Information acquisition in SME’s relationship lending and the cost of loans

Irene Comeig a,⁎, Matilde O. Fernández-Blanco b, Federico Ramírez b

a Department of Corporate Finance and ERICES, University of Valencia, Avda. Tarongers, s/n., 46022 Valencia, Spain
b Department of Corporate Finance, University of Valencia, Avda. Tarongers, s/n., 46022 Valencia, Spain

A R T I C L E   I N F O
Article history:
Received February 2014
Received in revised form October 2014
Accepted January 2015
Available online 7 February 2015

Keywords:
Asymmetric information
Collateral
Reputation
SMEs
Relationship lending

A B S T R A C T
This study analyzes the effect of the reputation SMEs get in a relationship lending on the cost of next loans. A unique dataset of 734 Spanish SMEs’ relationship lending provides information on a loan-by-loan basis about the ex post previous loan performance, which measures reputation. No prior empirical research differentiates the cost of loans following a defaulted loan from the costs of those following a successfully repaid loan. Results show that lenders obtain information about borrowers’ risk-level during relationship lending and use this information. Loans granted after a successful one pledge significantly lower collateral and interest rate than loans granted after a defaulted one. However, the pledged collateral is stronger in the second loan not only following a defaulted loan but also following a successfully repaid one. This result is consistent with the credit screening mechanism, in which good borrowers differentiate themselves from bad ones by pledging high collateral to get lower interest rates.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

Small and medium enterprises face strong asymmetric information problems when trying to access credit. Informational asymmetries between lenders and borrowers may decrease with multi-period lending relationships (Townsend, 1982). Relationship lending would improve banks’ information on firms and their projects, providing firms with reputation, and reducing the risk for the bank to grant a loan. SME borrowers with good reputation, in turn, might receive funds at a lower interest rate. Previous empirical literature, however, finds mixed results, probably because it does not distinguish between SMEs with good and bad reputation.


The present study, applying a logit model, finds lenders obtain information on borrowers’ risk-level during relationship lending and use this information. The group of loans after a successful one pledges significantly lower collateral and interest rate than the group after a defaulted loan. However, contrary to Boot and Thakor’s (1994) predictions regarding collateral requirements, pledged collateral is stronger in the second loan not only after a defaulted loan but also after a successfully repaid one. This study has the following structure: Section 2 describes database and methodology. Section 3 presents results. Section 4 highlights main conclusions.

2. Sample and methodology

The goal of this study is to explore the effects of good and bad reputation gained in a relationship lending on the cost of new loans.

http://dx.doi.org/10.1016/j.jbusres.2015.02.012
0148-2963/© 2015 Elsevier Inc. All rights reserved.
The database contains information on 734 loan relationships between 2012 and 1998. This sample covers an entire economic cycle with recession and growth periods, ensuring results robustness regardless of business cycle stage. SGR Comunidad Valenciana provides data as financial intermediary that grants guarantees to banks against their loans to SMEs. All loans correspond to SMEs (sole proprietors, private limited liability companies, and public limited companies with less than two hundred and fifty employees). From these loans, 21 follow a defaulted loan (Group 1) and 713 follow a successfully repaid loan (Group 2).

A logit model relates firm’s reputation—the ex post first loan performance (default or success)—with the next loan’s collateral and interest rate from the same bank, and some control variables. The dependent variable, Reputation, is a binary variable—value equals 1 for non-defaulted loans, and 0 for defaulted ones. Defaulted loans include non-performing loans, not only legal insolvency (i.e., due date 90 days ago and doubtful loans). Loans after default results are heterogeneous in reputation. Consequently, they should not be in the same pool when analyzing reputation effects on loan cost.

The model defines interest rate (Lint) as the spread between each loan’s initial interest rate and the interest rate in the Bank of Spain Bulletin at that period. Collateral variable (Lcoll) equals 0 for outside real estate collateral, 1 for guarantees and 2 for unsecured loans.

Therefore, the model is as follows:

\[ \text{Reputation}_{it} = \beta_0 + \beta_1 \text{Lint}_{it-1} + \beta_2 \text{Lint}_it + \beta_3 \text{Lcoll}_{it-1} + \beta_4 \text{Lcoll}_it + \epsilon_{it}. \] (1)

3. Results

Table 1 presents the analysis of variance and key exogenous variables’ means and standard deviations in each loan’s group. Table 1 also shows normality and homoscedasticity tests.

Results show that loans following a successfully repaid loan (Group 2) significantly pledge lower collateral (Lcoll < 1.19) than Group 1 loans (Lcoll = 0.95). However, collateral is stronger in the second loan (Lcoll < Lcoll,1) in both groups.

Interest rates are also lower in Group 2 (Lint = 0.82) than in Group 1 (Lint = 4.26). Moreover, consistent with Boot and Thakor’s (1994) predictions on interest costs, interest rate falls in the second loan in Group 2 (Lint,1 = 1.45; Lint = 0.82), and rises in the second loan in Group 1 (Lint,1 = 3.73; Lint = 4.26).

Between groups differences, in both interest rate and collateral, increase in the second loan. This result supports that lenders obtain information on borrowers’ risk-level during the first loan and use this information to adjust second loan costs.

However, results show that pledged collateral is stronger in the second loan both after a defaulted loan and after a successfully repaid one. This result is consistent with the credit screening mechanism (see Bester, 1985), in which low-risk borrowers differentiate themselves by pledging high collateral to get lower interest rates (see Comeig, Del Brio, & Fernandez Blanco, 2014 for an empirical test, and Capra, Comeig, & Fernández-Blanco, 2014 for a laboratory experiment on this screening mechanism). In line with these results, the Zambaldi, Aranha, Lopes, and Politi (2011) empirical analysis of Brazilian SMEs finds that lenders decide to grant credit based on a positive amount of collateral optimal for the bank; and the Bigelli, Martín-Ugedo, and Sánchez-Vidal (2014) empirical analysis of Italian private firms shows that small firms with fewer tangible assets do not access credit.

Table 2 presents the logit analysis’ results, which confirm ANOVA results. Logit analysis considers just 607 lending relationships due to missing data on interest rates in the 127 excluded consecutive loans.

Results from Test A—Lcoll,1, Lcoll, Lint,1 and Lint—are the exogenous variables—corroborate that second loan interest rate, Lint, and collateral, Lcoll, distinguish good reputation from bad reputation firms. Table 2 shows the final model solution, which comprises Lcoll,1, Lcoll,2 and Lint; all of them with negative signs. Thus, the lower the second loan’s interest rate the higher the probability of good reputation. Also, the firm’s good reputation relates to lower probability of outside real estate collateral requirements, in comparison with bad reputation loans.

Results from Test B—includes Reputation, and the four previous exogenous variables—show that most defaulted second loans come from bad reputation firms (final model just selects Reputation). Reputation represents the second loan’s ex-post loan performance—value 0 for defaulted loans, value 1 for non-defaulted loans.

4. Conclusions

This study presents an empirical analysis of SME’s reputation effects on the costs of new loans. Informational asymmetries between lenders and SMEs, and their consequences on credit access, motivate such analysis.

Theoretical models suggest that relationship lending improves bank’s information on firms and their projects, providing firms with a reputation, and reducing the banks’ risk to grant a loan. Consequently, SME borrowers with good reputation receive new funds at a lower cost (Boot & Thakor, 1994). Previous empirical literature, however, finds mixed results. These mixed results may come from not distinguishing between good and bad reputation SMEs.

In this study, data on 734 Spanish SME relationships lending with information on a loan-by-loan basis about ex post loan performance, the reputation measure, shows that loans granted after a successful one...
دریافت فوری متن کامل مقاله
امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات