Small Bank-Small Firm Relationship:

An Empirical Investigation after the Financial Crisis

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Abstract

The present paper aims at investigating the changes in small bank-small firm relationship after 2007-

2011 financial crisis. Specifically, it focuses on both long-term and short-term credit granting, by

seeking to understand which banks' and firms' financial conditions affect it. We apply OLS

regression models on a sample of 123 co-operative credit banks and more than 11,000 firms operating

in Italy between 2012 and 2014. Our main findings suggest that long-term credit rationing is mainly

affected by banks' capitalization, firms' leverage and multiple banking. Instead, short-term credit

granting is linked to the amount of bank's impaired loans and to firms' roe and leverage.

Key words

Small bank; small firm; credit granting; bank capitalization; multiple banking.

EFM classification codes: 140 - 510 - 800

Introduction

Co-operative banks, which in Italy cover the 7.2% of lending, are known to be close to the territory

and careful to the needs of firms, especially small-sized (Baccarani et al., 2013). However, after the

recent financial crisis, unprecedented in its global scale and severity, and due to the Basel Accords,

they have had to review their strategies about credit granting. As known a drop in liquidity for banks

may have a direct transmission effect on the supply of credit for firms (Iyer et al., 2013), thus this

circumstance translated in credit rationing, also defined as "credit crunch" (Bernanke and Lown,

1991; Bofondi et al., 2013; Burlon et al., 2016).

The present paper aims at investigating the changes in small bank-small firm relationship after 2007-2011 financial crisis. Specifically, it focus on both long-term and short-term credit granting, by seeking to understand which banks' and firms' financial conditions affect it. First, it adopts the bank perspective. Previous empirical research emphasizes the role of banks' capital constraints in determining quantitative restrictions in lending. According to those studies, banks' balance sheet conditions play a relevant role. Indeed, well-capitalized banks are less likely to generate strong procyclical changes in credit supply conditions through rationing (Schreft and Owens, 1991). Then, it embraces firm's perspective. The role of borrowers' risk profile is neglecting in literature, though borrowers' creditworthiness influences banks' availability to provide loans. Firm's financial decisions are actually determining factors in driving firms' ability to operate successfully. A weak financial structure, characterized by a high level of indebtedness and a limited supply of capital, with a higher incidence of interest expenses, is a determinant of future default events (Modina and Pietrovito, 2014). Banks consider these aspects when they have to express a judgement about firm's financial reliability. Therefore, we believe useful to consider in our study not only the effect of banks' balance sheet information on credit granting, but also firms' balance sheet.

Finally, in a joined perspective (bank-firm relationship), the paper considers the effects on credit granting of the "multiple banking" phenomenon (De Bodt et al., 2005). We suppose that building a solid relationship with one bank rewards the firms, overall in crisis or post-crisis period. We apply OLS regression models on a sample of 123 co-operative credit banks and more than 11,000 firms operating in Italy between 2012 and 2014.

Dataset was provided by the Crif, a credit rating agency issuing ratings on Italian firms, instrumental in banks' and other financial institutions' evaluation of their portfolios. More detailed data about banks' balance sheet was also collected on Bureau Van Dijk Database Bankscope and merged with the main dataset. Our main findings suggest that long-term credit rationing is mainly affected by banks' capitalization, firms' leverage and multiple bank. Instead, short-term credit granting is linked to the amount of bank's impaired loans and to firms' roe and leverage.

Our work seeks to provide useful implications for theory and practice. First, it focuses the attention

not only on banks' balance sheet, but also on firms' one. Moreover, it also considers the effect of

firm-bank relationship (multiple banking). In so doing, it offers a useful implication for practitioners.

As know, firms must give attention on their debt levels, besides they have to adequately plan their

relationship with banks, because choosing multiple bank can reveals unprofitable.

The remainder of this paper presents a brief literature review on the issue, delineates sample and data,

describes the methodology applied and discusses the main findings.

What can affect the credit granting after a financial crisis? A brief literature review

Previous empirical research have emphasized the role of banks' capital constraints in determining

credit granting. Some of them (e.g., Paravisini 2008; Khwaja and Mian 2008; Schnabl, 2012) have

suggested that bank liquidity shocks are transmitted to their customers through a change in lending.

Maintaining a satisfactory degree of risk coverage allows banks to maintain investor confidence and

attract external financing at low cost. It is essential to continue to ensure an adequate flow of credit

to households and businesses. Moving from these considerations, in the years following the crisis,

the Bank of Italy has conducted checks on the adequacy of value adjustments made by a large number

of banking groups. Where necessary, it required corrective actions. Specifically, it asked banks to

increase internally generated resources through cost containment, the sale of non-strategic activities,

the adoption of a dividend policy consistent with the income and asset situation of each intermediary

(Panetta, 2013). Well-capitalized banks are less likely to generate strong procyclical changes in credit

supply conditions through rationing (Schreft and Owens, 1991). Therefore, we aspect that banks'

capitalization have a positive effect on supply of long and short credit to corporate sector and

formulate the following hypotheses:

Hypothesis 1a: Banks' capitalization positively influences long-term credit granting

At a time of great uncertainty about the economic outlook and substantial weakness of both firms' and banks' balance sheets, banks could decide to cut credit lines to their clients indistinctly, or they might select the worst borrowers through a careful evaluation process. In this last case, it would be interesting to try understanding which firms suffer more difficulties in accessing credit. Numerous studies (e.g. Angelini et al., 1998; Guiso, 1998; 2006) have shown that the difficulties in obtaining credit are related to different business characteristics, such as size, sector of economic activity, fiscal conditions. Banks look mainly for businesses budget balances, using financial statement information. The advantage is twofold. First, balance sheets are publicly available and their content is verified by a third part. Second, these data provide a bunch of quantitative information, that help to predict possible default events influencing, in turn, banks' decisions about credit rationing. Rationing credit to firms with high growth prospects might affect the ability to make investments or undertake development paths. Instead, for businesses characterized by less solid financial condition of the difficulty of access to credit can undermine a balanced budget to determine the failure. Therefore, a careful selection in credit rationing is essential. Obviously, the presence of fragile financial condition is associated with a much higher probability of rationing average (Albareto and Finaldi Russo, 2012). A weak financial structure, characterized by a high level of indebtedness and a limited supply of capital, with a higher incidence of interest expenses, is a determinant of future default events (Modina and Pietrovito, 2014).

After the financial crisis, in Italy, firms registered a degree of much higher debt than in the past (Rossi, 2013). In the years preceding the crisis, they had increased the bank debt on average at a rate of more than 8 percent a year, thanks to favorable bank interest rates and lower rationing by banks. The dependence on the banking system was greater for smaller firms, for which the coverage of the investments with internal sources dropped by half. These companies have been always reluctant to raise venture capital, cause their family nature, and because the recourse to the capital market implies

a high and permanent transparency in costs and, finally, for the tax advantages. After several years in which they had enjoyed relative easy to access to bank credit, these firms found themselves burdened with financial statements by a high debt both by historical standards and relative to other countries (Bugamelli et al., 2009). In addition, a sharp fall in income flows and a sharp lengthening of customer payment terms (Accetturo et al., 2011), which led many companies to postpone, in turn, payments to suppliers, interest payments and the repayment of bank loans.

Banks consider these aspects when they have to express a judgement about firm's financial reliability. Therefore, we believe useful to consider in our study not only the effect of bank capitalization on credit granting, but also firms' balance sheet. Specifically, we formulate the following hypotheses:

Hypothesis 2a: Firms' leverage negatively influences long-term credit granting

Hypothesis 2b: Firms' leverage negatively influences short-term credit granting

Finally, we take in account another aspect scarcely considered in previous studies: the effect of multiple banking (bank-firm relationship) on credit granting. Bank-firm relationship is a central theme of the economic and financial literature. It has been enhanced with new profiles of observation and ideas of analysis for the unfolding of the effects induced by the crisis: among the most significant events, the deterioration of the economy of credit conditions, the slowdown in growth of bank loans, the difficulties of enterprises in the management of payments from customers and in dealing with the sharp fall in demand (Birindelli and Modina, 2010). Specifically, with respect to bank-firm relationship, the present paper aims at considering firms' choices about multiple bank. The use of multiple bank is explained by the modest information transparency of Small businesses. The less information transparency tends to elevate the costs incurred in the screening and firm's performance monitoring phases. Theoretically, those who finance could increase the price of the loan; in doing so it raises, however, the chances of seeing not repaid the loan, because it attracts the most risky borrowers (adverse selection) and/or encourages the borrower to take on riskier behavior (moral

hazard). These two phenomena have an impact on the overall profitability of the loan, then the lender may decide not to raise beyond a certain threshold the rate of interest and act on credit rationing (Stiglitz and Weiss, 1981).

A possible solution to the problem of asymmetric information could be found in the long-run relationship between bank and company (relationship lending) (Sette and Gobbi, 2014). The banks have the facilities, knowledge and skills that would enable them to compensate for the higher information asymmetry than companies, especially the smallest. However, the ability of the banks in reading the growth potential of a company, even picking up weak signals of the so-called soft information, seems to have weakened during the crisis. Albareto and Finaldi Russo (2012) suggest that the difficulties to access to credit for vulnerable firms would also be extended to some companies from good potential. The problem is provided for the high fragmentation of banking relationships, which do not favor a solid relationship between banks and enterprises (De Mitri et al., 2010). Reduce fragmentation would benefit, in particular, innovative businesses, whose evaluation by external financiers is typically much more difficult. There is empirical evidence that a long-term relationship with a bank increases the probability that an undertaking innovative activities (Herrera and Minetti, 2007; Micucci and Rossi, 2012). Narrower banking relationships facilitate access to credit, particularly for companies characterized by better growth prospects; This result is consistent with the hypothesis that the more banks involved in the financing of companies to be in better information and have greater incentives to use them. Empirical evidence, finally, confirmed by recent results on the importance of relations with customers in preserving the hardening companies offer credit (cfr. De Mitri et al., 2010). A high concentration of loans held by the major banks is associated with a lower likelihood of rationing. In addition, the presence of more "close relations" has influenced the selection made by the banks: the growth potential of businesses were most relevant in facilitating access to credit. This finding may reflect the breadth of information available to more intermediaries involved in financing companies and the increased incentives to use them in the selection of customers.

By providing linked financial services, banks can have access to additional information, available in

real time, concerning firm-bank relationship. This means that banks can observe this information long

before receiving financial statements of a firm, which may later confirm that the borrower is in

financial problems (Norden and Weber, 2010).

In the light of these arguments, we suppose that building a solid relationship with one bank rewards

the firms, overall in crisis or post-crisis period and thus formulate the following hypotheses:

Hypothesis 3a: Multiple banking negatively influences long-term credit granting

Hypothesis 3b: Multiple bank negatively influences short-term credit granting

Data and Methodology

In this section, we present sample and data and illustrate the methodology applied to test our

hypotheses and our models.

Sample, Data and Variables

In this article, we consider balance sheet information at firm-level and firm-bank relationship data,

provided us by Crif, an Italian company specializing in credit information systems, offering to banks

tools and solutions for the relationship with the customer management. In addition, we sought out

balance sheet information at bank-level on Bureau Van Dijk Database Bankscope. Banks and firms

in our sample are Italian. Nonetheless the restricted field of investigation, Italy is particular

instructive, since firms are highly dependent on banks as relationship lenders and banking industry

has been deeply affected by the global financial crisis (Rossi, 2013). As showed in figure 1, with

respect to other European Countries, Italian firms have less equity and more bank debts.

Insert Figure 1 about here

Despite Italian bank industry has reduced dimensions for the real economy, because their activities are 2,7 times the GDP, significantly lower than other Countries, banks in our Country play an important role in financing firms. Bank debts represent more than 60% of firms' financial debts; in France, they are approximately 30% and in Germany are about 50% (Fig. 2). The capital market has a limited weight and the use of bonds does not reach the 8% of firms' financial debts (Panetta, 2013).

Insert Figure 2 about here

The initial dataset of 226,000 observations included data from 124 co-operative credit banks. They adopt the same commercial policies (Baccarani et al., 2013), which allows us to make a deep comparison, without suffering from scale problems. These banks lend more than 81,000 firms located in 103 Italian provinces and operating in 80 different industries. In particular, firms in our sample belong to the following six macro-industries: agriculture, commerce, transports and hotels, manufacturing, building and services. The majority (95%) of the firms are productive firms, including limited companies, cooperative companies producing goods and non-financial services, and consortiums. Other included segments are holdings of non-financial groups and operating private holdings, managing and controlling a group of companies whose main activity is goods and services production. More than 80% of firms are limited liabilities companies and 5% of them are limited companies. Firms are mainly located in the Centre-North of Italy (72%) and only 28% of them is operating in the South.

From the initial sample provided by Crif, after checking for outliers, duplicates and missing values, and excluding financial services and the public administration sectors, the resulting sample consist of 11,083 firms and 123 co-operative banks, for 18,143 observations. For each bank, we collected

balance sheet data on Bureau Van Dijk Database Bankscope and then merged them with the main Crif database using the unique bank identification number. Banks' equity in our sample is from 5,500 to 322,000; their assets are from 44,200 to 8,467,900.

As dependent variables, we consider both long-term and short-term credit granting. This allow us to catch, through a proxy, whether the credit rationing is about investments or working capital. We measured them as difference in the level of lending between 2014 and 2013 and between 2013 and 2012 for each firm.

As main independent variable, we consider banks' capitalization, using the CET1 (Common Equity Tier 1), calculated as TIER1/Assets ratio. We also had available other banks' balance sheet information. In order to identify which of them insert in the regression analysis, we followed a process made in two steps. First, we applied the variance inflation factor model (VIF) for each potential independent variable, selecting the variables not affected by multicollinearity problems (Chatterjee and Hadi, 2012); then, we applied the stepwise procedure (backward selection method) to identify the best combination of significant explanatory variables (Shin and Lee, 2002; Shin et al., 2005). At the end of the process, we decided to consider as variables linked to banks' balance sheet equity and impaired loans/gross loans ratio (impaired/gross). Also with respect to the financial indicators, we had a set of possible variables constructed by Crif. We proceeded in the same way as abovementioned and, moving from a long list of about 60 indicators concerning several areas of firms' profile (i.e., leverage, profitability, and so on), we selected the following firms' balance sheet indicators: the return on asset (roa); the return on debt (rod); the return on equity (roe); the return on sales (ros); leverage; total debts/liabilities ratio (debts/liabilities); the level of short-term indebtedness (short term debts). In addition, we also considered the number of relationship with banks for each firm, in order to catch the *multiple banking* phenomenon.

Correlation matrix and main descriptive statistics for each variable are reported in Table 1 and in Table 2.

Insert Table 1 about here

Insert Table 2 about here

Models

In order to test our hypotheses, we apply stepwise forward OLS regression models. Specifically, we test three different models for each dependent variable. In the first one, we inserted the main independent variables at bank levels. In the Model 2, we added firms' balance sheet information; finally we also considered the number of relationship with banks for each firm in Model 3. The main models we estimate are as follows:

LTCG = $\beta_0 + \beta_1(CET1_i) + \beta_2(equity_i) + \beta_3$ (impaired/gross_i) + $\beta_4(roa_j) + \beta_5$ (rod_j) + β_6 (roe_j) + $\beta_7(ros_j) + \beta_8$ (leverage_j) + β_9 (debts/liabilities_j) + β_{10} (short term debts_j) + β_{11} (long term debts_j) + β_{12} (multiple banking_j) + ε STCG = $\beta_0 + \beta_1(CET1_i) + \beta_2(equity_i) + \beta_3$ (impaired/gross_i) + $\beta_4(roa_j) + \beta_5$ (rod_j) + β_6 (roe_j) + $\beta_7(ros_j) + \beta_8$ (leverage_j) + β_9 (debts/liabilities_j) + β_{10} (short term debts_j) + β_{11} (long term debts_j) + β_{12} (multiple banking_j) + ε

Before to test our models, we control for possible problems of heteroskedasticity and we carry out the control of heteroskedasticity by calculating the robust standard errors using the Huber White Sandwich estimator for clustered data (Rogers, 1993; Wooldridge, 2002).

Results

In this section, we present the results of the analysis, performed with STATA13. In Table 3, we can

see that long-term credit granting is affected by banks' balance sheet information. Specifically, the

sign of the β coefficient is positive (β = .005; p<.05), meaning bank capitalization positively

influences long-term credit granting, supporting hypothesis 1a. This means that bank less capitalized

are more forced to cut the loans to their clients. Moreover, another aspect that affects the long-term

credit granting is the presence of an increasing percentage of impaired loans ($\beta = -.021$; p<.01). In

the Model 2, we can observe the effect of firms' balance sheet information on long-term credit

granting. Our analysis suggests that firms with a better roe (return on equity) suffer less banks' credit

rationing (β = .019; p<.10). Instead, the leverage has a negative effect on long term credit granting (β

= -.054; p<.01). Therefore, firms that are more indebted endure most the reduction of loans. This

finding supports hypothesis 2a. Finally, in the Model 3, we tested the effect of multiple banking on

long-term credit granting, finding out that having relationships with a larger number of banks implies

a more consistent credit rationing ($\beta = -.029$; p<.01). Therefore, also hypothesis 3a is supported.

Insert Table 2 about here

In the second half of Table 3, we report the results related to short-term credit granting. Model 1 shows that just one variable at bank-level affects short-term credit granting: impaired loans/gross loans ratio (β = -.025; p<.01). This finding highlights that when banks decide about providing short-term loans, the decision is conditioned by the amount of impaired loans, but not by the level of bank capitalization (β = .006; ns). Therefore, the hypothesis 1b is not supported. In Model 2, we observe the effect of firms' balance sheet information on short-term credit granting. Results point out that also in this case banks look at roe, before to provide credit. Firms with a better level of roe suffer less credit rationing (β = .028; p<.01). As for long-term credit granting, instead, a high level of leverage determinates a strong short-term credit contraction by banks (β = -.039; p<.01). This last finding supports hypothesis 2b. Moreover, it is interesting to note that also the effect of the level of short-term debts is significant on credit granting (β = -.028; p<.01). Finally, Model 3 shows that hypothesis 3b is not supported, because the effect of multiple banking is not significantly (β = -.001; ns).

Discussion and Conclusion

The present paper sought to investigate the changes in small bank-small firm relationship after 2007-2011 financial crisis. Specifically, it focus on both long-term and short-term credit granting, by seeking to understand which banks' and firms' financial conditions affect it. Moving from previous studies, it considered the effect of banks' balance sheet information on the supply of credit to corporate sector. In line with previous results, our analysis suggests that banks more capitalized provide more long-term loans to their clients. Otherwise, bank less capitalized have suffered market crisis and find difficult supporting firms borrowing credits. Differently, this aspect seems not influence short-term credit granting, that is just affected by the presence of impaired loans.

indebted firms risk cut lending. Instead, we found a positive relationship between roe and credit granting. This means that firms with a better roe less suffer credit rationing. Finally, with respect to short-term credit granting another influencing aspect is the level of short-term debts. Firms with a higher amount of short-term debts more suffer credit crunch. Therefore, the highest probability of default of these firms induces caution when granting loans, it is associated with requests for more guarantees, with higher interest rates. These results tend to exclude the existence of the phenomenon of "evergreening". Banks do not seem to be interested to renew their financial support to weaker companies, just because any difficulties in access to credit by those firms may have significant effects on the financial stability of the same lending banks (Albertazzi and Marchetti, 2010).

Moreover, by considering firm-bank relationship, our results show that multiple banking is not an opportune choice for the firms, if they are willing to receive a long-term founding. Indeed, firms with a higher number of bank relationship more suffer credit rationing. Differently, this aspect does not influence short-term credit granting. A possible explanation could be that bank prefers to avoid high screening and monitoring costs with respect to short-term credit granting and limits its evaluating analysis to the presence of impaired loans and to the level of firm's leverage and short-term debts. This could lead firms to use with more intensity the short-term debt, which seems to require less transparency; this form of financing, in fact, is converted into a source of long-term, with the continuous renewal of custody granted lines (Birindelli and Modina, 2010).

Managerial Implications

The just mentioned results give us the opportunity to offer some useful implications for practitioners. First, because firms' capital structure affects both long-term and short-term credit granting, firms are required to pay attention to their capital structure and in particular to the composition of financial sources. The excessive firm debt and the high financial charges indeed generate a significant increase in the financial risk. Companies with greater debt exposure are more vulnerable to the intensification of the general market conditions and, for this reason, should adopt more virtuous financial behavior

in which the target levels of debt are more consistent with the objective of long-term sustainability of their economic and financial performance. However, how many firms, especially small firms, actually implement the finance function in their firms? And, on the other side, how many banks have advanced competences in corporate finance to support firms in their decisions? According to the last Italian reform on co-operative banks, this competence should be entrusted to the group holding, but this choice would belittle the role of co-operative banks on the territory (Chiaramonte et al., 2015). Differently, we suggest to banks to reconvert some professional figure and to train experts in finance, in order to obtain competitive advantages. In this way, financial crisis and reform could be converted from threats to opportunities.

Second, because a low bank's capitalization affects long-term credit crunch and non-performing loans influence both LTCG and STCG, a bank with a scarce quality credit portfolio and with not much free capital could not be more able to deliver before short-term and then long-term loans. Consequently, this type of banks have a limited capacity to survive. Therefore, it is important finding alternative solutions. For example, for co-operative banks, a possible way could be the aggregation, as the reform above-mentioned is suggesting for banks with a capital less than 200 millions. In this case, what could happen to firms choosing multiple banking? Would their loans be rationed? They should give more attention to the planning of banks relationship. Multiple bank could appear as an opportunity; instead, our results reveal that it represents a liability in rationing time. It is an aspect considered by banks in order to provide long-term, credit. Hence, a faithful relationship with one bank could be the right way to survival to a credit crunch, due to the personal link that may be created between bank and firm.

Limitations and Further Developments

Despite of these interesting preliminary findings, this work needs to be further developed. For example, it could be interesting investigating if the more capitalized banks adopt internal rating mechanisms, which in turn allow them to free resources to provide credit to borrowers. Moreover, it could be useful replying the same analysis, by considering different indexes able to give information

about firm's "health state". In this way, the research could provide further useful practical implications for firms and banks.

Besides, our study does not investigate the effect of credit crunch on firms' decisions about their financial structure (Kroll and Cohen, 2000). Small firms, for example, could compensate the credit crunch with other sources of debt (Cosci et al., 2015). This means that they should become more transparent. The current economic climate, the benefits arising from the possibility of access to otherwise unavailable resources should overpower the "disclosure" costs. The benefits of diversification of sources of funding, from greater bargaining power in credit relations and reputational gain that may result from access to markets could also be an incentive to openness and transparency. Finally, it would be interesting to understand if the choice to link the firm to a single bank, affordable choice in terms of lower credit rationing, may prove equally suitable than for example the interest rate which the company is subject. Sometimes, for example, it can happen that, by virtue of a binding long-term, the bank can smooth out the effects of monetary tightening on the customer base with which weaves broader relations. In exchange for what the customers of this type correspond to the bank permanently higher interest rates that incorporate a sort of insurance premium. It creates a sort of implicit contract between bank and enterprise that requires a profit and risk sharing (Ferri and Pittaluga, 1997). According to this implicit contract the bank is committed to stabilize the availability and the cost of borrowing for the enterprise; the company undertakes not to abandon the bank in times of abundant credit and cheap.

Finally, in this work, we measure the credit granting as the difference in the level of credit in a year and the previous one, but we do not take into account the actual amount of asked loans, whose requests have not been answered. Finally, we do not consider the purposes for which the request of credit is put forward: will the financing be used for debt restructuring or to fill the increased need for working capital, or to finance investments long term? This would be a further aspect to be investigated and which banks can take into account only if there is a long-term relationship with the company, willing to provide information in accordance with the principle of transparency.

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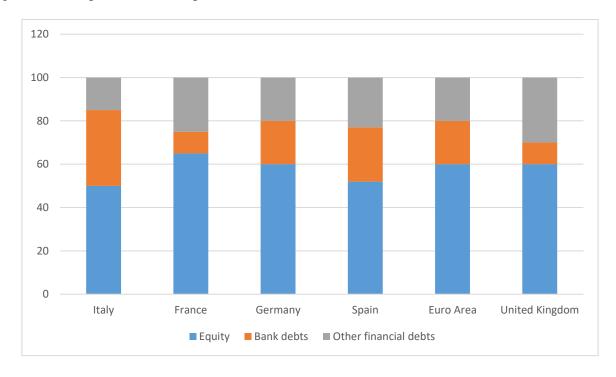
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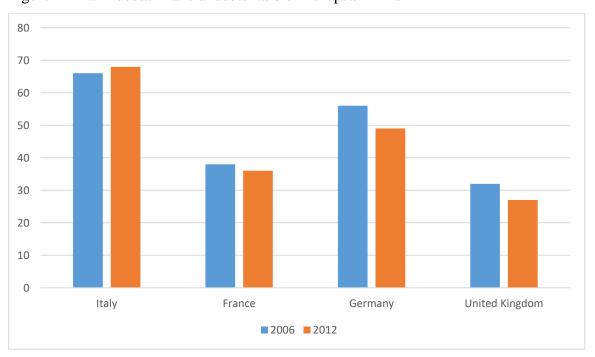
Figures and Tables

Figure 1 – Composition of European firms' financial liabilities



Source: Bank of Italy

Figure 2 – Bank debts/financial debts ratio of European firms



Source: Bank of Italy

Table 1- Correlation matrix for Long-Term Credit Granting

	Mean	s.d.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1.LTCG	-8033,58	1,51	1											
2.Cet1	16,79	5,12	002	1										
3.Equity	75743,58	52707,76	004	007	1									
4.Impaired/Gross	17,39	6,12	025	086	392	1								
5.Roa	,56	13,06	.010	.011	.013	015	1							
6.Rod	20,74	1,34	.001	011	013	.001	010	1						
7.Roe	17,44	2,21	004	.003	001	.005	166	003	1					
8.Ros	12,35	3,41	.013	.032	.053	065	165	.015	.147	1				
9.Leverage2014	71,13	2,34	026	008	012	.019	142	004	.605	.120	1			
10.Debts/Liabilities	73,44	33,43	003	.002	045	.027	071	014	.301	.085	.382	1		
11.Short Term Debts	35,31	29,39	.004	.040	.023	068	.124	011	.152	.155	.196	.575	1	
12.Long Term Debts	56,16	1,34	.013	.000	002	.006	.020	.000	.001	.013	.001	.001	.000	1
13.Multiple banking	1,14	,437	.028	.010	001	.022	008	004	017	028	.003	.016	.008	004

Table 2 – Correlation matrix for Short-Term Credit Granting

	Mean	s.d.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1.STCG	-5831,25	1,70	1											
2.Cet1	16,79	5,12	.003	1										
3.Equity	75743,58	52707,76	.008	007	1									
4.Impaired/Gross	17,39	6,12	013	086	392	1								
5.Roa	,56	13,06	001	.011	.013	015	1							
6.Rod	20,74	1,34	.000	011	013	.001	010	1						
7.Roe	17,44	2,21	.002	.003	001	.005	166	003	1					
8.Ros	12,35	3,41	.006	.032	.053	065	165	.015	.147	1				
9.Leverage2014	71,13	2,34	.008	008	012	.019	142	004	.605	.120	1			
10.Debts/Liabilities	73,44	33,43	.004	.002	045	.027	071	014	.301	.085	.382	1		
11.Short Term Debts	35,31	29,39	.029	.040	.023	068	.124	011	.152	.155	.196	.575	1	
12.Long Term Debts	56,16	1,34	001	.000	002	.006	.020	.000	.001	.013	.001	.001	.000	1
13.Multiple banking	1,14	,437	.001	.010	001	.022	008	004	017	028	.003	.016	004	.008

 $Table\ 3-Results\ of\ Regression\ Models$

•	Lo	ng-Term Credit	Granting	•	Short-Term Credit Granting				
Variables	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3			
Cet1	.005**	.004**	.006**	.006	.013	.001			
Equity	.014***	.025***	.017*	.003	.013	.003			
Impaired/Gross	021***	063***	031***	025***	042***	008***			
Roa		.001	.010		.011	008			
Rod		.001	.000		.000	.000			
Roe		.019*	.018*		.028***	.005***			
Ros		006	.016		.014	001			
Leverage		054***	040***		039***	011***			
Debts/Liabilities		002	.006		004*	022*			
Short Term Debts		.002	.000		028***	041***			
Long Term Debts		.009	.013		001	.000			
Multiple banking			029***			.001			
Small size									
N	18,143	18,143	18,143	18,143	18,143	18,143			
Adjusted R ²	.10	.30	.32	.10	.40	.41			
F	8.671***	7.669***	2.880***	10.174***	5.086***	1.226***			

^{***}p<.01 **p<.05 *p<.10