

# **BANKS' AVAILABILITY VERSUS SMES' EXPECTANCIES IN BUSINESS FINANCING. AN ANALYSIS ON CREDIT RENEWAL**

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## **Abstract**

The limited access of SMEs to adequate funding is an important issue both in practice and in literature, mainly due to demand-side and supply-side constraints. In order to address this issue for the case of Romania, we undertook an extensive, quantitative survey-based research among Romanian banks' representatives. In this paper we used a multiple linear regression and the method of ordinary least squares to find out that most effective variables determining banks' availability to grant loans or to renew/extend credit lines at maturity (for existing customers) are *prompt repayments* and *the length of the banking relationship*. On the other side, the *trust* in managers/owners of the companies and the collateral exert a moderate influence, while variables *bank size* and *the nature and origin of the capital* (i.e. national vs. foreign capital, state-owned vs. private capital) have little influence. Compared with the results of a similar research question from our previous research (2012), but addressed to SMEs (i.e. "the demand side"), we found partial similarity between banks' availability on one side and on other side, SMEs expectancies concerning the access to finance. Our findings, which are in line with other similar researches, enable us to formulate critical assertions on the banks' role in SMEs financing.

**Key words:** SMEs, lending relationship, banks' behaviour, credit renewal

**JEL Code:** G21, G32, O16

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## **Introduction**

Overcoming the effects of the economic crisis and the revival of European economies development are closely related to the growth and strengthening of the SMEs sector. Certainly, the access to finance of these firms is essential. However, the lenders' reaction (mainly, the banks) is weak and largely uncorrelated with the expectations of business environment and policy makers. Indeed, even before the crisis, and even more over the last 5-6 years, the access to finance of European SMEs is considered as the second most pressing

issue for the SMEs managers (European Commission, 2013). Moreover, during this period, the banks tightening of credit terms to an extent which far exceeded any precautions arising from changes in the riskiness of SMEs borrowers. Objective or subjective reasons, constraints often difficult to mitigate by micro- or macro-levels measures, such as inconclusive credit history, opaque financial reports, insufficient collateral, high costs, but also bank services not always tailored to firms' needs, all have affected SMEs' access to financing. The consistency and the quality of a banking relationship could considerably help to mitigate the effects of the crisis and facilitate SMEs' access to finance. The objective of this paper is to find out which are, from the banks' side, the most important variables determining the renewal at maturity of the SMEs' loans, and how these fit with SMEs' expectations.

## 1 Literature review

A valuable lending relationship is revealed through several descriptors, such as the possibility to renew credit lines at maturity, to obtain favourable conditions or a reasonable collateral, etc. All these elements (i.e. renewal, favourable conditions and collateral) act as dependent variables (or effects) of the indicators of the banking relationship, as mentioned in the empirical literature, i.e. concentration, length, size and the nature of bank's capital, trust (Badulescu & Simut, 2012).

In terms of *size*, large bank institutions prefer to lend to larger, experimented and financially sound SMEs; their credit decisions is based mainly on financial ratios, long distance, impersonal and short terms relation with SMEs customers; instead, small banks promote privileged and personal relationships with their SMEs customers (Petersen & Rajan, 1994), flexibility and non-bureaucratic procedures in credit assessment (Berger, Rosen, & Udell, 2003). Empirical studies suggest that small banks reduce SMEs financing constraints, increase competition (Carbó-Valverde, Rodríguez-Fernández, & Udell, 2009); (Degryse & Ongena, 2007) and promote economic growth in local communities, especially in underdeveloped regions, or in post-transition countries (Hasan, Jackowicz, Kowalewski, & Kozłowski, 2014). On the other hands, recent studies (Shen, Shen, Xu, & Bai, 2009) found that bank size has a modest contribution to banks' decision in SME's lending. Regarding the *nature of the bank's capital* (e.g. foreign, national, private, state owned), foreign banks prefer to use different lending techniques and organizational structures than small, domestic or niche banks, to reach out to SMEs (Beck, Demirgüç-Kunt, & Soledad Martinez Peria, 2010).

Regarding the *length* of a banking relationship, the studies reveal two trends, somewhat contradictory. On the one hand, the *length* of a banking relationship indicates the

intensity and the mutual trust, but, at the same time, the duration leads to an accumulation of information, the debtor's capture and, consequently, an increase in the costs of credit. According to Boot (2000), the contract lending terms improve over the length of the relationship, whereas the interest rates and collateral requirements decrease. These assertions are questioned by Degryse & Van Cayseele (2000), who found, rather, a direct correlation between the interest rate on credit and the bank-firm relationship duration. Firms with longer bank relationships perceive an improvement in credit availability, but not necessarily a better loan interest (Petersen & Rajan, 1994). For Hernandez-Canovas & Martinez-Solano (2010, p. 467) and Elsas & Krahnén (1998), the existence and the stability in the future of the relationship lending do not depend on the duration of the relationship, "but rather on the bank's participation in the firm's financing, (...) on its commitment to aid the firm when it experiences financial difficulties". The recent crisis nuanced the reticent assessments regarding the positive effects of a lasting relationship between European firms and their banks, showing that longer bank-firm lending relationships help companies to obtain more loans and to reduce costs, mitigating the effects of the crisis (Beck, Degryse, De Haas, & van Horen, 2014, p. 32).

Regarding the banking relationship influence on *collateral*, most opinions converge that relationships diminish the information asymmetry between lenders and borrowers, discipline the borrowers' behaviour and, consequently, reduce the requirements for collateral; good ("safe") borrowers offer higher collateral for a lower interest rate (Bester, 1985), (Besanko & Thakor, 1987), (Petersen & Rajan, 1994), or as a signal that they do not fear of losing their the guarantees.

The importance of *prompt repayment* of loan instalments was addressed by fewer studies, approaching the discipline of borrowers, the effect of credit registry, the information asymmetry, the costly enforcement of the credit contract and the nature of credit transactions. Boot & Thakor (1994), Petersen & Rajan (1994) or Elsas & Krahnén, (1998), consider that, on SMEs credit market, long-term relationships are based on disciplined behaviour of the borrowers in fulfilling their contractual obligations, which improves their further access to loans.

The studies on the role of *trust* in banking relationship reveal its importance in reducing the effects of adverse selection, in improving access to finance and, at the same time, in reducing borrowing costs (Hernandez-Canovas & Martinez-Solano, 2010, p. 467), collateral and personal guarantees (Harhoff & Körting, 1998) or as a (partial) compensation of the lack of skills of SMEs representatives. However, Moro, Lucas & Kodwani (2010) show

that trust plays a minor role in reducing the request of collateral. In general, when the bank requires additional collateral to strengthen its exposure to borrowers, this is often perceived by SMEs as a sign of lack of confidence from the bank, which adversely affects the lending relationship.

## 2 Data, methodology and results

In order to investigate the nature of the banking relationship, we developed a survey-based research among banks representatives from different banks in Romania. In this paper - which is a result of a more complex research project investigating the relationship between SMEs and banks - we approach the supply-side perspective (i.e. bankers' perspective) as well as a comparison between the supply-side perspective and the demand-side perspective (i.e. SMEs representatives). The survey was developed during January-March 2012, based on a questionnaire with 18 questions. The questionnaire was focused on approaching subjects such as: the importance of relationship banking, supply and demand for funding, and sectorial financing issues.

The questionnaires were sent to 150 bank representatives (i.e. bank managers, SMEs risk managers and SMEs relationship managers) from different banks in Romania. The respondents targeted were only staff members holding managerial positions or being directly involved in SMEs lending, i.e. working with loan requests and applications. Most of the respondents (i.e. 85%) were employed in bank units located in North-Western Region of Romania, and the rest (i.e. 15%) in Centre Region and Western Region. The large majority of the respondents (i.e. 80%) work in branches, and the rest of 20% in banks' head offices. As a result of the survey, the primary dataset consisted of 67 responses from managers working in 20 banks (out of the total of 42 banks existing in Romania at the survey's time). After removing the errors, 64 questionnaires were taken in analysis (Badulescu, Giurgiu, Istudor, & Badulescu, 2015). When checking the representativeness of the responses - due to the fact that 85% of the valid responses were collected from only one Romanian region (i.e. the North-West Region) we found no special features, different economic laws or regulations for this area, or special behaviours or practices coming from the banks related to SMEs. Moreover, the North-West Region of Romania displays a regular position within the country for main bank lending indicators, e.g.: bank units number and territorial density, number of inhabitants per bank branch, volume of loans granted to SMEs, number of current accounts etc.

We test the effect of the general characteristics (i.e. *size*, *nature* and *origin of the capital*), and specific financial indicators concerning lending (i.e. *prompt repayment* and

*collateral*) and relational characteristics (i.e. *trust* and *length*) on the bank's availability to meet companies' requests for loan/credit lines renewal. Specifically, banks were asked to rate on a scale from 1 (never) to 5 (always) the following statement: "For the SMEs with a good track record of lending, bank showed high availability to credit requests or to grant/renew/extend the loan at maturity compared to new customers requests". From the registered responses, we define the dummy variable *Renewal*, which takes value 1 when the response exceeds median and 0 otherwise. The effect of the bank relationship on *Renewal* is analysed through the following model:

$$\text{Renewal} = c(1) + c(2) * \text{Trust} + c(3) * \text{Lenght} + c(4) * \text{Size} + c(5) * \text{Origin of the capital} + c(6) * \text{Collateral} + c(7) * \text{Prompt repayment} + \varepsilon \quad (1)$$

**Tab. 1: Definition and explanation of variables**

Variable	Explanation of variables
<b>Endogenous variables</b>	
Renewal	On a scale from 1 (never) to 5 (always), we denote the opinion of banks on the following statement: "For the SMEs with a good track record of lending, the bank showed high availability to credit requests or to renew/extend the loan at maturity compared to new customers requests". Dummy variable <i>Renewal</i> takes value 1 when response exceeds median and 0 otherwise.
<b>Exogenous variables</b>	
<i>Bank characteristics</i>	
Size	On a scale from 1 (totally disagree) to 5 (totally agree), we denote bank's opinion on the following statement: "In Romania, the small banks have a higher availability to finance SMEs compared to the large banks". Dummy variable <i>Size</i> takes value 1 when response exceeds median and 0 otherwise
Nature and origin of the capital	On a scale from 1 (totally disagree) to 5 (totally agree), we denote the bank's opinion on the following statement: "In Romania, domestic banks have higher availability in SME financing in comparison with the foreign banks". This dummy variable takes value 1 when response exceeds median and 0 otherwise
<i>Relationship characteristics</i>	
Length	On a scale from 1 (totally disagree) to 5 (totally agree), we denote the bank's opinion on the following statement: "For the companies that work primarily with a bank for extended periods of time, that bank show high availability to credit requests or to renew/extend the loan at maturity compared to new customers requests". This dummy variable takes value 1 when response exceeds median and 0 otherwise
Trust	On a scale from 1 (totally disagree) to 5 (totally agree), we denote bank's opinion on the following statement: "When the bank gives a loan to an SME confidence in shareholders / managers of that company is the most important argument for the bank ". Dummy variable <i>Trust</i> takes value 1 when response exceeds median and 0 otherwise
<i>Lending characteristics</i>	
Prompt repayment	On a scale from 1 (never) to 5 (always), banks managers indicate the frequency. Indicate how often the term or advance payment rates determined more favorable treatment from the bank. This dummy variable takes value 1 when response exceeds median and 0 otherwise
Collateral	On a scale from 1 (totally disagree) to 5 (totally agree), we denote bank's opinion on the following statement: "The banks grant loans only if the company guaranties". Dummy variable <i>Collateral</i> takes value 1 when response exceeds median and 0 otherwise

Source: own elaboration based on Hernandez-Canovas & Martinez-Solano (2010)

Table 2 summarizes the regression results. The regression contains the estimation by ordinary least squared method of the model (1). Regarding the characteristics of the firm we can notice that *trust* exerts no impact on renewal, while the variable *length* has a significant impact on dependent variable renewal. The probability of renewing the credit lines increases by 2.37% when the variable *length* increases by 10%, whereas an increase by 10% in the variable *trust* increases the probability of renewal by only 0.42%, almost 4 times less. Therefore, we can affirm that when it comes to renewing a credit, the bank considers that *the length* of the relationship is more important than *the trust*. We find a positive and significant coefficient for the variable *nature and the origin of the capital*, at a level of 10%, and a negative and insignificant coefficient for the variable *size*. These two variables measure the effect of bank characteristics on debt availability. The results indicate that the nature and the origin of the capital influence the availability of the banks regarding the firms' credit requests or for renewal of existing credit, while the size of the bank does not influence this availability of the banks. Moreover, when the bank's size increases by 10%, then the probability of renewing the credit decreases by 0.50%. This shows that the bigger is the bank, the smaller are the SMEs chances to access or to renew a loan.

Two other variables that influence the renewal of a credit from the banks' perspective are *prompt repayment* and *collateral*. If the variable *prompt repayment* positively influences the renewal, the *collateral* negatively influences the dependent variable *renewal*. This shows that payment on time or in advance of the credit instalments determines more favourable treatments from the bank side, including granting new loans or renewing the existing ones, while the collateral rather decreases the banks' availability to offer new credit or to renew the existing credit lines. Furthermore, banks consider that payment in due time is the most important factor influencing the renewal of an existing credit. The probability of renewing the credit lines increases by 2.38% when the variable *prompt repayment* increases by 10%.

**Tab. 2: Effect of trust and length of bank relationship on debt availability (Renewal)**

	Renewal
<b>Constant</b>	3.835297 (6.069386)***
<b>Relationship characteristics</b>	
Length	0.237731 (1.850972)*
Trust	0.042655 (0.679070)
<b>Bank characteristics</b>	
Size	-0.050149 (-0.505054)
Nature and origin of the capital	0.166863 (1.796371)*

<b>Financing characteristics</b>	
Prompt repayment	0.238084 (2.328195)**
Collateral	-0.167360 (-2.415668)**
<b>Observations</b>	64
<b>Adjusted R-squared</b>	0.189045
<b>Prob (F-statistic)</b>	0.005648
<b>White (prob)</b>	1.075316 (Prob=0.4139)
<b>Durbin Watson</b>	2.272211
<b>Jarque Bera (prob)</b>	1.545584 (Prob=0.461722)

The dependent variable in the regression is dummy variable *Renewal*. Description of all variables reported in Table 1. Observations is number of cases included in estimation. F is p-value of global test of significance of linear model. Adjusted R<sup>2</sup> is the adjusted coefficient of determination (measures goodness of fit of linear model). T-statistic in parentheses. \*, \*\*, \*\*\* Significant at the 10%, 5%, 1% level  
Source: authors' calculations

Given the present estimated model and the model estimated in our previous article (Badulescu & Simut, 2012), we can perform a comparative analysis in order to identify the effect of firm/bank characteristics, financing characteristics and relationship characteristics on *Renewal* variable. Table 3 summarizes the regressions' results from both models.

**Tab. 3: Effect of firm/bank characteristics, financing characteristics and relationship characteristics on debt availability (*Renewal*) – a comparative analysis**

	Renewal Firm perspective (Badulescu & Simut, 2012)		Renewal Bank perspective (present research)	
	Influence	Coefficient	Influence	Coefficient
<b>Constant</b>		0.014937	significant	3.835297
<b>Relationship characteristics</b>				
Concentration	insignificant	-0.014945		
Length	significant	0.080517	significant	0.237731
Trust	significant	0.054522	insignificant	0.042655
<b>Firm/Bank characteristics</b>				
Age	insignificant	0.008310		
Solvency	insignificant	-0.068644		
Size	significant	-0.005090	insignificant	-0.050149
Nature and origin of the capital			significant	0.166863
<b>Financing characteristics</b>				
Lines of credit	significant	0.113324		
Prompt repayment			significant	0.238084
Collateral			significant	-0.167360

The dependent variable in all regressions is dummy variable *Renewal*. All regressions estimated using ordinary least squares.  
Source: authors' calculation

If we compare the results estimated in the model (1) with the results of a similar research question from our previous article (Badulescu & Simut, 2012), but addressed to SMEs, we found that, in both perspectives, banks' availability to grant loans or to renew/extend credit lines at maturity significantly depends mainly on the *length* of the

banking relationship. On the contrary, Table 3 reveals that the variable mostly influencing the availability to grant loans or to renew/extend credit lines at maturity is, from SMEs perspective, the pre-existence of *credit lines* (the regression coefficient estimate is 1.13%) while from banks perspective, the variable that mostly influences this availability is the *prompt repayment* (the regression coefficient estimate is 2.38%). Regarding the influence of the variable *prompt repayment*, SMEs representatives consider that it influences mainly the specific credit conditions (i.e. costs, procedures, collateral requirements) than the bank's decision itself to grant loans or to renew/extend credit lines at maturity.

## **Conclusion**

The quality of banking relationship is essential for granting loans or renewal of credit lines, given that SMEs access to finance still face supply and demand constrains. In this paper we have investigated the effect of banking relationship indicators, i.e. length, size, trust and the nature of bank's capital on the credit lines' renewal. The investigation was based on a survey among bank representatives. We found out that the most effective variables determining banks' availability to grant loans and to renew/extend credit lines at maturity (i.e. for the existing customers) are *prompt repayments* and *the length* of the banking relationship. In our previous research (Badulescu & Simut, 2012), but addressed to "the demand side" (i.e. SMEs), we found that banks' availability to grant loans or to renew/extend credit lines at maturity significantly depends mainly on the length of the banking relationship, but also on the trust between the lender and the SME. Regarding the influence of the variable *prompt repayment*, SMEs representatives consider that it influences more the specific credit conditions (i.e. costs, procedures, collateral requirements) than the decision itself to grant loans or to renew/extend credit lines at maturity. Our present research reveals a partial similarity between banks' availability and SMEs expectancies concerning the access to finance, thus questioning the effective banks' involvement in fulfilling SMEs financing needs.

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