of family business and its distinctive characteristic behavior in industry activity" In Richard Beckhard, *The Family Firm Institute*, Edition: The Best of FBR, Boston, pp.132-139.
- GRANOVETTER M. (1985), "Economic and social structure: the problem of embeddedness", *American Journal of sociology*, Vol 91, pp. 481-510.
- GUILLE M. (1994), "Savoir bancaire spécifique, marché du crédit et intermédiation financière", *Economie Appliquée*, Vol 4, pp. 49-77.
- GULATI, K. N. (1994), "Unilateral commitment and the role of process in alliances", *Sloan Management review*, Vol 35, pp. 61-69.
- GUO, Y. HOLLAND, J. and KREANDER, N. (2013), "Establishing bank-corporate relationships and building competitive advantages", *Journal of Financial Services Marketing*, Vol 18, pp. 27-39.

- HARHOFF, D. and KORTING T. (1998), “Lending relationships in Germany - empirical evidence from survey data”, *Journal of Banking and Finance*, Vol 22, pp. 1317-1353.
- Lei, C. (2013), “The Development of the relationship lending theory in China”, *Journal of Convergence Information Technology*, Vol. 8, pp. 1036-1043.
- LEHMANN, E., NEUBERGER, D. and RATHKE, S. (2004), “Lending to small and medium-sized firms: is there an East-West gap in Germany?”, *Small Business Economics*, Vol. 23, pp. 23-39.
- MORO, A, and FINK, M. (2013), “Loan managers’ trust and credit access for SMEs », *Journal of Banking and Finance*, Vol.37, pp. 927-936.
- OKTEN, C. and OSILIS, U. O. (2004). “Social networks and credit access in Indonesia », *World Development*, Vol. 32, pp. 1225–1246.
- ONGENA S. and SMITH, D. C. (2001), “The duration of bank relationships”, *Journal of Financial Economics*, Vol. 61, pp. 449-475.
- PETERSEN, M. A. and RAJAN, R. G. (1994), “The Benefits of lending relationships: evidence from small business data”, *Journal of Finance*, Vol. 49, pp. 3-37.
- PETERSON, M. A. and RAJAN, R. G. (1995), “The effect of credit market competition on lending relationships”, *Quarterly Journal of Economics*, Vol. 110, pp. 406-443.
- RAVINA, E. (2012), “Love & loans: the effect of beauty and personal characteristics in credit markets”, *Working paper*, New York University.
- STEIN, J.C. (2002), “Information production and capital allocation: decentralized vs. hierarchical firms”, *Journal of Finance*, Vol. 57, pp. 1891-1921.
- UZZI, B. (1997), Social structure and competition in interfirm networks: The paradox of embeddedness, *Administrative Science Quarterly*, Vol. 42, pp. 35-67.
- UZZI, B., and GILLESPIE, J. (2002), “Knowledge spillover in corporate financing networks: embeddedness and the firm’s debt performance”, *Strategic Management Journal*, Vol. 23, pp. 595–618.
- WANG, Q., PIRINSKY, C. A. (2010), “Geographic location and corporate finance: a review”, *Handbook of Emerging Issues in Corporate Governance*.
- YILDIRIM, H. S., AKCI, Y. and EKSI, I.H. (2013), “The effect of firm characteristics in accessing credit for SMEs », *Journal of Financial Services Marketing*, Vol. 18, pp.40-52.