How Bank Regulation and Lender Location Influence Loan Pricing

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Abstract

How do differences in a country's regulations regarding banking-commerce integration and the concentration of its banking industry influence the pricing of domestic and foreign loans? We are the first to address this issue in the context of pricing of individual loans and document the impacts of two aspects of bank regulation (banking-commerce integration and industry concentration) on loan pricing across 30 countries. We find that rules governing permissible levels of cross-ownership and industry concentration matter for financial outcomes. Banking-commerce integration lowers loan spreads for a certain degree of integration, however unrestricted integration leads to an increase in loan spreads. Further, the way in which integration matters differs between concentrated and competitive banking environments and also between domestic and foreign lenders. Our results support the notion that integration to a certain extent increases informational efficiencies.

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1. Introduction

How do differences in a country's regulations regarding banking-commerce integration and the concentration of its banking industry influence the pricing of domestic and foreign loans? We address this question in the present paper building on important prior work. A number of studies have examined the role of industry market concentration in determining loan pricing in the US (Berger *et al.*, 1998) and in selected international markets (Sapienza, 2002). Also, Barth, Nolle, and Rice (1997) document a wide range of banking structures and supervisory practices across 15 European Union countries, Canada, Japan, Switzerland, and the U.S. Drawing on their work, Demirguc-Kunt, Laeven, and Levine (2004) examine bank regulation, showing that differences in rules affect banks' net interest margins and overhead costs. In this paper we shift the level of investigation from bank profitability to the pricing of individual loans and document the impacts of two aspects of bank regulation (banking-commerce integration and industry concentration) on loan pricing across 30 countries.

Differences in the integration of banking and commerce reflect the presence (absence) of restrictions on banks' (non-financial firms') abilities to own or control non-financial firms (banks). Such restrictions affect the development of close relationships between borrowers and lenders and influence how lenders monitor borrowers and also the setting of loan contract terms. Given mutual ownership between banks and firms, the agency conflict between shareholders and debtholders in a firm may be reduced and it is easier for the bank to dispose of assets seized in a loan default (Prowse (1990), Haubrich and Santos (2005)). On the other hand, such mutual ownership may negatively impact the firm's investment efficiency and the bank's risk exposure. With large equity shares, banks are more likely to engage in connected lending allowing borrowers to undertake risky projects (Park (2000)).

We also examine the impact of banking concentration on loan pricing. Prior research articulates two contrasting views of the influence of banking concentration on bank performance. The market-power theory suggests that banks collude and use their market power to extract monopoly rents (Berger (1995)). On the other hand, the efficient-structure theory posits that banking concentration increases overall efficiency as more efficient banks grow more rapidly than less efficient ones (Corvoisier and Gropp (2002)). In the current study, we examine the extent to which banking concentration impacts loan prices of both foreign and domestic lenders by employing a large international sample. We separately identify foreign lenders headquartered outside the borrower's home country because, in contrast to domestic

lenders, they are less likely to have cross-ownership ties with borrowers and hence less likely to be affected by the benefits or costs of affiliation with borrowers.[1]

The main empirical findings of this paper are as follows. First, host countries' banking-commerce integration and banking concentration are important determinants of loan prices. This paper establishes the importance of bank regulations using loan-level data presenting evidence that the impact of concentration and banking-commerce integration on loan prices does not hold uniformly across the integration spectrum. Overall, while loan prices initially decline (for both domestic and foreign lenders) as rules governing integration are relaxed from a restricted regime to a regime which permits integration, it is followed by an increase in loan prices (for domestic lenders only) if rules governing integration are further relaxed to allow unrestricted integration. Second, we also find evidence of a non-linear relationship between bank regulations and loan pricing. Specifically, the benefit of the initial lower loan costs from domestic lenders vanishes in countries with higher banking concentration. At the same time, in such countries, foreign lenders also do not tend to provide favorable contract terms (lower loan prices) to attract borrowers. Thus, in countries with higher levels of banking concentration, the initial decline in loan prices is reversed, suggesting that the initial benefit to borrowers arising due to integration of banking and commerce is limited only to countries with a competitive banking sector. To a certain extent, our results reinforce those of Demirguc-Kunt *et al.* (2004) who find that regulatory differences play a significant role in explaining variations in bank profitability across countries. However, our finding that increased concentration is associated with higher loan prices is contrary to their result that this variable does not explain cross-bank operational performance.

Third, domestic and foreign lenders react differently to host countries' regulation practices. In countries which permit integration of banking and commerce (as opposed to those that either prohibit or restrict integration), domestic lenders tend to charge lower spreads due to the direct equity holdings and stronger relationships between banks and firms. On the other hand, this decline in spread is not observed for foreign lenders. Since foreign lenders lack the advantages of equity and lending relationships with borrowers relative to domestic lenders, they must exercise greater monitoring relative to domestic lenders, thus extracting similar loan rents as before. Fourth, in countries with even higher levels of integration (when integration is unrestricted) both domestic and foreign lenders charge higher spreads, suggesting that the benefits accruing due to better information flow as a result of higher integration are only limited to a certain level of integration. Fifth, our overall results suggest that failure to take lender location into account might lead to incorrect conclusions when analyzing the impact of bank regulation on loan pricing.

[1] In this study, we include both syndicated loans and non-syndicated loans. For classifying syndicated loans as foreign or domestic, we require that all lead lenders of the loan belong to either the foreign or domestic category while for classifying non-syndicated loans we require all lenders associated with the loan to belong to the same category, i.e., either foreign or domestic. We classify all loans not fulfilling these criteria as mixed loans.

Finally, we also present corroborative evidence that host countries' legal and institutional variables are important determinants of loan contracts terms. For instance, loan costs are lower in countries with established traditions of law and order, and more developed financial sectors. These results are consistent with those in prior studies such as Qian and Strahan (2005).

Our results are economically highly significant. An initial relaxation in rules permitting integration, leads to a decline in spreads of about 57% for domestic banks, while the spread reduction is only 7% for foreign banks. Further relaxation of rules, resulting in unrestricted integration, leads to a significant increase in loan spreads for both domestic (66%) and foreign (50%) banks. However, the initial decline in spreads for domestic banks is reversed in countries having a concentrated banking environment.

This paper contributes to the literature in two ways. To the best of our knowledge, this is the first paper which explicitly examines how host countries' banking-commerce integration and banking concentration impact the determination of loan pricing in a cross-country setting. Exploiting a relatively new database, we conduct an international study of the impact of banking regulation on loan pricing covering 30 developing as well as developed countries. We show that different countries have distinct bank regulation practices as well as varying levels of industry concentration and that these differences are reflected in loan pricing. Several of our results carry implications of interest to bank regulators considering policy changes. We find that introducing a moderate degree of flexibility for cross-ownership of banks and non-financial firms is associated with reduced loan costs which likely arise from information efficiencies. Further, our results suggest that greater industry concentration resulting from mergers raises loan costs.

Second, we establish that the impact of bank regulation variables on loan pricing differs between domestic and foreign lenders, and our result highlights the importance of incorporating lender location when analyzing the determinants of loan pricing.[2] In particular, in countries with somewhat relaxed rules on cross-ownership, domestic lenders offer lower loan prices but foreign lenders do not. We find no support for the view that competition and efficiencies introduced by foreign banks lead to lower spreads. These findings suggest that regulators should not necessarily regard liberalization of rules on foreign bank entry as a good prescription for reducing loan costs.

The remainder of this paper is organized as follows. In section 2, we briefly discuss the related literature and the primary proxies used to capture different countries' macro-level characteristics. We also outline our hypotheses. Section 3 describes the data. The results of our empirical tests are reported in Section 4. Section 5 concludes.

[2] Similar to this result of ours, Qian and Strahan (2005) find that domestic bank participation is negatively related to the loan interest rate. They argue, that since domestic banks have information advantages relative to foreign banks, foreign banks tend to charge higher loan spreads in deals where domestic banks are unwilling to fund a significant portion.

2. Country level characteristics and hypotheses

In this section, we first describe the host countries' characteristics of interest: banking-commerce integration and banking concentration and our hypotheses related to those variables. We follow with a description of the proxies we employ for host countries' legal and institutional characteristics. Our control variables are also discussed in this section.

2.1 Banking-commerce integration:

We first explore the integration of banking and commerce, an important characteristic of banking regulation which has significant impact on firms' investment decisions (John, John and Saunders (1994), Saunders (1994), and Prowse (1990), among others). We analyze the extent to which differences in the affiliation of banking and commerce across countries affect loan pricing as well as how this relationship varies between domestic and foreign banks. Our study employs two measures of the degree of regulatory restrictiveness on banking-commerce integration.[3] The first measure gauges restrictions on banks owning non-financial firms. The second measure looks at the ability of non-financial firms to own banks. For each of these dimensions of cross-ownership, we construct three dummy variables that we include in our regressions, each representing a different level of banking and commerce integration.[4]

Prior studies have documented the regulatory benefits and costs of banking-commerce integration. There are generally five primary causes for restricting banking-commerce integration (Barth, Caprio, and Levine, 2004). First, conflicts of interest may arise as banks engage in diverse activities. When they have large equity holdings, there are greater incentives for banks to finance risky projects of their portfolio firms, which lead to an increase in the firms' debt holdings and thus increase the risk of the bank's investment portfolio. Second, banks are more likely to expand their risk exposures if they are allowed to engage in a broader range of activities. Third, it is difficult to monitor complex banks. Fourth, banks may become so politically and economically powerful that they become "too big to discipline". Finally, large financial conglomerates may lead to less competition and inefficiency.

Banking theory can shed light on the possible impact of banking-commerce integration on loan pricing. The banking literature shows that banks act as delegated monitors. In the presence of imperfect

[3] The measures are obtained from a World Bank survey conducted on bank regulation and supervisory practices for 107 countries. The survey was updated through 2003. The survey is presented in the following link: http://wbln0018.worldbank.org/html/FinancialSectorWeb.nsf/SearchGeneral?openform&Banking+Systems&Databases. More details about the survey are available in Barth, Caprio and Levine (2004).

[4] The primary reason why we construct 3 dummies for each of these variables is to accurately capture the impact of each category of restriction on banking and commerce integration. Another alternative is to code these variables as dummies taking on increasing values as cross-ownership increases: 0 for countries in which such cross-ownership is prohibited, 1 representing restricted ownership, 2 for permitted ownership and 3 for unrestricted. However, this has the drawback of assuming a linear relationship and equal impacts of different regimes of integration on loan prices which may not necessarily be true.

and asymmetric information, banks serve as firm monitors, becoming informed lenders in the process (Diamond, 1984 and Fama, 1985). A bank is even closer and more informed lender when it owns equity in the firm because the close relationship between the lender and the borrower facilitates information flow and mitigates information asymmetry. In addition, lenders owning equity positions in firms can exercise greater monitoring and control. Similarly, when the firm owns or controls the bank, it may be able to receive financing from the bank at lower cost due to information efficiencies. Integrating banking and commerce leads to the reduction of agency costs and the costs of asymmetric information and also may reduce the cost of distorted risk-taking incentives by firms given the closer lender-borrower relationships (John, John, and Saunders, 1994). Further, cross-ownership may spur the growth of an active takeover market introducing enhanced market discipline on managers and reduce the agency costs of equity. The economic success of the German and Japanese economies is partly attributed to the direct equity links and lending relationships developed between banks and firms in those economies. Accordingly, we expect that loan financing cost may be lower given mutual equity links and close relationships between banks and firms.

On the other hand, as suggested by Prowse (1990), differences in banking-commerce integration may limit the degree to which large investors can reduce principal-agent conflicts between firms' shareholders and debtholders. Given the mutual equity holding between banks and firms, banks may engage in connected lending making improper transactions with their affiliates that increase the risk of bank assets rather than improve efficiency (Park, 2000). Since connected lending includes making loans to affiliated firms at lower cost, it provides a complementary motivation for our earlier prediction that loan costs should decline as equity links become closer.

We expect the integration of banking and commerce to affect loan pricing differently depending on lender location as foreign lenders likely lack the advantage of close equity and lending relationships with borrowers relative to domestic lenders.[5] Given potentially higher information costs, foreign lenders may charge higher loan spreads as compensation for their risk exposure. In this paper, we test a central hypothesis related to banking-commerce integration:

Hypothesis 1: Increasing openness to non-financial firms owning banks will have a different impact on loan pricing depending on the location of the lender group. We expect integration to be negatively associated with loan pricing in the domestic lender sample and positively associated with loan pricing in the foreign lender sample. We also examine the equity link from the opposite direction. Consistent with the first hypothesis, as rules allowing banks to own non-financial firms are relaxed we

[5] Berger, Klapper and Udell (2001) show that foreign bank lending goes primarily to larger firms. As a result, it is largely domestic banks which have lending (and possibly equity) relationships with domestic SMEs comprising a sizeable market segment.

expect liberalization to be negatively associated with loan pricing in domestic lender sample and positively associated in the foreign lender sample.

For both types of cross-ownership, the impact on loan prices may vary depending on the level of integration. It is possible that the costs associated with connected lending may outweigh the benefits arising from efficient information production, depending on the level of integration between banking and commerce and also on the channel through which this integration is achieved, i.e., whether banks are allowed to own non-financial firms or *vice versa*. The overall impact of integration on loan prices therefore remains an empirical question.

2.2 Banking concentration:

This paper employs two measures of banking concentration which are also obtained from the World Bank survey.

1). Concentration of assets measures the percentage of assets held by the five largest commercial banks in borrower countries.

2). Concentration of deposits replicates the measure for deposits.

Banking concentration in terms of assets varies across the countries in our sample, ranging from 20% (Germany) to 99.5% (Finland). It is important to point out that the banking concentration level should not be viewed as an indicator of financial development. For example, the U.S and the U.K. have asset concentration levels of 30% and 23%, respectively, while Peru and Mexico have concentration levels of 83% and 80%, respectively. For robustness, we employ the two alternative banking concentration measures noted above in our empirical tests.

In the literature, some studies argue that high concentration might lead to increased price collusion and monopoly rents in banking; banks with greater market power tend to charge higher interest rates (Berger, 1995). In particular, if banks highly familiar with the local economy have a comparative advantage in generating borrower information, they might use this advantage to extract rents from borrowers.[6] Accordingly, domestic lenders are expected to extract higher loan spreads in countries with high banking concentration. If foreign lenders are already established within a country, they may also collude with the domestic banks and charge a higher spread in a similar fashion. On the other hand, if foreign lenders are potential entrants in a market, they may provide favorable loan contacts terms to attract borrowers as a way to enter the banking sector since the presence of high banking concentration places tougher barriers of entry for foreign financial institutions.

[6] Alternatively, a positive relationship between loan costs and banking concentration may indicate that firms with lower quality might have access to credit in a more concentrated market as suggested by Peterson and Rajan (1995). The higher loan costs may not necessarily suggest bank collusion.

In contrast, the efficient-structure theory suggests that banking concentration increases overall banking efficiency (Corvoisier and Gropp (2002)). Instead of extracting monopoly rents, banks in highly concentrated markets enjoy economies of scale and hence price their services more competitively. In this context, foreign entrance into the banking sector promotes fierce competition between domestic and foreign lenders, producing competitive behavior and pricing. The market discipline resulting from the presence of foreign lenders is expected to be incorporated in loan pricing. Thus, according to the efficient-structure theory, both domestic and foreign lenders would provide competitive loan pricing.[7]

The impact of banking concentration on loan prices is therefore an empirical question. Furthermore, its influence on loan prices charged by foreign and domestic lenders may be different depending on whether foreign banks are established or new entrants within a market and also depending on whether the market power or the efficient structure theory dominates. We formalize and test this notion in the following hypotheses on banking concentration.

Hypothesis 2: Concentration of assets (deposits) may have different impacts on loan pricing between domestic and foreign lender groups. We hypothesize that it may be positively related to loan pricing in the domestic lender sample and we are agnostic about its sign in the foreign lender sample if the market power theory dominates.

Hypothesis 3: Concentration of assets (deposits) is predicted to be negatively related to loan pricing in both the domestic and foreign lender samples if the efficient structure theory dominates.

To assess the impacts of bank regulation on loan pricing, we add host countries' banking-commerce integration and banking concentration variables to the base model specified below, and examine how the addition of these variables influences loan pricing.

2.3 The Base specification:

The base model specification includes host countries' primary legal and institutional variables which are widely used in prior studies (Qian and Strahan, 2005 and Esty 2004), among others). Thus, in order to assess the effects of banking-commerce integration and banking concentration on loan pricing, we first need to account for the influence of legal and institutional variables. The legal and institutional variables used in this study are:

- Legal origin dummy variables: We include three legal-origin indicator variables in the regressions, Scandinavian-origin, French-origin, and German-origin (La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) (hereafter LLSV)). English origin is the omitted group in this study.

[7] Sengupta (2007) develops a theoretical model that demonstrates how better information production by domestic banks can offset any initial cost advantages enjoyed by foreign entrants. Since cross-ownership may promote improved information flow, there may be a significant interaction effect. We explore this below.

- Private credit adjusted: A measure of financial sector development, this variable is calculated as the value of credits by financial intermediaries to the private sector plus stock market capitalization divided by GDP. Our formulation adds stock market capitalization to the numerator of the measure widely used in prior studies (Levine and Zervos (1998), Beck *et al*. (2003), Levine *et al*.(2000), and Esty (2004), among others).
- Rule of law is an assessment of the law and order tradition in the country produced by the country risk rating agency, International Country Risk (ICR). Measured as an average of values for the months of April and October of the monthly index between 1982 and 1995, it is scaled from zero to 10, with lower scores for a weaker tradition for law and order (LLSV (1997)).[8]
- Creditor rights: This index of creditor rights introduced by LLSV is formed by adding 1 when: 1) the country imposes restrictions, such as creditors' consent or minimum dividends, to file for reorganization; 2) secured creditors are able to gain possession of their security once a reorganization petition has been approved (no automatic stay); 3) the debtor does not retain the administration of its property pending the resolution of the reorganization; 4) secured creditors are ranked first in the distribution of the proceeds that result from the disposition of the assets of a bankrupt firm. The index ranges from 0 to 4 (LLSV 1997, 1998). A higher value indicates stronger creditor rights.
- GAAP. An indicator of accounting quality. The dummy variable is set equal to one for countries where accounting practices for banks conform to U.S. GAAP accounting rules.[9]

In addition to legal and institutional variables, we bring into the regression several variables reflecting the efficiency of banks and banking regulators:

- Number of bank supervisors. Defined as the logarithm of the number of bank supervisors in a country plus one, this variable is a rough measure of the cost of regulation.
- Bank overhead costs. Greater overhead costs in a country's banking sector may be associated with lower efficiency.
- Bank assets owned by the government. Higher levels of government ownership are likely to signal lower efficiency.

We also introduce a number of control variables relating to characteristics of the loan and the lenders. In addition, we account for borrower-level risk within the data constraints of *Dealscan*. It is very

[8] In earlier versions of the paper, we also included a political stability variable drawn from Kaufmann, Kraay and Mastruzzi (2003) capturing the probability that the country's government may be overthrown in a violent manner. We later dropped this variable due to high colinearity with rule of law and creditor rights.

[9] The GAAP information is in response to question 3.11 in the banking regulation survey and comes from the World Bank dataset cited before.

difficult to obtain borrowers' financial information consistently across all 30 countries in our sample; hence we measure borrower risk using the credit ratings of borrowers, as described below.

- Six dummy variables to control borrower-level risk. Based on Moody's credit ratings of borrower's senior debt, we create 7 rating indicators, AAA, AA, A, BBB, BB, B, and NR. The rating indicator, B equals 1 if borrowers have credit ratings B or worse. The variable NR is 1 if borrowers have no credit rating. In our test, B is the omitted group.[10]
- Four dummy variables are included to control for loan purposes. The loan purposes could influence lenders' decisions on some loan contract terms as some projects are inherently riskier than others. The dummy variable, Recapitalization, equals 1 if the loan purposes are debt repayment, debtor-in-possession financing, or recapitalization; Acquisition equals 1 if loan purposes are acquisition lines, LBO/MBO, or takeover; a further dummy indicates whether the loan is for project finance. Other loan purposes are included in miscellaneous. General purpose (corporate purposes or working capital) is the omitted group.
- A dummy variable which equals 1 if the loan type is line of credit. Otherwise, it is zero. A line of credit facility provides an ongoing line of credit that may be drawn down, repaid and re-borrowed many times over the life of the facility. A line of credit facility is more likely to be associated with quantity risk (Ho and Saunders, 1983) as the expected size of the loan to be drawn down is often variable depending on the borrower's future circumstances. This quantity risk (amount of loan drawn down) would therefore affect the determination of loan spreads.
- Loan maturity. The logarithm of loan maturity is predicted to be positively associated with loan spread (Gottesman and Roberts, 2004). We define loan maturity as the number of days between the facility active date and the facility maturity date.
- Has-secured data dummy: This is a dummy variable which equals 1 if *Dealscan* records a non-missing value for the secured variable and 0 otherwise. We incorporate this variable in our regressions as many loan observations have missing secured status in *Dealscan.*
- Secured dummy: This dummy variable equals 1 if *Dealscan* reports the status of the loan as secured and 0 otherwise.[11] Banks grant secured loans to riskier borrowers. Despite the ability of

[10] In unreported regressions we also include 1 digit SIC dummy variables to control for the borrower's industry affiliation as a further proxy for risk. Our results remain qualitatively unchanged.

[11] In unreported regressions we also utilized a predicted secured variable. In the full data sample, many loan observations have missing secured status. We employed an instrumental variable approach to interpolate the missing values. In the first stage we run a logistic regression of secured status on various firm and loan specific characteristics. Specifically, we include the borrower's credit rating and industry classification to proxy for its credit risk. In addition we also include different loan characteristics such as loan size and loan purposes as additional independent variables. From this logit regression, we do both an in- and out-of-sample prediction of the probability of the loan being secured for our entire sample. We then employ this "predicted secured" as an additional regressor in our estimations. Note that, unlike secured status which is a binary dummy variable, predicted secured is a

security to mitigate risk, incomplete controls on risk lead to a positive link between the presence of security and loan spreads (Gottesman and Roberts, 2007).

- A covenant dummy variable which equals 1 if the loan facility has any type of covenants, including both financial and non-financial covenants. The inclusion of covenants in a loan facility requires the borrower to release detailed financial and/or accounting information to the lender(s) on a regular basis which may affect the loan price.
- Loan size is proxied by the natural logarithm of the tranche amount expressed in U.S. dollars. Large loans may have lower loan prices by virtue of the fact that large loans are secured by large companies - a group likely to be associated with less information asymmetry.
- Facility ratio quantified as the percentage of the deal composed by the loan facility, i.e., facility amount scaled by deal amount.
- A variable representing the number of lenders measured as the natural logarithm of one plus the number of lenders for each loan facility. The number of lenders impacts the determination of loan pricing for the reasons of risk-diversification, the complication of restructuring and renegotiation processes, and free-rider problems (Hao and Roberts (2007)).[12]

All the principal regression specifications in this paper include year fixed effects (1989-2004). Including year fixed effects allows us to absorb the influence of inflation and business cycles as well as any other omitted variable that shifts over time.

To differentiate lenders as domestic or foreign, we require information about lender and borrower location. We define a lender as foreign if its headquarters country is different from the borrower's. A loan facility is included in the foreign lender sample if all the lead lenders associated with the loan are not from the borrower's country; it is in the domestic lender sample if all the lead lenders are from the borrower country. We also include a mixed lender group in which some of the lenders are from the borrower's country and others are not.

3. Data and Sample Selection

Our loan data source is the *DealScan* database, which is supplied by the Loan Pricing Corporation (LPC). This database includes borrower and lender identities and locations, lender shares and roles, loan purpose, type, amount, contract date and price, as well as a number of non-price loan contract terms. In

continuous variable between zero and one. Our results remain qualitatively unchanged when we use this variable instead of the Has-secured and the Secured dummies.

[12] Since we control for the number of lenders of each facility, we exclude the syndicated dummy (which has been usually used in the literature) from our loan pricing regressions, since it is highly correlated (0.65) with the log of the number of lenders. Our results remain unchanged if we use the syndicated dummy instead of the log of the number of lenders.

DealScan, some of the "deals" involve more than one loan "facility" originated by the same borrower. In this study, we conduct our analysis at the facility-level, treating each loan facility as a separate loan. This is because deals with multiple lenders do not always involve the same group of lenders in all facilities.

[Table 1 here]

We use loan data for the period January 1989 to December 2004 where *Dealscan* provides non-missing values for both the loan spread and the maturity of the loan. We draw the borrower's country from *DealScan* and link it to country legal and institutional characteristics from LLSV (1997 and 1998), Levine (1998), and Demirguc-Kunt and Levine (2001).[13] In doing so, we get 66,289 loan facilities in total across 42 countries. In order to have a meaningful sample for each country in our regressions and to avoid an unbalanced sample, we drop the U.S. as it would have comprised 81% of the sample. At the other end of the scale, we also eliminate countries for which there are fewer than 50 loans.[14] Table 1 provides a calendar distribution of loans in our sample. Our final data set contains 12,468 loan facilities covering 30 countries. Of these, 1810 are from domestic lenders, 3872 from foreign and 6786 from mixed lenders.

[Table 2 here]

Table 2 shows the summary statistics of loan pricing and maturity (in days) across countries. In our empirical testing, the dependent variable is the natural logarithm of loan price for each loan facility. Loan price is measured in basis points by the all-in-spread drawn over the benchmark London Interbank Offered Rate (LIBOR). In *DealScan*, all-in-spread drawn is expressed as a spread over LIBOR which takes into account both one-time and recurring fees associated with the loan.[15] Loan maturity is defined as the number of days between the facility active date and the facility maturity date.

[Table 3 here]

The definitions of the primary variables are provided in Table 3. There are three sets of variables: legal and institutional, bank regulation, and loan-level variables. As discussed earlier, in the empirical tests, we add the loan variables as controls to account for their effects on loan pricing, and to control for borrower-level risk, we include borrower credit rating variables.

[Table 4 here]

[13] There are some potential limitations associated with the variables used to capture host countries' legal and institutional characteristics which are widely used in the literature. For example, the index of creditor rights is at a single date based on legal rules protecting against expropriation. In this study, our data sample covers from 1989 to 2004. We are unable to fully control for some of the country-level variables' alteration over the time.

[14] For robustness we also re-ran the regressions on a sample that excluded the US and countries that had fewer than 100 loans. In this case, our sample consisted of 11,957 loan facilities covering 23 countries. Our results remain qualitatively unchanged.

[15] In *Dealscan*, the all-in-spread drawn is defined as the coupon spread, plus any annual fee, plus any up-front fee divided by the maturity of the loan. For loans not based on LIBOR, LPC converts the coupon spread into LIBOR terms by adding or subtracting a constant differential reflecting the historical averages of the relevant spreads.

Table 4 shows the primary legal, institutional, and banking regulation proxies across 30 countries. It is clear that these country-level variables vary considerably across economies. For example, private credit adjusted which is a measure of financial sector development ranges from 0.20 (Ireland and Mexico) to 2.71 (Hong Kong). Rule of Law, an assessment of the law and order tradition in the country, varies from 2.08 (Colombia) to 10 (Australia, Belgium, Canada, Denmark, Finland, Netherlands, Norway, Sweden, and Switzerland) with higher scores on Rule of Law indicating stronger traditions of law and order. As for Creditor Rights, Colombia, France, Mexico, and Peru have the lowest rank (0) while Egypt, Hong Kong, South Africa, and the U. K. have the highest rank (4).

Turning to the system variables of primary interest in this study, a measure of banking concentration defined as the percentage of deposits held by the five largest banks in a given country varies from 21% (Germany) to Finland (99.7%). Table 4 also displays the extent to which non-financial firms are permitted to own banks and vice versa. Total prohibition and full unrestricted cross-ownership are relatively uncommon. Most of our sample countries either restrict or permit such cross-ownership. Although such permission remains subject to limitations, in contrast with restriction, it can have a powerful impact on corporate business. For example, among the countries permitting banks to own non-financial firms is Germany where banks control the majority of shares voted in annual meetings despite owning only 6% of control blocks in domestic firms. According to Macey and Miller (1997) the voting power of German banks is enhanced by the common practice of limiting voting rights to 5% to 15% irrespective of the actual number of shares owned. In comparison, in the UK cross-ownership is unrestricted but banks owning company shares do not enjoy an enhancement of their power through such voting rules. As a result, it remains an open question how moving from permitting cross-ownership subject to a set of rules to allowing unrestricted cross-ownership impacts loan pricing. We structure our tests below to address this issue.

[Table 5 here]

The correlation matrix of selected explanatory variables (the loan contract terms, the legal and institutional variables, and the banking regulatory variables) is presented in Table 5.[16] It indicates some simple relationships. The results show that higher concentration and closer lender-borrower relationships up to a certain degree (where more direct equity links between banks and firms are permitted) are associated with lower loan price. However, if equity links between banks and firms are completely unrestricted, then it could lead to higher loan prices. In addition, the correlations show that better institutions (more developed financial sector, greater creditor rights, and countries with better legal regimes) are negatively related to loan pricing. Of potential concern is the high negative correlation between the concentration variables and the creditor rights index. To address this issue, we eliminate

[16] A full correlation matrix is in the appendix, Table A5.

creditor rights from the regressions when we have either of the concentration variables present.[17] Another point that should be noted here is the high positive correlation between the has-secured and the secured variables, which is by construction. However, excluding these variables from the regressions does not affect our results at all and hence we choose to leave them in as they serve as an important control in loan pricing regressions (as shown in the prior literature by several papers, e.g., see Dennis, Nandy and Sharpe, 2000).

4. Empirical results

In this section we discuss our main result starting with a univariate comparison of loan prices in countries with different levels of banking commerce integration, as well as countries with high and low levels of banking concentration.

[Table 6 here]

As can be seen from Table 6, overall we find that easing of restrictions on banking commerce integration leads to a decrease in loan prices. This should, however, be interpreted with caution as these results do not control for other country, loan, and borrower specific factors that obviously affect loan prices; we introduce such controls in our multivariate analysis, which is discussed later.

Specifically we find that a movement from a prohibited or restricted regime to a regime which permits integration leads to quite a dramatic decrease in loan prices (around 11%), which is economically quite significant. Similarly, a movement from a prohibited or restricted regime to one allowing unrestricted integration leads to a decrease in loan prices by about 4%. However, a movement from a regime which already permits integration to one which allows unrestricted integration leads to an increase in loan prices (around 7.8%).[18] Overall, our results lend support to the notion that easing of restriction on banking-commerce integration to a certain extent may lead to better loan spreads for borrowers. With regard to the level of banking concentration, in general, we do not find any differences in loan prices across countries with high and low levels of concentration.[19]

4.1 Impact of Banking-Commerce Integration on Loan Prices

[17] In unreported regressions, we also have re-run all our tests after including the US data. In this case, we include the creditor rights variable in the regression as after the inclusion of the US data the correlation between creditor rights and the concentration variables is negligible. These results may be obtained from the authors upon request. Our results remain qualitatively unchanged.

[18] This result also supports our earlier conjecture that easing of restrictions on banking and commerce integration may not necessarily have a linear impact on loan prices. Thus, it is important to control for the easing of restrictions in phases and their respective impact on loan prices, which is our primary objective in this paper.

[19] The only exception is when we consider the log of loan price and classify the concentration of the banking sector based on deposits. In this case, we find that the loan spread is significantly lower in countries with high concentration. However, as mentioned before, this should be interpreted with caution since we do not control for other potential factors that may influence loan prices

Turning to our multivariate analysis, we add the measures of banking-commerce integration and banking concentration to the base specification model and examine the impacts of those variables on loan pricing among different data sets: full sample, domestic, foreign, and mixed lender samples.[20]

[Table 7 here]

The focus in Table 7 is on the impacts of banking-commerce integration variables on loan pricing. There are three sets of four regressions in Table 7 with the first set representing the base specification without the integration variables. The second set contains two dummy variables for non-financial firms owning banks and the third set includes dummies for banks owning non-financial firms. As explained earlier, to measure bank ownership of non-financial firms we combine prohibited and restricted as the omitted category and include dummy variables for permitted (Bnkown_nff2) and unrestricted (Bnkown_nff3).[21] For the first set of variables (non-financial firms owning banks), the data do not include a "prohibited category". Here, we treat restricted as the omitted category and as before include dummy variables for permitted (Nff_ownbnk2) and unrestricted (Nff_ownbnk3).[22]

For both sets of integration variables, each regression is run for a different sample: the full sample, domestic, mixed and foreign lender groups, respectively. In *Reg 5* to *Reg 8*, the variable, nff_ownbnk2, reflects the impact of permitting non-financial firms to own and control banks compared to the omitted group in which such cross-ownership is restricted. As stated in Hypothesis 1, we expect a negative relationship between this variable and loan pricing in the domestic lender sample but a positive relationship for foreign lenders. Consistent with these expectations, the results show that the coefficient of this variable is negative and significant for domestic and positive and significant for foreign banks (*Reg 6* and *Reg 8* in Table 7).[23] Our second variable, nff_ownbnk3, fails to attain significance in all the categories. Thus, while some degree of integration (a movement from a restricted regime to a regime permitting cross-ownership) leads to a decrease in loan prices; complete integration (a change from a restricted

[20] As an alternative to running separate regressions, similar insights can also be gained from running the model in one regression while including dummy variables for different lender categories interacted with our various explanatory variables. We do so in unreported regressions and our results remain qualitatively unchanged. We choose to report the separate regressions as this approach has the advantage of a more parsimonious display of results as well as easier interpretation of the economic significance of the various variables.

[21] We need to combine these 2 categories as in our sample we only have a single country (Chile) where banks are prohibited from owning non-financial firms. Thus just keeping one country as the omitted category in our regressions may not lead to robust results. Hence, we combine the prohibited and restricted category as the omitted category.

[22] Each dummy is either one if the country's rules fall in the stated category or zero otherwise. The category numbers are for ease of identification.

[23] Table 7 also reports results for the full sample and for mixed loans with some domestic and some foreign banks among the lenders. For the first dummy, nff_ownbnk2, which obtains positive significance, the mixed group provides a test of the reasonableness of our result. As expected, the coefficient for mixed loans lies between the coefficients for domestic and foreign.

regime to an unrestricted regime) is not associated with any decrease in loan cost to borrowers, which supports our earlier univariate results presented in Table 6.[24]

Hypothesis 1 goes on to reframe the impact of cross-ownership shifting the focus from cross-ownership by non-financial firms to one of banks owning such firms. *Reg 9* to *Reg 12* in Table 7 contains our two bank-ownership variables and tests the second part of Hypothesis 1. Consistent with our hypothesis, loans from domestic banks attract lower spreads as the rules governing bank ownership of non-financial firms become more relaxed. Comparing permitted ownership on the one hand against prohibited or restricted on the other, produces the negative coefficient on bnkown_ff2 in *Reg 10* significant at the 10% level. The coefficient for the next level of unrestricted ownership (bnkown_ff3) fails to attain significance for domestic banks, consistent with earlier, univariate results as well as with our anecdotal evidence from Germany and the UK.

Turning to foreign banks (*Reg 12*) reveals a highly significant, non-linear relationship between loan cost and bank ownership of non-financial firms. As ownership rules are relaxed initially from prohibited/restricted to permitted (nff_ownbnk2) loan costs decrease in contradiction of Hypothesis 1. Moving to the highest level of cross-ownership by banks (nff_ownbnk3) vs. prohibited/restricted is associated with increased costs as predicted by Hypothesis 1.[25] This result thus strongly supports our initial conjecture and our univariate results and demonstrates that varying the degree of banking commerce integration does not have a linear impact on loan prices.[26]

The overall economic significance of our results from *Reg 5* to *Reg 12* implies that while for domestic lenders, there is an initial decrease in loan price from anywhere between 36% to 44% depending on whether restrictions are lowered on banks owning non-financial firms or non-financial firms owning banks this is followed by an increase in loan prices if restrictions are eased further. For foreign lenders, the

[24] We also conduct a test of the impact on loan prices if a country moves from a permitted regime to an unrestricted regime. Consistent with our univariate results, we find that in this case for domestic lenders, the loan spread increases significantly contrary to the efficient information production hypothesis. For foreign lenders however, the impact is different depending on how we define integration. For non-financial firms owning banks, a movement from a permitted regime to an unrestricted regime leads to a decrease in loan prices for foreign lenders, while if banks own non-financial firms the effect is significantly positive for a similar move. A joint test of the significance of the two variables together yields an *F*-statistic of 16.38 in the domestic lender category and 18.85 in the foreign lender category, both significant at the 1% level. Further, we also test if the 2 variables are significantly different from each other; this test yields an *F*- statistic of 32.98 in the domestic lender category and 27.23 in the foreign lender category, both significant at the 1% level.

[25] It appears therefore, that when integration is achieved through banks owning non-financial firms, foreign banks that might enter a market through an equity stake in a non-financial firm also initially benefit due to efficient information production. This is clearly not possible when integration is achieved through non-financial firms owning banks, since in that case it is very unlikely that a non-financial firm in a country would be able to acquire a foreign bank, given the bank's overall global market share. However, even for foreign banks, further integration does not lead to more efficient information production, but rather seems to increase the riskiness of a bank's portfolio leading to an increased cost structure.

[26] The joint test of the significance of the two variables and the differences in the two variables are again significant at the 1% level in both the domestic and foreign lender categories.

overall increase in loan price ranges between 34% to 6% depending on whether restrictions are lowered on banks owning non-financial firms or non-financial firms owning banks respectively, thus supporting our Hypothesis 1.[27]

Taken together, the regression results in Table 7 suggest that borrowers pay lower rents to domestic lenders in countries which ease their restrictions and allow cross-ownership to a certain degree. Put another way, domestic lenders charge lower spreads to borrowers given closer banks' equity links. These results are consistent with the argument that direct equity links and close lending relationships developed between banks and firms provide lenders with incentives to become more informed and facilitate information transfer.[28] Lenders with equity holdings in firms can exercise monitoring more effectively and efficiently, which leads to reduced contracting costs. However, further easing of restrictions on cross-ownership leads to domestic lenders charging higher spreads, suggesting that the benefits gained due to informational efficiency at the initial stages are outweighed by the costs due to increased riskiness in the banks' portfolio, when unrestricted integration between banks and non-financial firms is allowed.

Relative to domestic lenders, foreign lenders are less likely to be familiar with the local economy or to have comparative advantages in generating borrower information, particularly so when foreign banks are not allowed to own firms in the domestic economy. The problem of information asymmetry is severe and thus information costs are relatively higher for foreign lenders. Therefore, relative to their domestic counterparts, foreign lenders must put forth greater effort to monitor borrowers effectively. This is consistent with findings in Qian and Strahan (2005) that, in the cases where domestic lender participation is less, foreign lenders charge higher loan rents due to lack of information advantages relative to domestic lenders. Further, foreign lenders might extract higher loan rents from borrowers who have equity relationships with other financial institutions because these links may increase the riskiness of the firm. Considering the potential increase in borrower risk, foreign lenders exercise greater monitoring and extract higher loan rents to compensate their greater risk exposure and the higher cost of distorted risk-taking incentives by borrowers. However, when foreign lenders are allowed to own firms in the domestic economy, they also benefit initially from more efficient information production, thus leading to lower spreads. Similar to domestic banks, this advantage also vanishes when complete integration is allowed.

[27] For domestic lenders however, the initial decrease in loan prices when a country moves from a restricted or prohibited regime to a permitted regime is not sustained if the country allows for even further integration. In that case, when a country moves from a permitted regime to an unrestricted regime, loan prices increase about 47% to 58%. It thus seems that further integration when integration is already permitted, does not lead to informational efficiencies.

[28] Our findings for domestic lenders in Table 7 have an alternate explanation. If connected lending prevails, subsidies to related firms could lower loan spreads. We explore and reject this alternate view below.

Our discussion of the results in Table 7 has so far concentrated on comparing regressions for domestic and foreign sub-samples focusing on the banking-commerce integration variables.[29] The other variables representing controls for legal and institutional features, the quality of bank supervision, banking system efficiency, and loan and borrower characteristics take on signs consistent with the results of prior studies. Reviewing these briefly, both increased maturity and the presence of security are associated with higher spreads. Loans generally carry lower spreads when borrowers are from countries with more developed financial systems (greater values of private credit adjusted) and characterized by the rule of law, strong creditor rights and the use of U.S. GAAP accounting. Further, increased regulatory costs (larger number of bank supervisors) and lower efficiency of the banking system (higher system overhead and greater government ownership of banks) positively impact spreads in the majority of regressions in Table 7.

Turning to borrower and loan features, except for the AAA category, spreads increase monotonically as we move down the rating scale toward the omitted B category.[30] Loan purpose dummies tend to increase spreads as these categories are regarded as more risky than the omitted general purposes. Larger loan facilities are associated with lower spreads as are loans with greater numbers of lenders. As expected, the presence of financial and non-financial covenants in loan contracts is linked to higher spreads.

4.2 Impact of Banking Concentration and Banking-Commerce Integration on Loan Prices

We next turn to the results of employing banking concentration variables only, reported in Table 8. Organized similarly to Table 7, Table 8 displays three sets of four regressions with the first set containing the base model.[31] The second set (*Reg 5* to *Reg 8*) reports results based on the measure of asset concentration while the third set reports results based on deposit concentration. For both measures, concentration is the percentage of assets (deposits) held by the largest five banks within a country. Within each set, we run each regression for a different sample: the full sample, domestic, mixed and foreign lender groups, respectively.

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[29] It should be noted at this point, that Table 7 analyzed the impact of banking-commerce integration on loan pricing in isolation, ignoring the impact that the concentration of the banking sector in a country may have on it. We feel that it is vitally important to account for the structure of a country's banking sector when analyzing the impact of integration on loan prices. We do this in the following section 4.2, and present the results in Table 9.

[30] Our sample contains only 61 loans out of 12,418 that are rated AAA. Of these, 4 are in the domestic lender category, 21 in the foreign lender category, and the remaining 36 in the mixed category. Thus, the counterintuitive result on this variable is probably due to this limited sample size.

[31] As discussed earlier, we eliminate the creditor rights variable from these regressions due to the high correlation between the creditor rights and the concentration variables. In unreported regressions (available upon request), that include US data, we are able to introduce creditor rights into the regressions since the correlation of creditor rights with concentration is insignificant after adding the US data to our sample. Our results remain qualitatively unchanged.

[Table 8 here]

Hypothesis 2 predicts that market power allows domestic banks to charge higher rates when concentration is high and at the same time it is agnostic about the rate charged by a foreign bank. Supporting this premise, *Reg 6* and *Reg 10* in Table 8 have significantly (at the 1% level) positive coefficients for the concentration measures for domestic banks. Furthermore, *Reg 8* and *Reg 12* also have significantly (at the 1% level) positive coefficients for foreign banks, thus supporting a strong form of the market power theory.[32] Thus, we do not find that concentration has differing impacts on pricing between domestic and foreign banks. As before, the mixed category of lenders has a coefficient that is in between that of the domestic and foreign category. Hypothesis 3 which posits the efficient structure theory and contends that competition and efficiencies introduced by foreign banks should lead to lower spreads for both domestic and foreign lenders is not supported by our empirical results.

Our results are also economically significant. For domestic lenders, *Reg 6* and *Reg 10* imply that for a one standard deviation increase in the concentration level, loan prices increase by 25.06% and 22.08% respectively. On the other hand, for foreign lenders this increase is much less at 8.64% (*Reg 8*) and 9.20% (*Reg 12*). Thus, while an increase in the concentration level of the banking sector of a country increases the loan spread charged to borrowers, it appears that this increase is significantly higher if the loan is sourced from domestic as opposed to foreign lenders.

As in Table 7, the other variables representing controls for legal and institutional features and loan and borrower characteristics generally take on signs consistent with the results of prior studies.[33] For example, for the borrower specific risk proxies, i.e., the credit ratings, we observe that spreads increase monotonically as we move down the rating scale toward the omitted B category. Also, larger loan facilities and loans with a larger number of lenders are associated with lower spreads.

The main findings and contribution of this paper are presented in Table 9 which displays the results when we include both banking-commerce integration and banking concentration variables together in the same regression. We present the results for banks owning non-financial firms and explore possible differences between this concept of integration and that defined by non-financial firms owning banks later

[32] While it would be ideal to separate the loans made by the foreign banks depending on whether they are new entrants in a country or whether they are already established in a country in order to more accurately test Hypothesis 2, it is beyond the scope of this paper to do so.

[33] One notable exception is the GAAP dummy denoting countries which conform to U.S. GAAP accounting principles. While this dummy mostly takes on its expected negative sign in Table 7, in Table 8 it only retains its negative sign in the domestic lender category. It becomes positive and significant in all the other regression specifications. While we expected this variable to be generally negative, this result is not necessarily puzzling, since several countries in our sample, such as Canada and U.K. while not conforming to U.S. GAAP, do conform to GAAP accounting principles, as defined by the Canadian and U.K. GAAP respectively. Additionally, there does not appear to be any serious correlation issues with this variable in our data. To be certain that the presence of this variable in the regressions do not influence our results, we re-estimated the specifications in both Table 7 and Table 8 after omitting the GAAP dummy. Our results remain qualitatively unchanged.

in Table 10. We are interested in analyzing the impact on loan prices due to the interaction between a country's level of integration between banking and commerce and its concentration of the banking sector, which we believe would affect the decision making process of a country's regulatory body when implementing changes in the level of restrictions on the country's banking-commerce integration. To conduct the test, we create two new variables, high concentration of asset (deposit) dummies, which equal 1 when a country's concentration of assets (deposits) is greater than or equal to the median level of concentration in our sample, and zero otherwise.[34] We also include two interaction terms - the products of the level of integration as measured by banks owning non-financial firms (Bnkown_nff2 and Bnkown_nff3) with the new concentration dummy variable.

[Table 9 here]

In Table 9 for domestic lenders (*Reg 2* and *Reg 6*), the coefficients for the banking-commerce integration and the banking concentration variables, carried over from Tables 7 and 8, are consistent with our predictions as well as with our earlier results except that the high-concentration dummies fail to attain statistical significance. For foreign lenders (*Reg 4* and *Reg 8*), there is one notable difference: the high-concentration dummy takes on its predicted negative sign supporting the efficient structure argument proposed in Hypothesis 3. A new result which becomes apparent in Table 9, as seen from the significantly negative coefficient on Bnkown_nff3, shows that an enhanced degree of financial integration (i.e., a movement from a regime permitting integration to one with unrestricted integration) is now associated with lower spreads for both domestic and foreign lenders *if and only if* the country has a competitive (less concentrated) banking sector in place.

The coefficients of the interaction terms are significantly positive for both domestic and foreign lenders. For domestic lenders, this indicates that the advantageous effects of integration on loan pricing are decreasing given high levels of banking concentration in host countries. One possible explanation is that the increased loan availability and lower loan cost in concentrated banking economies reduces the competitive advantage of the equity links between the bank and the firm. In prior studies, Peterson and Rajan (1995) point out that higher loan availability and lower loan cost are available for new and small firms in concentrated banking areas in the U.S. Moreover, Cao and Shi (2001) suggest that, with low screening costs, loan availability and loan prices are more favorable to borrowers in a concentrated market. Following this line of reasoning, in countries with high banking concentration, we expect that domestic lenders charge low loan rents and provide higher loan availability in order to obtain future surpluses from the borrowers, which is in line with Peterson and Rajan's (1995) argument. Further, the direct equity link

[34] We create these dummies and interact them with the integration dummies in order to analyze the impact of the interaction between concentration and integration on loan prices. In unreported regressions, we also interacted the level of concentration with the integration dummies and obtained qualitatively similar results. We report the results with the concentration dummies for ease of interpretation.

between the bank and the firm would lead to lower screening cost. Consequently, higher loan availability and lower loan costs are expected in concentrated markets as suggested by both these prior studies. Accordingly, direct equity relationships between the bank and the firm lead to lower loan costs while such benefits are offset by the presence of higher loan availability and lower screening costs associated with high banking concentration.

Further, *Reg 2* and *Reg 6* in Table 9 reveal that, for domestic banks, the favorable effects on loan pricing due to the equity link between the bank and the firm vanish in countries with high banking concentration (as the magnitude of the coefficient of the concentration dummy plus the interaction terms are comparable to that of the coefficients of bnkown_nff2 and bnkown_nff3). Tests for foreign lenders reveal similar results in *Reg 4* and *Reg 8*.

The results can be interpreted easily by examining the tests on the linear combination of the various variables in *Reg 2* and *Reg 4*, presented in the lower panel of Table 9.[35] First, similar to Table 7, test (1) shows that loan spreads increase for both domestic and foreign lenders if a country moves from a permitted regime to an unrestricted regime, and test (2) confirms that this result holds for domestic lenders only in countries with higher levels of concentration. Second, consistent with the results in Table 8, tests (3) and (4) show the impact of concentration on loan prices at different levels of integration and confirms the market power argument in Hypothesis 2 that higher levels of concentration lead to increased loan spreads. Third, consistent with our univariate results and the results presented in Table 7, tests (5) and (6) show that while for domestic lenders there is an initial decrease in loan spread when a country moves from a prohibited/restricted regime to one permitting integration, there is no such decrease for foreign lenders, which weakly supports our Hypothesis 1. However, when a country moves from a permitted regime to an unrestricted regime, loan spreads increase for both domestic and foreign lender groups. Finally, tests (7) and (8) highlight the importance of accounting for the level of banking concentration in a country, when analyzing the impact of an effect of banking-commerce integration on loan spreads. The overall results suggest that as restrictions on integration are relaxed gradually, borrowers in the country benefit from lower spreads from both domestic and foreign lenders. This supports our predictions in Hypothesis 1 for domestic lenders, but contradicts that for foreign lenders. However, if restrictions on banking-commerce integration are fully relaxed, borrowers pay a higher spread to domestic lenders, while there is no significant effect for foreign lenders. [36]

[35] Due to space constraints, we only present the linear combinations for *Reg 2* and *Reg 4*, however the results remain qualitatively unchanged even if we consider the linear combinations of the variables from *Reg 6* and *Reg 8*. These results are available from the authors upon request.

[36] Alternatively, in the presence of connected lending as discussed earlier, when banks own non-financial firms; firms may force their group banks to advance credit at subsidized rates or to fund excessively risky projects. Thus, one could speculate, that our results may also be explained by this argument. We pursue this in greater detail in the following section, 4.3, and present evidence arguing that our results are likely not driven by connected lending, but

Our results are generally consistent with several theoretical studies which have analyzed the impact of integration and concentration on loan pricing (e.g., see John, John, and Saunders, 1994 and Peterson and Rajan, 1995). Moreover, the results also highlight the importance of the interaction between the two and show that by not considering the concentration of the banking sector when analyzing the impact of banking-commerce integration on loan spreads, one may arrive at biased conclusions.

On our final pass through Table 9, we compare the signs of the coefficients on country, banking system, loan and borrower control variables with those attained earlier in Tables 7 and 8. Here, almost all the coefficients on the control variables are similar to what we expected and obtained earlier. The only exceptions are the positive signs for German origin and negative coefficients for government ownership.

4.3 Alternative Explanations

As mentioned earlier one can argue that some of our results in Tables 7, 8, and 9 are also consistent with the connected lending argument. Higher levels of integration between banks and firms might make connected lending more likely, resulting in spreads that do not reflect the true credit risk associated with a connected loan. For example, our results in Table 9 that banks charge higher spreads in countries with a more concentrated banking sector and higher levels of integration is consistent with the connected lending argument. In such countries, domestic banks may be forced to finance projects in group firms that are significantly riskier, thus leading to the observed higher spread. At the same time, foreign banks would also charge higher spreads, since they would incur greater monitoring costs on average if there is a greater risk that in such countries the loan would not be used for the declared purpose.

[Table 10 here]

In order to proxy the degree of connected lending in different countries, we utilize the percentage of non-performing loans to assets in that country.[37] Table 10 presents some very interesting results. Panel A shows that if non-financial firms own banks, the percentage of non- performing loans to asset increases monotonically with the level of integration. However, in Panel B we show that if banks own non-financial firms, the percentages of non-performing loans decrease monotonically with the level of integration. Additionally, Panel C shows that for any given level of integration, the percentage of non performing loans in the case when banks own non-financial firms is significantly lower than if non-financial firms

rather by informational efficiencies.

[37] The intuition behind this proxy is that if a greater degree of connected lending exists in certain countries, it would lead to a substantial increase in the riskiness of such loans thus increasing the default rates on loans. We are unable to obtain this variable for all the countries in our sample and thus the results presented in Table 10 include 23 of the 30 countries in our sample for which we were able to obtain this data.

own banks.[38] Further, Panels D and E document that a higher level of concentration leads to a lower percentage of non- performing loans to assets.

Focusing on the distinction between banks owning non-financial firms and non-financial firms owning banks provides us a nice way to test if our results are driven by the connected lending argument. It does not appear to be so. As shown in Table 9, higher levels of concentration and higher degree of integration as measured by banks owning non-financial firms (the two interaction terms) lead to higher loan spreads, which is exactly the opposite of what we would have expected had connected lending been the primary driver of our results. This is because, as shown in Table 10, a higher degree of concentration and a higher level of integration (as measured by banks owning non-financial firms) both lead to a lower percentage of non- performing loans and thus a lower degree of connected lending.

4.4 Robustness Issues

Our first robustness check reruns our tests introducing clustering at the country level in computing standard errors to correct for possible cross-correlation biases.[39] To conserve space, we include Table 11 (Table 9 with clustering) to illustrate this robustness check in detail since this table displays our complete model with the interaction terms.[40] In a clustered regression, in order for the standard errors to be meaningful and in order to implement an *F*-test for the structural model, the number of constraints in the regression must be fewer than the number of clusters so that the variance-covariance matrix in the clustered regression may be estimated correctly. In order to reduce the number of regressors below the number of countries, we drop control variables with lower levels of significance in the original regressions.

[Table 11 here]

To assess the robustness of our findings to the introduction of clustering, we compare the results in Table 11 with clustering to those in the original Table 9. Generally, all our results survive as coefficients retain the same signs and in almost all cases similar levels of significance. The only exception are that the Rule of Law variable which looses its significance in some of the specifications and, in two cases the German origin dummy switches sign at a marginal significance level.[41] The economic significance of our variables of interest also remains similar to that in Table 9 Panel B.

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[38] The number of observations in Panel C is different from those in Panels A and B, since in Panel C we only consider loans in countries which allow either one or the other type of integration, in order to perform a clean test. Thus, loans in countries which have the same level of restrictions on both non-financial firms owning banks as well as banks owning non-financial firms are removed from the sample.

[39] We thank a referee for pointing out the need for this robustness check.

[40] Tables 7 and 8 with clustering are available from the authors upon request. Our results remain qualitatively unchanged.

[41] Since in the clustered regressions we drop certain variables the overall sample size of our regressions increases somewhat. This is because for some of the country specific variables that we dropped, such as the number of bank supervisors, we did not have data for every country in our sample which resulted in the somewhat smaller sample

[Table 12 here]

In a second set of robustness checks, in Table 12 we rerun the regressions in Table 9 including unrated borrowers only. If unrated borrowers are smaller firms with limited access to credit as suggested by Falkender and Petersen (2006), treating them as another rating class, as we do to this point, may be misleading.[42] Our results remain qualitatively unchanged, with only the interaction terms of high concentration and Bnkown_nff2 (hca_bnk2 and hcd_bnk2) failing to attain significance in the domestic lender category. Comparing the number of observations in the two tables, it seems that the percentage of unrated borrowers' that source loans from domestic and mixed lenders is greater than those who source loans from foreign lenders.

[Table 13 here]

Since only about 5% of the loans in our sample are sourced prior to 1994, our third set of robustness checks again reruns the regressions in Table 9 including only loans which originated in 1994 and later. Generally, all our results remain qualitatively unchanged as coefficients retain the same signs and similar levels of significance. The only exception is the hca_bnk2 and hcd_bnk2 variables in the domestic category which fails to attain significance.

[Table 14 here]

Finally, we re-estimate the regressions in Table 9, introducing the sample of US loans and removing our constraint of keeping only countries with greater than 50 loans. In this setup, since our sample becomes relatively unbalanced, we employ the bootstrap approach and examine whether excluding these countries from our analysis had biased our earlier results in any way. For each regression, the standard errors are calculated by drawing repeated samples 1,000 times. These results are presented in Table 14. Comparing the results in Table 14 to those in Table 9 reveals that our earlier results remain qualitatively unchanged with the primary variables of interest retaining similar levels of significance in all the regressions.

5. Conclusion

This paper presents evidence on the ways in which international differences in bank regulation and industry concentration impact loan pricing, how the impacts differ between domestic and foreign lender groups, and highlights the importance of bank regulations for financial outcomes using *loan-level* data. We find that host countries' banking-commerce integration and banking concentration are important

size previously.

[42] We run this set of tests for unrated borrowers as opposed to rated borrowers only, since rated borrowers are a minority in our sample and if we did the latter, we lose a lot of the cross country variation in our regressions, especially in the domestic category. Specifically, we end up with only 154 observations in the domestic category which are mostly distributed amongst 3 countries.

determinants of loan pricing, along with legal and institutional characteristics. Moreover, lender location (domestic vs. foreign) plays an important role in the determination of loan pricing. For example, in countries allowing cross-ownership, domestic lenders are more likely to have close direct equity links with borrowers. As a result, they charge lower spreads while foreign lenders extract higher loan rents in compensation for their exposure to greater information asymmetry. Connected lending activities in which banks extend loans at subsidized rates to affiliated firms provide a competing explanation for our finding. We reject this alternative because we find that higher concentration and freer integration are associated with higher spreads exactly opposite to the implications of connected lending.

Further, the favorable effects of equity links between banks and firms on loan pricing in the domestic lender group vanish in countries with high banking concentration. In addition, we provide evidence that greater industry concentration is associated with increased loan pricing consistent with the market-power view (Berger, 1995). In countries with higher banking concentration, foreign lenders do not tend to provide more favorable contract terms to attract borrowers.

Our results carry important implications for the shaping of regulations on cross-ownership and merger rules which impact industry concentration. Greater concentration is associated with higher loan costs while a moderate degree of flexibility for cross-ownership enhances information efficiency and reduces spreads. Since this spread reduction occurs only at domestic banks, our research questions whether opening a market to foreign competition necessarily results in lower borrowing costs.

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Table 1: Annual Distribution of Loans in Sample

This table shows the calendar distribution of loans in our sample after removing loans made to US borrowers and loans in countries where the total number of loans were less than 50. We use loan data for the period January 1989 to December 2004 where *Dealscan* provides non-missing values for both the loan spread and the maturity of the loan. We define lenders as domestic if the borrower country is the same as the lender country as reported in *Dealscan*. Similarly, we define foreign lenders if the borrower country is not the same as the lender country. For loans with multiple lenders, we consider the location of all the lead lenders. Thus, for syndicated loans we define the lender to be domestic or foreign if all lead lenders in the loan are domestic or foreign, otherwise it is categorized as a mixed lender group. The table below provides the annual distribution of the total number of loans as well as the distribution of the number of loans by each lender category.

Year	Number of Loans	Percentage of Loans	Number of Loans by Domestic Lenders	Number of Loans by Mixed Lenders	Number of Loans by Foreign Lenders
1989	149	1.2	62	24	63
1990	160	1.28	45	63	52
1991	74	0.59	23	24	27
1992	89	0.71	20	26	43
1993	160	1.28	34	47	79
1994	363	2.91	58	144	161
1995	418	3.35	53	164	201
1996	518	4.15	70	169	279
1997	700	5.61	54	324	322
1998	851	6.83	70	422	359
1999	1,197	9.6	127	677	393
2000	1,383	11.09	153	801	429
2001	1,376	11.04	208	821	347
2002	1,287	10.32	181	806	300
2003	1,442	11.57	219	921	302
2004	2,301	18.46	433	1,353	515
Total	12,468	100	1,810	6,786	3,872

Table 2: Summary statistics of Loan pricing and Loan maturity across Countries

This table shows some summary statistics of loan pricing and loan maturity across the 30 countries in our data sample. Loan price and loan maturity are obtained from the *DealScan* database. Loan price is measured in basis points by the all-in-spread drawn over the benchmark London Interbank Offered Rate (LIBOR). In *DealScan*, all-in-spread drawn is expressed as a spread over LIBOR which takes into account both one-time and recurring fees associated with the loan. The all-in-spread drawn is thus defined as the coupon spread, plus any annual fee, plus any up-front fee divided by the maturity of the loan. Loan maturity id defined as the number of days between the facility active date and the facility maturity date.

Country	Number of Loans	Loan Price			Maturity		
		Mean	Median	SD	Mean	Median	SD
Argentina	257	252.56	225	152.32	1269.33	1096	892.67
Australia	163	73.80	50	87.39	2525.96	1827	1406.76
Belgium	151	139.06	90	121.72	1871.01	1826	993.21
Brazil	266	272.78	250	137.41	1206.41	1095.5	919.80
Canada	1,150	192.04	175	132.14	1309.89	1096	871.95
Chile	239	113.16	70	115.51	1784.93	1826	744.32
Colombia	97	238.34	225	126.32	1748.33	1826	805.92
Denmark	90	105.81	46.25	116.43	1926.01	1826	744.41
Egypt	57	98.89	72	69.42	1907.02	1095	1476.88
Finland	172	81.20	45	87.21	1990.01	1826	675.03
France	1,281	152.04	150	112.15	2071.02	2191	913.02
Germany	815	182.00	212.5	131.79	2073.36	2374	954.72
Greece	184	87.45	76.25	59.72	1767.79	1825	1078.34
Hong Kong	106	75.46	52.5	70.33	1418.60	1169.5	706.03
Ireland	168	140.40	130	117.62	2118.69	1826	1141.00
Italy	534	124.71	100	104.96	2078.46	1827	1104.32
South Korea	50	128.08	110	107.04	1844.38	1099	1472.84
Mexico	441	201.40	175	133.61	1543.54	1461	951.40
Netherlands	588	166.94	150	117.98	1951.79	1962	1024.84
Norway	285	79.86	40	85.63	1924.43	1826	805.35
Peru	54	255.80	272.5	131.67	1817.56	1461	1002.14
Portugal	98	80.55	40	77.23	2089.79	1826	1265.71
South Africa	140	88.27	66.25	68.97	1137.71	1095	662.72
Spain	813	110.30	90	90.70	2364.08	2192	1114.45
Sweden	337	95.63	45	101.84	1886.19	1826	817.42
Switzerland	246	124.95	77.5	116.14	1637.25	1825	1034.04
Taiwan	115	96.69	80	49.92	2100.84	1826	1028.49
Turkey	352	112.04	85	83.35	805.55	365	950.79
United Kingdom	3,154	147.30	125	113.52	1974.25	1826	1021.52
Venezuela	65	205.60	200	126.77	1963.97	1826	1292.05
Total	12,468	149.13	125	120.99	1854.65	1826	1045.61

Table 3: Definitions of key dependent and independent variables

Three legal origin dummy variables are from LLSV (1998). English origin dummy variable is the omitted group in this study. Private credit is from Beck, Demirguc-Kunt and Levine (2000). Rule of Law and Creditor Rights both are from LLSV (1997, 1998). The banking regulation and supervision variables are all from a World Bank's survey on bank regulation and supervision across 107 countries. The data is updated to 2003. The loan specific variables are from *DealScan.*

Legal and Institutional Variables	
English Origin Dummy	A dummy variable which equals 1 (0 otherwise) if the borrower country is of English legal origin. (omitted category)
French Origin Dummy	A dummy variable which equals 1 (0 otherwise) if the borrower country is of French legal origin.
German Origin Dummy	A dummy variable which equals 1 (0 otherwise) if the borrower country is of German legal origin.
Scandanavian Origin Dummy	A dummy variable which equals 1 (0 otherwise) if the borrower country is of Scandanavian legal origin.
Private Credit Adjusted	Calculated as the value of credits by financial intermediaries to the private sector plus stock market capitalization scaled by GDP.
Rule of Law	An index variable scaled from 0 to 10, with lower scores for a weaker tradition for law and order of the borrower country.
Creditor Rights	An index measuring the borrower country's overall creditor rights, ranging from 0 to 4.
GAAP Dummy	A dummy variable which equals 1 for countries which conform to GAAP accounting.
Bank Regulation and Supervision Variables	
Non-Financial Firms owning Banks	
Nff_OwnBnk1	A dummy variable which equals1 if it is "restricted" in a country for non-financial firms to own banks. (omitted category)
Nff_OwnBnk2	A dummy variable which equals 1 if it is "permitted" in a country for non-financial firms to own banks.
Nff_OwnBnk3	A dummy variable which equals 1 if it is "unrestricted" in a country for non-financial firms to own banks.
Banks owning Non-financial Firms	
Bnkown_nff1	A dummy variable which equals 1 if it is either "prohibited" or "restricted" in a country for banks to own non-financial firms. (omitted category)
Bnkown_nff2	A dummy variable which equals 1 if it is "permitted" in a country for banks to own non-financial firms.
Bnkown_nff3	A dummy variable which equals 1 if it is "unrestricted" in a country for banks to own non-financial firms.
Concentration of Assets	Percentage of assets held by 5 largest banks - measure of concentration of assets.
Concentration of Deposits	Percentage of deposits held by 5 largest banks - measure of concentration of deposits.
Ln(Bank Supervision)	Log of (1 + number of bank supervisors in country).
Bank Overhead Costs	Total overhead costs of the banking sector in the country.
Bank Assets Govt Owned	Percentage of bank assets owned by the government.
High_ConcA	High concentration of asset dummy which equals 1 if asset concentration is >=median.
High_ConcD	High concentration of deposit dummy which equals 1 if deposit concentration is >=median.
Hca_nff2	Interaction term (high_conca*nff_ownbnk2).
Hca_nff3	Interaction term (high_conca*nff_ownbnk3).
Hcd_nff2	Interaction term (high_concd*nff_ownbnk2).
Hcd_nff3	Interaction term (high_concd*nff_ownbnk3).
Hca_bnk2	Interaction term (high_conca*bnkown_nff2).
Hca_bnk3	Interaction term (high_conca*bnkown_nff3).
Hcd_bnk2	Interaction term (high_concd*bnkown_nff2).
Hcd_bnk3	Interaction term (high_concd*bnkown_nff3).
Loan Specific Variables	

Ln(Loan Price)	Natural logarithm of all-in-spread drawn which is defined as the coupon spread, plus any annual fee, plus any up-front fee divided by the maturity of the loan. For loans not based on LIBOR, the LPC converts the coupon spread into LIBOR terms by adding or subtracting a constant differential reflecting the historical averages of the relevant spreads.
Ln(Maturity)	The natural logarithm of the number of days between the facility active date and the facility maturity date.
Has Secured	A dummy variable which equals 1 if *Dealscan* records a non-missing value for the secured variable and 0 otherwise.
Secured	A dummy variable equals 1 if *Dealscan* reports the status of the loan as secured and 0 otherwise.
Ln(Loan Size)	The natural logarithm of the tranche amount expressed in U.S. dollars.
Facility Ratio	The percentage of the deal composed by the loan facility, i.e., facility amount scaled by deal amount.
Ln(Number of Lenders)	Measured as the natural logarithm of one plus the number of lenders for each loan facility
Line of Credit Dummy	A dummy variable which equals 1 if the loan type is line of credit and 0 otherwise.
Covenant Dummy	A dummy variable which equals 1 if the loan facility has any type of covenants.
Recapitalization	A dummy variable which equals 1 if the loan purposes are debt repayment, debtor-in-possession financing, or recapitalization.
Acquisition	A dummy variable which equals 1 if loan purposes are acquisition lines, LBO/MBO, or takeover.
Project Finance	A dummy variable which equals 1 if loan purpose is Project Financing.
Miscellaneous	A dummy variable which equals 1 if loan purpose is other purposes.

Table 4: Brief description of legal, financial and banking variables

The legal origin variable is following that in LLSV (1997, 1998). The various variable definitions are as in Table 2. Both Rule of Law and Creditor Rights are from LLSV(1998). Banks owning non-financial firms measures restrictions on the abilities of banks to own and control non-financial firms. Non-financial firms owning banks measures restrictions on the abilities of non-financial firms to own and control banks. The five banking regulation and supervision variables are all from a survey conducted by the World Bank.

Country	Creditor Rights	Rule of Law	Private Credit Adjusted	Concentration of Assets	Concentration of Deposits	Ln(Bank Supervision)	Legal Origin	Non-Financial Firms own Banks	Banks own Non-financial Firms	Conforms to U.S. GAAP Standards
Argentina	1	5.35	0.30	49.90	49.50	5.69	French	Permitted	Restricted	0
Australia	1	10.00	1.46	76.00	74.00	3.71	English	Permitted	Permitted	1
Belgium	2	10.00	0.76	88.00	87.00	4.23	French	Permitted	Permitted	0
Brazil	1	6.32	0.55	53.60	62.90	6.73	French	Unrestricted	Unrestricted	1
Canada	1	10.00	0.93	80.00	87.40	5.30	English	Restricted	Permitted	0
Chile	2	7.02	1.26	60.80	61.70	4.69	French	Permitted	Prohibited	0
Colombia	0	2.08	0.29	41.00	41.00	5.14	French	Permitted	Restricted	0
Denmark	3	10.00	0.81	90.00	80.50	3.43	Scandinavian	Permitted	Restricted	0
Egypt	4	4.17	0.60	61.80	63.10	5.57	French	Permitted	Restricted	0
Finland	1	10.00	1.02	99.50	99.70	3.71	Scandinavian	Permitted	Permitted	0
France	0	8.98	1.15	60.00	70.00	6.31	French	Unrestricted	Permitted	0
Germany	3	9.23	0.94	20.00	21.00	7.11	German	Permitted	Permitted	0
Greece	1	6.18	0.47	73.90	76.20	4.62	French	Unrestricted	Permitted	0
Hong Kong	4	8.22	2.71	42.00	58.00	4.84	English	Restricted	Permitted	0
Ireland	1	7.80	0.20	.	.	3.30	English	Permitted	Permitted	0
Italy	2	8.33	0.69	51.20	52.20	5.99	French	Restricted	Permitted	0
South Korea	3	5.35	1.24	70.10	69.80	4.91	German	Permitted	Restricted	1
Mexico	0	5.35	0.20	80.18	80.32	.	French	Restricted	Restricted	1
Netherlands	2	10.00	1.34	88.10	90.70	5.21	French	Permitted	Unrestricted	0
Norway	2	10.00	0.82	84.00	86.00	3.93	Scandinavian	Restricted	Permitted	0
Peru	0	2.50	0.25	82.50	85.06	4.80	French	Permitted	Permitted	0
Portugal	1	8.68	0.62	79.60	79.00	5.13	French	Permitted	Restricted	0
South Africa	4	4.42	2.00	75.20	77.30	4.51	English	Permitted	Permitted	0
Spain	2	7.80	1.00	53.20	43.70	5.71	French	Permitted	Unrestricted	0
Sweden	2	10.00	1.05	62.00	90.00	3.66	Scandinavian	Permitted	Unrestricted	1
Switzerland	1	10.00	2.37	72.00	69.00	4.56	German	Unrestricted	Permitted	1
Taiwan	2	8.52	.	38.40	34.00	6.35	German	Restricted	Restricted	1
Turkey	2	5.18	0.21	55.64	57.00	4.32	French	Permitted	Permitted	0
United Kingdom	4	8.57	1.98	23.00	24.00	5.71	English	Unrestricted	Unrestricted	0
Venezuela	.	6.37	0.28	56.80	51.94	4.75	French	Permitted	Restricted	0
Sample Means	1.79	7.55	0.95	64.43	66.28	4.96	-	-	-	0.23

Table 5: Correlation Matrix of Loan Contract terms, Legal and Institutional Variables, and Banking Regulatory and Supervision Variables.

The legal origin variable is following that in LLSV(1997, 1998). Private credit adjusted is a measure of host countries' financial sector development, calculated as the value of credits by financial intermediaries to the private sector plus stock market capitalization scaled by GDP. Rule of Law is an assessment of the law and order tradition in host countries. Creditor Rights is a measure of host countries' basic legal protections against borrower expropriation. Both Rule of Law and Creditor Rights are from LLSV(1998). Nff_OwnBnk2 and Nff_OwnBnk3 are dummies as defined in Table 2 which measure the degree of integration of Non-financial firms owning banks. Bnkown_nff2 and Bnkown_nff3 are dummies as defined in Table 2 which measure the degree of integration of banks owning non-financial firms. Concentration of assets measures the percentage of assets held by the five largest commercial banks in borrower countries. Concentration of deposits measures the percentage of deposits held by the five largest commercial banks in borrower countries.

	Ln(Loan Price)	Ln(Maturity)	Has Secured	Secured	English Origin Dummy	French Origin Dummy	German Origin Dummy	Scandanavian Origin Dummy	Private Credit Adjusted	Rule of Law
Ln(Loan Price)	1.000									
Ln(Maturity)	0.214	1.000								
Has Secured	0.082	-0.043	1.000							
Secured	0.152	0.000	0.852	1.000						
English Origin Dummy	0.050	-0.044	0.126	0.119	1.000					
French Origin Dummy	0.024	-0.001	-0.084	-0.068	-0.713	1.000				
German Origin Dummy	0.035	0.031	-0.045	-0.055	-0.262	-0.274	1.000			
Scandinavian Origin Dummy	-0.176	0.050	-0.027	-0.035	-0.237	-0.248	-0.091	1.000		
Private Credit Adjusted	-0.004	0.091	-0.026	-0.025	0.502	-0.464	0.076	-0.146	1.000	
Rule of Law	-0.090	0.158	0.064	0.053	0.427	-0.654	0.196	0.216	0.589	1.000
Creditor Rights	-0.037	0.061	-0.083	-0.090	0.568	-0.574	0.075	-0.062	0.528	0.326
GAAP Dummy	-0.039	-0.036	0.013	0.006	-0.154	-0.103	0.163	0.299	0.024	-0.045
Nff_OwnBnk2	-0.055	0.011	-0.032	-0.043	-0.537	0.292	0.253	0.176	-0.289	-0.267
Nff_OwnBnk3	0.052	0.071	-0.109	-0.095	0.379	-0.162	-0.134	-0.255	0.418	0.191
Bnkown_nff2	-0.029	-0.088	0.071	0.077	-0.254	0.052	0.327	0.019	-0.304	-0.056
Bnkown_nff3	0.018	0.105	-0.061	-0.067	0.375	-0.188	-0.283	-0.036	0.445	0.255
Concentration of Assets	-0.068	-0.093	0.130	0.133	-0.380	0.354	-0.259	0.325	-0.324	-0.110
Concentration of Deposits	-0.056	-0.104	0.127	0.130	-0.352	0.303	-0.273	0.382	-0.314	-0.083
Ln(Bank Supervision)	0.198	0.081	-0.063	-0.056	-0.020	0.119	0.375	-0.592	-0.008	-0.045
Bank Overhead Costs	0.029	-0.089	-0.036	-0.050	-0.111	0.020	0.004	0.164	-0.259	-0.323

	Creditor Rights	GAAP Dummy	Nff_Own Bnk2	Nff_Own Bnk3	Bnkown _nff2	Bnkown _nff3	Concentration of Assets	Concentration of Deposits	Ln(Bank Supervision)	Bank Overhead Costs
Creditor Rights	1.000									
GAAP Dummy	-0.194	1.000								
Nff_OwnBnk2	-0.078	0.072	1.000							
Nff_OwnBnk3	0.247	0.040	-0.696	1.000						
Bnkown_nff2	-0.551	-0.050	-0.105	-0.268	1.000					
Bnkown_nff3	0.618	0.095	-0.080	0.399	-0.865	1.000				
Concentration of Assets	-0.708	0.161	0.227	-0.509	0.408	-0.463	1.000			
Concentration of Deposits	-0.731	0.241	0.150	-0.447	0.436	-0.466	0.969	1.000		
Ln(Bank Supervision)	0.069	-0.292	-0.230	0.324	0.014	0.068	-0.565	-0.544	1.000	
Bank Overhead Costs	-0.112	0.043	0.129	-0.079	0.121	-0.183	0.066	0.050	-0.149	1.000

Table 6: Univariate Comparison of Loan Prices.

This table presents a univariate comparison of loan prices in countries with different levels of banking and commerce integration as well as countries with high and low levels of banking concentration. We present the comparison both in terms of the level of the loan price as well as the natural logarithm of loan prices which is our dependent variable in the multivariate analysis. Panel A presents the comparison in terms of restrictions on non-financial firms owning banks; Panel B in terms of banks owning non-financial firms; Panel C defines banking concentration in terms of bank assets; while Panel D defines banking concentration in terms of bank deposits. *t*-statistics are presented to test for differences in means across the different categories of restrictions and across high and low concentration levels.

Panel A - Non Financial Firms owning Banks					
Restrictions on Non-Financial Firms owning Banks	Number of Observations	Loan Price		Log Loan Price	
		Mean	Median	Mean	Median
Prohibited or Restricted	2631	158.93	125.00	4.68	4.83
Permitted	4656	140.91	100.00	4.54	4.61
Unrestricted	5131	151.77	130.00	4.66	4.87
t-test (Permitted - Prohibited/Restricted)		-5.99***		-5.82***	
t-test (Unrestricted - Permitted)		4.50***		6.12***	
t-test (Unrestricted - Prohibited/Restricted)		-2.47**		-0.85	

Panel B - Banks Owning Non-Financial Firms					
Restrictions on Banks owning Non-Financial Firms	Number of Observations	Loan Price		Log Loan Price	
		Mean	Median	Mean	Median
Prohibited or Restricted	1459	172.33	135.00	4.80	4.91
Permitted	5801	145.55	117.50	4.57	4.77
Unrestricted	5158	146.80	125.00	4.62	4.83
t-test (Permitted - Prohibited/Restricted)		-7.41***		-7.91***	
t-test (Unrestricted - Permitted)		0.55		2.77***	
t-test (Unrestricted - Prohibited/Restricted)		-7.08***		-6.34***	

Panel C - Concentration of Assets					
Concentration of Assets	Number of Observations	Loan Price		Log Loan Price	
		Mean	Median	Mean	Median
High	6359	149.87	115.00	4.61	4.74
Low	6059	148.53	125.00	4.63	4.83
t-test (High - Low)		0.62		-1.04	

Panel D - Concentration of Deposits					
Concentration of Deposits	Number of Observations	Loan Price		Log Loan Price	
		Mean	Median	Mean	Median
High	6400	148.07	112.50	4.59	4.72
Low	6018	150.43	125.00	4.65	4.83
t-test (High - Low)		-1.09		-3.01***	

Table 7: The impact of Banking and Commerce integration on Loan pricing

This table reports the impact of banking-commerce integration on loan pricing after controlling the effects of legal, institutional and other loan variables. We report the impact separately for 3 different lender categories; domestic, foreign and mixed, as well as the full sample. The dependent variable is Ln (loan price). The banking-commerce integration variables are nff_ownbnk2 and nff_ownbnk3 reflecting restrictions on non-financial firms owning banks and bnkown_nff2 and bnkown_nff3 reflecting restrictions on banks owning non-financial firms. All variables are defined in table 3. Reg 1 to reg 4 presents the base model without the integration variables. All regressions control for year fixed effects. White heteroskedasticity-consistent standard errors are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

	Base Model				Non-Financial Firms owning Banks				Banks Owning Non-Financial Firms			
	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign
	Reg 1	*Reg 2*	*Reg 3*	*Reg 4*	*Reg 5*	*Reg 6*	*Reg 7*	*Reg 8*	*Reg 9*	*Reg 10*	*Reg 11*	*Reg 12*
Ln(Maturity)	0.130***	0.060**	0.192***	0.092***	0.129***	0.063**	0.191***	0.086***	0.129***	0.061**	0.197***	0.078***
	[0.011]	[0.026]	[0.014]	[0.021]	[0.011]	[0.026]	[0.014]	[0.020]	[0.011]	[0.025]	[0.014]	[0.020]
Has Secured	-0.142***	-0.101	-0.142***	-0.068	-0.145***	-0.067	-0.144***	-0.083	-0.170***	-0.141	-0.156***	-0.08
	[0.035]	[0.093]	[0.046]	[0.068]	[0.035]	[0.090]	[0.046]	[0.067]	[0.035]	[0.093]	[0.045]	[0.065]
Secured	0.353***	0.291***	0.284***	0.444***	0.354***	0.296***	0.284***	0.450***	0.367***	0.311***	0.284***	0.447***
	[0.040]	[0.098]	[0.052]	[0.075]	[0.040]	[0.092]	[0.052]	[0.074]	[0.039]	[0.097]	[0.052]	[0.071]
Scandinavian Origin	-0.376***	-0.435***	-0.479***	-0.413***	-0.381***	-0.554***	-0.483***	-0.498***	-0.432***	-0.367**	-0.473***	-0.575***
	[0.043]	[0.151]	[0.056]	[0.086]	[0.044]	[0.156]	[0.056]	[0.094]	[0.041]	[0.143]	[0.053]	[0.082]
French Origin	-0.490***	-0.670***	-0.387***	-0.488***	-0.525***	-0.282	-0.438***	-0.660***	-0.765***	-1.095***	-0.634***	-0.733***
	[0.025]	[0.128]	[0.032]	[0.051]	[0.030]	[0.214]	[0.039]	[0.062]	[0.028]	[0.139]	[0.039]	[0.052]
German Origin	-0.532***	-0.831**	-0.462***	-0.554***	-0.577***	-0.349	-0.512***	-0.799***	-0.172***	-0.757**	-0.220***	-0.107
	[0.051]	[0.330]	[0.070]	[0.091]	[0.057]	[0.355]	[0.076]	[0.106]	[0.053]	[0.329]	[0.076]	[0.096]
Private Credit Adjusted	-0.048***	-0.161***	-0.077***	-0.03	-0.042**	-0.265***	-0.072***	-0.007	-0.045***	-0.075	-0.057***	-0.073**
	[0.018]	[0.052]	[0.020]	[0.038]	[0.019]	[0.049]	[0.021]	[0.039]	[0.016]	[0.050]	[0.019]	[0.034]
Rule of Law	-0.208***	0.045	-0.113***	-0.186***	-0.212***	0.244	-0.129***	-0.150***	-0.335***	-0.219	-0.288***	-0.251***
	[0.024]	[0.199]	[0.034]	[0.037]	[0.024]	[0.276]	[0.034]	[0.039]	[0.024]	[0.188]	[0.036]	[0.036]
Creditor Rights	-0.087***	-0.086***	-0.052***	-0.139***	-0.095***	-0.015	-0.063***	-0.183***	-0.261***	-0.324***	-0.192***	-0.278***
	[0.008]	[0.025]	[0.010]	[0.017]	[0.009]	[0.035]	[0.011]	[0.019]	[0.012]	[0.047]	[0.017]	[0.021]
GAAP Dummy	0.035	-0.752***	0.087**	0.129**	0.033	-0.701***	0.072	0.197***	-0.401***	-1.051***	-0.269***	-0.281***
	[0.032]	[0.149]	[0.044]	[0.054]	[0.033]	[0.211]	[0.045]	[0.061]	[0.041]	[0.132]	[0.057]	[0.070]
Nff_OwnBnk2					0.053**	-0.441***	0.071**	0.299***				
					[0.027]	[0.132]	[0.032]	[0.056]				
Nff_OwnBnk3					0.013	0.03	0.026	0.063				
					[0.024]	[0.095]	[0.029]	[0.053]				
Bnkown_nff2									-0.234***	-0.361*	-0.087	-0.285***
									[0.032]	[0.203]	[0.058]	[0.042]
Bnkown_nff3									0.307***	0.224	0.300***	0.338***
									[0.042]	[0.217]	[0.069]	[0.063]
Ln(Bank Supervision)	0.084***	0.098	0.014	0.135***	0.096***	-0.073	0.027	0.193***	-0.005	0.058	-0.039**	-0.001
	[0.012]	[0.066]	[0.017]	[0.021]	[0.014]	[0.079]	[0.021]	[0.022]	[0.012]	[0.057]	[0.018]	[0.023]

Bank Overhead Costs	1.155***	5.049**	0.323	2.215***	1.107***	4.296***	0.218	2.065***	0.651***	4.441**	-0.059	1.834***
	[0.238]	[2.200]	[0.226]	[0.534]	[0.245]	[1.628]	[0.232]	[0.558]	[0.223]	[2.111]	[0.222]	[0.505]
Bnk Assets Govt Owned	0.008***	0.011*	0.008***	0.007***	0.008***	0.013*	0.008***	0.008***	0.010***	0.021***	0.010***	0.009***
	[0.001]	[0.007]	[0.002]	[0.002]	[0.001]	[0.007]	[0.002]	[0.002]	[0.001]	[0.007]	[0.002]	[0.002]
AAA	-1.334***	-0.432	-1.443***	-1.327***	-1.333***	-0.395	-1.434***	-1.353***	-1.312***	-0.474	-1.405***	-1.320***
	[0.080]	[0.317]	[0.088]	[0.141]	[0.080]	[0.313]	[0.088]	[0.139]	[0.078]	[0.314]	[0.088]	[0.137]
AA	-1.407***	-1.440***	-1.384***	-1.318***	-1.411***	-1.406***	-1.386***	-1.350***	-1.386***	-1.406***	-1.371***	-1.235***
	[0.054]	[0.198]	[0.059]	[0.145]	[0.054]	[0.194]	[0.059]	[0.143]	[0.054]	[0.196]	[0.059]	[0.141]
A	-1.032***	-1.263***	-1.047***	-0.888***	-1.037***	-1.229***	-1.049***	-0.945***	-1.023***	-1.237***	-1.035***	-0.876***
	[0.043]	[0.186]	[0.051]	[0.087]	[0.043]	[0.182]	[0.051]	[0.087]	[0.042]	[0.182]	[0.050]	[0.089]
BBB	-0.676***	-0.708***	-0.715***	-0.495***	-0.680***	-0.675***	-0.717***	-0.528***	-0.679***	-0.686***	-0.706***	-0.522***
	[0.043]	[0.176]	[0.051]	[0.088]	[0.043]	[0.170]	[0.051]	[0.087]	[0.043]	[0.174]	[0.051]	[0.087]
BB	-0.114***	-0.092	-0.120**	-0.088	-0.119***	-0.113	-0.123**	-0.139*	-0.150***	-0.064	-0.134***	-0.150*
	[0.042]	[0.184]	[0.049]	[0.078]	[0.042]	[0.176]	[0.049]	[0.078]	[0.041]	[0.181]	[0.049]	[0.077]
NR	-0.472***	-0.213	-0.517***	-0.399***	-0.475***	-0.212	-0.516***	-0.429***	-0.451***	-0.163	-0.490***	-0.398***
	[0.035]	[0.157]	[0.043]	[0.057]	[0.035]	[0.152]	[0.043]	[0.057]	[0.034]	[0.154]	[0.042]	[0.055]
Recapitalization	0.200***	0.334***	0.138***	0.192***	0.199***	0.327***	0.136***	0.182***	0.179***	0.297***	0.134***	0.162***
	[0.019]	[0.049]	[0.025]	[0.035]	[0.019]	[0.048]	[0.025]	[0.035]	[0.018]	[0.049]	[0.024]	[0.034]
Project Finance	0.133***	0.434***	0.090*	-0.003	0.132***	0.474***	0.086*	0.009	0.100***	0.360***	0.073	-0.02
	[0.034]	[0.082]	[0.047]	[0.062]	[0.034]	[0.084]	[0.047]	[0.061]	[0.034]	[0.081]	[0.047]	[0.062]
Acquisition	0.541***	0.522***	0.478***	0.570***	0.542***	0.481***	0.476***	0.579***	0.535***	0.510***	0.482***	0.558***
	[0.020]	[0.047]	[0.027]	[0.039]	[0.020]	[0.048]	[0.027]	[0.038]	[0.020]	[0.048]	[0.026]	[0.038]
Miscellaneous	0.162***	0.247***	0.136***	0.108***	0.165***	0.210***	0.137***	0.118***	0.160***	0.247***	0.133***	0.103**
	[0.027]	[0.073]	[0.041]	[0.041]	[0.027]	[0.074]	[0.041]	[0.041]	[0.027]	[0.073]	[0.040]	[0.041]
Line of Credit Dummy	-0.220***	-0.069*	-0.275***	-0.211***	-0.218***	-0.086**	-0.275***	-0.197***	-0.206***	-0.083**	-0.262***	-0.179***
	[0.014]	[0.040]	[0.018]	[0.027]	[0.014]	[0.039]	[0.018]	[0.027]	[0.014]	[0.040]	[0.018]	[0.027]
Ln(Loan Size)	-0.088***	-0.078***	-0.073***	-0.085***	-0.088***	-0.083***	-0.072***	-0.089***	-0.083***	-0.066***	-0.066***	-0.093***
	[0.006]	[0.015]	[0.008]	[0.013]	[0.006]	[0.014]	[0.008]	[0.013]	[0.006]	[0.015]	[0.008]	[0.012]
Facility Ratio	-0.517***	-0.367***	-0.578***	-0.584***	-0.518***	-0.318***	-0.581***	-0.576***	-0.548***	-0.431***	-0.606***	-0.581***
	[0.024]	[0.058]	[0.031]	[0.050]	[0.024]	[0.057]	[0.031]	[0.050]	[0.024]	[0.058]	[0.030]	[0.049]
Ln(Num Lenders)	-0.064***	0.002	-0.088***	-0.063***	-0.064***	-0.003	-0.088***	-0.059***	-0.058***	-0.001	-0.085***	-0.055***
	[0.008]	[0.021]	[0.012]	[0.013]	[0.008]	[0.021]	[0.012]	[0.013]	[0.007]	[0.021]	[0.012]	[0.013]
Covenant Dummy	0.071***	0.155***	0.046**	0.022	0.071***	0.155***	0.045**	0.032	0.087***	0.155***	0.061***	0.024
	[0.018]	[0.053]	[0.021]	[0.038]	[0.018]	[0.052]	[0.021]	[0.038]	[0.017]	[0.052]	[0.020]	[0.038]
Constant	6.382***	5.764***	6.087***	6.315***	6.325***	6.456***	6.040***	6.072***	7.457***	6.815***	6.764***	7.857***
	[0.146]	[0.634]	[0.206]	[0.278]	[0.152]	[0.835]	[0.216]	[0.284]	[0.154]	[0.709]	[0.219]	[0.295]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11337	1647	6323	3367	11337	1647	6323	3367	11337	1647	6323	3367
R-squared	0.532	0.496	0.609	0.513	0.532	0.511	0.61	0.52	0.551	0.508	0.617	0.537
Adjusted R-square	0.53	0.482	0.607	0.506	0.53	0.497	0.607	0.513	0.549	0.494	0.614	0.531
F-stat	477.203	43.223	408.892	103.278	446.301	43.841	382.258	99.441	466.179	43.911	389.692	107.409

Table 8: The impact of banking concentration on Loan pricing

This table reports the impact of banking concentration on loan pricing after controlling the effects of legal, institutional and other loan variables. We report the impact separately for 3 different lender categories; domestic, foreign and mixed, as well as the full sample. The dependent variable is Ln (loan price). The two banking concentration variables are concentration of assets and concentration of deposits. All variables are defined in table 3. Reg 1 to reg 4 presents the base model without the concentration variables. All regressions control for year fixed effects. White heteroskedasticity-consistent standard errors are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

	Base Model				Concentration of Assets				Concentration of Deposits			
	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign
	Reg 1	*Reg 2*	*Reg 3*	*Reg 4*	*Reg 5*	*Reg 6*	*Reg 7*	*Reg 8*	*Reg 9*	*Reg 10*	*Reg 11*	*Reg 12*
Ln(Maturity)	0.119***	0.045*	0.186***	0.087***	0.131***	0.076***	0.197***	0.091***	0.135***	0.082***	0.198***	0.092***
	[0.011]	[0.026]	[0.014]	[0.020]	[0.011]	[0.026]	[0.014]	[0.020]	[0.011]	[0.026]	[0.014]	[0.020]
Has Secured	-0.136***	-0.11	-0.145***	-0.026	-0.145***	-0.103	-0.148***	-0.039	-0.140***	-0.091	-0.143***	-0.042
	[0.036]	[0.094]	[0.046]	[0.067]	[0.035]	[0.092]	[0.045]	[0.066]	[0.035]	[0.092]	[0.045]	[0.066]
Secured	0.374***	0.318***	0.296***	0.446***	0.348***	0.270***	0.279***	0.436***	0.342***	0.264***	0.273***	0.438***
	[0.040]	[0.098]	[0.053]	[0.075]	[0.039]	[0.097]	[0.052]	[0.074]	[0.039]	[0.096]	[0.052]	[0.074]
Scandinavian Origin	-0.413***	-0.590***	-0.492***	-0.436***	-0.369***	-0.216	-0.420***	-0.443***	-0.419***	-0.370**	-0.483***	-0.453***
	[0.043]	[0.142]	[0.055]	[0.084]	[0.043]	[0.157]	[0.056]	[0.083]	[0.042]	[0.145]	[0.054]	[0.083]
French Origin	-0.338***	-0.527***	-0.289***	-0.275***	-0.496***	-0.811***	-0.469***	-0.350***	-0.488***	-0.744***	-0.457***	-0.343***
	[0.020]	[0.116]	[0.023]	[0.043]	[0.024]	[0.121]	[0.032]	[0.046]	[0.023]	[0.116]	[0.030]	[0.045]
German Origin	-0.327***	-0.619*	-0.316***	-0.235***	-0.442***	-0.896***	-0.435***	-0.297***	-0.380***	-0.709**	-0.367***	-0.255***
	[0.045]	[0.328]	[0.064]	[0.073]	[0.047]	[0.311]	[0.067]	[0.075]	[0.046]	[0.306]	[0.065]	[0.073]
Private Credit Adjusted	-0.133***	-0.268***	-0.125***	-0.147***	-0.068***	-0.091	-0.068***	-0.118***	-0.068***	-0.123**	-0.074***	-0.113***
	[0.014]	[0.035]	[0.017]	[0.030]	[0.016]	[0.056]	[0.019]	[0.031]	[0.016]	[0.052]	[0.020]	[0.033]
Rule of Law	-0.186***	0.101	-0.112***	-0.172***	-0.264***	-0.085	-0.195***	-0.196***	-0.270***	-0.083	-0.199***	-0.203***
	[0.022]	[0.194]	[0.032]	[0.035]	[0.025]	[0.195]	[0.034]	[0.037]	[0.025]	[0.192]	[0.034]	[0.037]
GAAP Dummy	0.136***	-0.697***	0.134***	0.288***	0.108***	-0.463***	0.163***	0.245***	0.051*	-0.573***	0.093**	0.206***
	[0.030]	[0.154]	[0.042]	[0.049]	[0.030]	[0.136]	[0.041]	[0.051]	[0.031]	[0.134]	[0.041]	[0.054]
Concentration of Assets					0.006***	0.010***	0.005***	0.004***				
					[0.000]	[0.002]	[0.001]	[0.001]				
Concentration of Deposits									0.006***	0.008***	0.005***	0.004***
									[0.000]	[0.001]	[0.001]	[0.001]
Ln(Bank Supervision)	0.071***	0.049	0.002	0.124***	0.175***	0.373***	0.132***	0.173***	0.156***	0.275***	0.101***	0.171***
	[0.012]	[0.065]	[0.017]	[0.021]	[0.015]	[0.080]	[0.024]	[0.024]	[0.014]	[0.068]	[0.021]	[0.023]
Bank Overhead Costs	1.592***	5.722**	0.597***	2.815***	1.472***	4.734**	0.322	2.916***	1.539***	4.953**	0.417*	2.947***
	[0.243]	[2.278]	[0.228]	[0.539]	[0.255]	[2.100]	[0.227]	[0.568]	[0.254]	[2.066]	[0.226]	[0.569]
Bnk Assets Govt Owned	0.003***	0.006	0.004***	0	0.006***	0.009	0.006***	0.002	0.005***	0.007	0.005***	0.001
	[0.001]	[0.007]	[0.001]	[0.002]	[0.001]	[0.006]	[0.001]	[0.002]	[0.001]	[0.006]	[0.001]	[0.002]
AAA	-1.280***	-0.408	-1.408***	-1.247***	-1.315***	-0.502	-1.435***	-1.270***	-1.316***	-0.476	-1.433***	-1.276***
	[0.076]	[0.299]	[0.086]	[0.129]	[0.080]	[0.342]	[0.089]	[0.135]	[0.081]	[0.344]	[0.090]	[0.135]
AA	-1.382***	-1.450***	-1.367***	-1.263***	-1.406***	-1.462***	-1.384***	-1.285***	-1.403***	-1.436***	-1.380***	-1.292***

	[0.054]	[0.193]	[0.060]	[0.138]	[0.054]	[0.208]	[0.059]	[0.140]	[0.054]	[0.205]	[0.059]	[0.140]
A	-1.018***	-1.243***	-1.039***	-0.883***	-1.030***	-1.294***	-1.046***	-0.888***	-1.029***	-1.274***	-1.042***	-0.896***
	[0.043]	[0.182]	[0.051]	[0.089]	[0.042]	[0.197]	[0.051]	[0.088]	[0.042]	[0.193]	[0.051]	[0.087]
BBB	-0.642***	-0.641***	-0.700***	-0.447***	-0.672***	-0.788***	-0.713***	-0.462***	-0.671***	-0.776***	-0.710***	-0.464***
	[0.044]	[0.172]	[0.052]	[0.087]	[0.043]	[0.186]	[0.051]	[0.088]	[0.043]	[0.181]	[0.051]	[0.088]
BB	-0.090**	-0.071	-0.109**	-0.042	-0.122***	-0.151	-0.133***	-0.059	-0.119***	-0.139	-0.127**	-0.057
	[0.042]	[0.181]	[0.050]	[0.082]	[0.041]	[0.193]	[0.050]	[0.080]	[0.042]	[0.189]	[0.050]	[0.080]
NR	-0.467***	-0.212	-0.516***	-0.394***	-0.482***	-0.247	-0.517***	-0.408***	-0.474***	-0.226	-0.508***	-0.408***
	[0.035]	[0.154]	[0.043]	[0.058]	[0.034]	[0.168]	[0.043]	[0.057]	[0.034]	[0.163]	[0.043]	[0.057]
Recapitalization	0.197***	0.327***	0.136***	0.190***	0.207***	0.345***	0.143***	0.197***	0.204***	0.340***	0.142***	0.197***
	[0.019]	[0.049]	[0.025]	[0.035]	[0.019]	[0.049]	[0.025]	[0.035]	[0.019]	[0.049]	[0.025]	[0.035]
Project Finance	0.104***	0.414***	0.069	-0.029	0.126***	0.419***	0.095**	-0.015	0.131***	0.433***	0.102**	-0.015
	[0.034]	[0.083]	[0.047]	[0.061]	[0.034]	[0.078]	[0.047]	[0.061]	[0.034]	[0.079]	[0.046]	[0.061]
Acquisition	0.536***	0.508***	0.476***	0.565***	0.549***	0.527***	0.485***	0.575***	0.544***	0.519***	0.483***	0.575***
	[0.020]	[0.047]	[0.027]	[0.039]	[0.020]	[0.047]	[0.027]	[0.038]	[0.020]	[0.047]	[0.027]	[0.038]
Miscellaneous	0.152***	0.252***	0.126***	0.094**	0.167***	0.264***	0.146***	0.103**	0.169***	0.252***	0.149***	0.105**
	[0.028]	[0.075]	[0.041]	[0.042]	[0.027]	[0.073]	[0.041]	[0.042]	[0.027]	[0.073]	[0.041]	[0.042]
Line of Credit Dummy	-0.215***	-0.068*	-0.273***	-0.211***	-0.223***	-0.081**	-0.276***	-0.216***	-0.228***	-0.083**	-0.281***	-0.219***
	[0.014]	[0.040]	[0.018]	[0.028]	[0.014]	[0.039]	[0.018]	[0.028]	[0.014]	[0.039]	[0.018]	[0.028]
Ln(Loan Size)	-0.093***	-0.087***	-0.075***	-0.095***	-0.090***	-0.072***	-0.073***	-0.092***	-0.088***	-0.072***	-0.072***	-0.091***
	[0.006]	[0.015]	[0.008]	[0.013]	[0.006]	[0.014]	[0.008]	[0.013]	[0.006]	[0.014]	[0.008]	[0.013]
Facility Ratio	-0.519***	-0.363***	-0.579***	-0.576***	-0.520***	-0.375***	-0.576***	-0.581***	-0.518***	-0.367***	-0.572***	-0.581***
	[0.024]	[0.059]	[0.031]	[0.050]	[0.024]	[0.057]	[0.031]	[0.050]	[0.024]	[0.057]	[0.031]	[0.050]
Ln(Num Lenders)	-0.067***	0.005	-0.091***	-0.070***	-0.064***	-0.002	-0.086***	-0.069***	-0.064***	-0.001	-0.085***	-0.069***
	[0.008]	[0.021]	[0.012]	[0.013]	[0.007]	[0.021]	[0.012]	[0.013]	[0.007]	[0.020]	[0.012]	[0.013]
Covenant Dummy	0.087***	0.169***	0.058***	0.037	0.074***	0.141***	0.046**	0.033	0.070***	0.137***	0.044**	0.031
	[0.018]	[0.052]	[0.021]	[0.038]	[0.017]	[0.052]	[0.020]	[0.038]	[0.017]	[0.052]	[0.020]	[0.038]
Constant	6.492***	6.167***	6.178***	6.352***	5.537***	3.486***	5.148***	5.838***	5.592***	4.083***	5.321***	5.809***
	[0.146]	[0.623]	[0.206]	[0.280]	[0.165]	[0.767]	[0.248]	[0.313]	[0.161]	[0.671]	[0.231]	[0.312]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11402	1647	6335	3420	11402	1647	6335	3420	11402	1647	6335	3420
R-squared	0.526	0.491	0.607	0.5	0.533	0.506	0.612	0.503	0.535	0.509	0.613	0.504
Adjusted R-square	0.525	0.478	0.605	0.494	0.531	0.493	0.609	0.497	0.533	0.495	0.61	0.497
F-stat	492.375	44.9	423.874	103.45	482.56	45.719	413.446	100.96	487.006	45.991	415.184	101.78

Table 9: The Impact of Banking-Commerce Integration and Banking Concentration on Loan Pricing.

This table reports the impact of banking commerce integration and banking concentration and their interactions on loan pricing after controlling the effects of legal, institutional and other loan variables. We report the impact separately for 3 different lender categories; domestic, foreign and mixed, as well as the full sample. The dependent variable is Ln (loan price). The two banking concentration variables, high_concA and high_concD are constructed as dummies as defined in Table 3. We consider the level of integration from the perspective of banks owning non-financial firms. All variables are defined in Table 3. All regressions control for year fixed effects. White heteroskedasticity-consistent standard errors are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

	Concentration of Assets				Concentration of Deposits			
	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign
	Reg 1	*Reg 2*	*Reg 3*	*Reg 4*	*Reg 5*	*Reg 6*	*Reg 7*	*Reg 8*
Ln(Maturity)	0.137***	0.097***	0.204***	0.085***	0.136***	0.096***	0.203***	0.085***
	[0.010]	[0.025]	[0.013]	[0.020]	[0.010]	[0.025]	[0.013]	[0.020]
Has Secured	-0.148***	-0.117	-0.145***	-0.067	-0.153***	-0.117	-0.146***	-0.086
	[0.033]	[0.086]	[0.044]	[0.062]	[0.034]	[0.088]	[0.044]	[0.062]
Secured	0.360***	0.303***	0.286***	0.426***	0.362***	0.299***	0.282***	0.444***
	[0.038]	[0.091]	[0.050]	[0.069]	[0.038]	[0.093]	[0.051]	[0.068]
Scandinavian Origin	-0.526***	-0.642***	-0.527***	-0.621***	-0.576***	-0.810***	-0.570***	-0.637***
	[0.042]	[0.146]	[0.053]	[0.089]	[0.041]	[0.148]	[0.052]	[0.088]
French Origin	-0.565***	-1.324***	-0.562***	-0.422***	-0.550***	-1.257***	-0.539***	-0.410***
	[0.023]	[0.088]	[0.031]	[0.044]	[0.023]	[0.087]	[0.031]	[0.044]
German Origin	0.159***	0.828***	0.123*	0.239**	0.143**	0.782***	0.074	0.207*
	[0.053]	[0.289]	[0.073]	[0.096]	[0.059]	[0.299]	[0.079]	[0.108]
Private Credit Adjusted	-0.141***	-0.216***	-0.127***	-0.184***	-0.192***	-0.331***	-0.165***	-0.222***
	[0.014]	[0.043]	[0.018]	[0.030]	[0.014]	[0.041]	[0.018]	[0.030]
Rule of Law	-0.286***	-1.025***	-0.330***	-0.127***	-0.226***	-0.833***	-0.261***	-0.059
	[0.025]	[0.135]	[0.036]	[0.038]	[0.026]	[0.127]	[0.037]	[0.041]
GAAP Dummy	-0.317***	-1.243***	-0.263***	-0.136*	-0.277***	-1.145***	-0.219***	-0.106
	[0.037]	[0.107]	[0.048]	[0.072]	[0.037]	[0.107]	[0.048]	[0.074]
Bnkown_nff2	-0.976***	-1.145***	-1.020***	-1.069***	-0.909***	-1.255***	-0.935***	-1.082***
	[0.048]	[0.206]	[0.076]	[0.076]	[0.050]	[0.229]	[0.078]	[0.079]
Bnkown_nff3	-0.727***	-0.767***	-0.893***	-0.652***	-0.614***	-0.955***	-0.789***	-0.582***
	[0.047]	[0.207]	[0.080]	[0.068]	[0.048]	[0.228]	[0.082]	[0.071]
High_ConcA	-0.490***	0.167	-0.730***	-0.481***				
	[0.053]	[0.268]	[0.085]	[0.067]				
Hca_bnk2	0.922***	0.571**	1.032***	1.004***				
	[0.059]	[0.288]	[0.091]	[0.089]				
Hca_bnk3	1.260***	1.429***	1.404***	1.148***				
	[0.058]	[0.266]	[0.088]	[0.089]				
High_ConcD					-0.402***	0.107	-0.675***	-0.446***
					[0.059]	[0.306]	[0.093]	[0.079]
Hcd_bnk2					0.837***	0.426	0.961***	1.038***
					[0.065]	[0.335]	[0.099]	[0.098]
Hcd_bnk3					1.135***	1.432***	1.308***	1.075***
					[0.060]	[0.303]	[0.093]	[0.094]
Ln(Bank Supervision)	0.120***	0.178***	0.072***	0.133***	0.116***	0.162***	0.066***	0.143***
	[0.013]	[0.047]	[0.018]	[0.026]	[0.012]	[0.049]	[0.018]	[0.026]
Bank Overhead Costs	1.353***	4.545***	0.459**	2.613***	1.488***	5.394***	0.532**	2.658***
	[0.224]	[1.449]	[0.217]	[0.513]	[0.229]	[1.645]	[0.220]	[0.518]
Bnk Assets Govt Owned	-0.004***	-0.025***	-0.005***	-0.003**	-0.003***	-0.027***	-0.004**	-0.001
	[0.001]	[0.006]	[0.002]	[0.002]	[0.001]	[0.007]	[0.002]	[0.002]
AAA	-1.267***	-0.421	-1.360***	-1.281***	-1.261***	-0.433	-1.350***	-1.290***

	[0.078]	[0.341]	[0.088]	[0.133]	[0.078]	[0.346]	[0.088]	[0.134]
AA	-1.359***	-1.314***	-1.327***	-1.286***	-1.363***	-1.354***	-1.330***	-1.291***
	[0.052]	[0.186]	[0.058]	[0.136]	[0.052]	[0.188]	[0.059]	[0.136]
A	-1.008***	-1.126***	-1.007***	-0.910***	-1.014***	-1.146***	-1.008***	-0.919***
	[0.042]	[0.173]	[0.050]	[0.088]	[0.042]	[0.175]	[0.050]	[0.090]
BBB	-0.672***	-0.620***	-0.691***	-0.537***	-0.665***	-0.643***	-0.687***	-0.519***
	[0.042]	[0.164]	[0.051]	[0.086]	[0.042]	[0.166]	[0.051]	[0.086]
BB	-0.176***	-0.046	-0.150***	-0.203***	-0.168***	-0.067	-0.146***	-0.190**
	[0.040]	[0.173]	[0.049]	[0.077]	[0.041]	[0.176]	[0.049]	[0.078]
NR	-0.442***	-0.074	-0.464***	-0.421***	-0.444***	-0.107	-0.465***	-0.420***
	[0.033]	[0.144]	[0.043]	[0.054]	[0.033]	[0.146]	[0.043]	[0.055]
Recapitalization	0.166***	0.259***	0.115***	0.173***	0.170***	0.278***	0.118***	0.174***
	[0.018]	[0.047]	[0.024]	[0.034]	[0.018]	[0.047]	[0.024]	[0.034]
Project Finance	0.119***	0.351***	0.108**	-0.012	0.114***	0.353***	0.107**	-0.031
	[0.034]	[0.078]	[0.046]	[0.060]	[0.034]	[0.078]	[0.046]	[0.061]
Acquisition	0.513***	0.430***	0.465***	0.558***	0.520***	0.448***	0.469***	0.567***
	[0.019]	[0.046]	[0.026]	[0.037]	[0.019]	[0.046]	[0.026]	[0.037]
Miscellaneous	0.160***	0.227***	0.145***	0.104**	0.161***	0.247***	0.148***	0.096**
	[0.026]	[0.071]	[0.039]	[0.041]	[0.026]	[0.072]	[0.039]	[0.040]
Line of Credit Dummy	-0.225***	-0.130***	-0.273***	-0.196***	-0.223***	-0.121***	-0.271***	-0.197***
	[0.014]	[0.038]	[0.017]	[0.027]	[0.014]	[0.039]	[0.017]	[0.027]
Ln(Loan Size)	-0.088***	-0.060***	-0.068***	-0.107***	-0.087***	-0.065***	-0.068***	-0.105***
	[0.006]	[0.015]	[0.008]	[0.012]	[0.006]	[0.015]	[0.008]	[0.012]
Facility Ratio	-0.518***	-0.420***	-0.586***	-0.535***	-0.522***	-0.410***	-0.587***	-0.541***
	[0.024]	[0.056]	[0.030]	[0.048]	[0.024]	[0.056]	[0.030]	[0.048]
Ln(Num Lenders)	-0.055***	0.004	-0.078***	-0.058***	-0.054***	0.005	-0.078***	-0.053***
	[0.007]	[0.019]	[0.011]	[0.013]	[0.007]	[0.020]	[0.011]	[0.013]
Covenant Dummy	0.089***	0.142***	0.065***	0.03	0.084***	0.135***	0.060***	0.024
	[0.017]	[0.050]	[0.020]	[0.038]	[0.017]	[0.050]	[0.020]	[0.037]
Constant	6.881***	7.311***	6.742***	7.181***	6.805***	7.595***	6.651***	6.987***
	[0.157]	[0.543]	[0.217]	[0.311]	[0.156]	[0.556]	[0.217]	[0.308]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11402	1647	6335	3420	11402	1647	6335	3420
R-squared	0.566	0.551	0.633	0.542	0.563	0.544	0.632	0.54
Adjusted R-square	0.564	0.538	0.631	0.535	0.561	0.531	0.629	0.533
F-stat	465.459	52.984	389.479	104.628	457.945	51.006	382.706	103.709

Marginal Effects of Linear Combinations of Variables in *Reg 2* and *Reg 4*

	Domestic Lenders – *Reg 2*				Foreign Lenders – *Reg 4*			
	Coef.	Std. Err.	*t*-statistic	p - value	Coef.	Std. Err.	*t*-statistic	p - value
(1) bnkown_ff3 - bnkown_ff2	0.38	0.10	3.91	0.000	0.42	0.07	5.66	0.000
(2) hca_bnk3 - hca_bnk2	0.86	0.16	5.47	0.000	0.14	0.09	1.62	0.106
(3) high_conca + hca_bnk2	0.74	0.11	6.98	0.000	0.52	0.07	7.28	0.000
(4) high_conca + hca_bnk3	1.60	0.12	13.41	0.000	0.67	0.06	10.39	0.000
(5) bnkown_ff2 + hca_bnk2	-0.57	0.24	-2.36	0.018	-0.07	0.05	-1.34	0.182
(6) bnkown_ff3 + hca_bnk3	0.66	0.22	3.06	0.002	0.50	0.07	6.93	0.000
(7) bnkown_ff2 + hca_bnk2 + high_conca	-0.41	0.21	-1.96	0.050	-0.55	0.06	-9.16	0.000
(8) bnkown_ff3 + hca_bnk3 + high_conca	0.83	0.21	3.89	0.000	0.01	0.08	0.17	0.866

Table 10: Univariate Comparison of Non Performing Loans by Different Levels of Integration and Concentration.

This table presents a univariate comparison of non performing loans in countries with different levels of banking and commerce integration as well as countries with high and low levels of banking concentration. Panel A presents the comparison in terms of restrictions on non-financial firms owning banks; Panel B in terms of banks owning non-financial firms; Panel C tests for differences in non performing loans when banks own non-financial firms vs when non-financial firms own banks. Panel D defines banking concentration in terms of bank assets; while Panel E defines banking concentration in terms of bank deposits. *t*-statistics are presented to test for differences in means across the different categories of restrictions and across high and low concentration levels.

Panel A - Non Financial Firms Owning Banks

Restrictions on Non-Financial Firms owning Banks	Number of Observations	Percentage of Non Performing Loans to Asset	
		Mean	Median
Prohibited or Restricted	2631	2.86	1.00
Permitted	2938	3.21	0.70
Unrestricted	696	4.93	5.20
t-test (Permitted - Prohibited/Restricted)		3.12***	
t-test (Unrestricted - Permitted)		8.71***	
t-test (Unrestricted - Prohibited/Restricted)		16.36***	

Panel B - Banks Owning Non Financial Firms

Restrictions on Non-Financial Firms owning Banks	Number of Observations	Percentage of Non Performing Loans to Asset	
		Mean	Median
Prohibited or Restricted	1312	7.50	5.74
Permitted	3537	2.25	1.00
Unrestricted	1416	1.83	0.50
t-test (Permitted - Prohibited/Restricted)		-44.69***	
t-test (Unrestricted - Permitted)		-5.19***	
t-test (Unrestricted - Prohibited/Restricted)		-33.17***	

Panel C - Test of differences between Banks Owning Non Financial Firms only and Non-Financial Firms owning Banks only

Restriction Category: Permitted	Number of Observations	Percentage of Non Performing Loans to Asset	
		Mean	Median
Banks owning Non-financial Firms	2505	2.18	1.00
Non-financial firms owning Banks	1906	3.64	0.50
t-test (Bank owning - Non-financial firm owning)		-10.70***	

Restriction Category: Unrestricted	Number of Observations	Percentage of Non Performing Loans to Asset	
		Mean	Median
Banks owning Non-financial Firms	1150	0.42	0.50
Non-financial firms owning Banks	430	3.09	1.52
t-test (Bank owning - Non-financial firm owning)		-49.47***	

Panel D - Concentration of Assets

Concentration of Assets	Number of Observations	Percentage of Non Performing Loans to Asset	
		Mean	Median
High	4343	2.59	1.36
Low	1922	4.75	6.70
t-test (High - Low)		-19.79***	

Panel E - Concentration of Deposits

Concentration of Deposits	Number of Observations	Percentage of Non Performing Loans to Asset	
		Mean	Median
High	4384	2.22	1.36
Low	1881	5.67	6.70
t-test (High - Low)		-32.91***	

Table 11: The Impact of Banking-Commerce Integration and Banking Concentration on Loan Pricing with Clustered Standard Errors.

This table reports the impact of banking commerce integration and banking concentration and their interactions on loan pricing after controlling the effects of legal, institutional and other loan variables. We report the impact separately for 3 different lender categories; domestic, foreign and mixed, as well as the full sample. The dependent variable is Ln (loan price). The two banking concentration variables, high_concA and high_concD are constructed as dummies as defined in Table 3. We consider the level of integration from the perspective of banks owning non-financial firms. All variables are defined in Table 3. All regressions control for year fixed effects. White heteroskedasticity-consistent standard errors, clustered at the country level are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

	Concentration of Assets				Concentration of Deposits			
	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign
	Reg 1	*Reg 2*	*Reg 3*	*Reg 4*	*Reg 5*	*Reg 6*	*Reg 7*	*Reg 8*
Ln(Maturity)	0.200***	0.093*	0.271***	0.144***	0.197***	0.094*	0.269***	0.140***
	[0.031]	[0.049]	[0.021]	[0.028]	[0.031]	[0.049]	[0.021]	[0.028]
Scandinavian Origin	-0.854***	-1.083***	-0.800***	-0.835***	-0.873***	-1.098***	-0.813***	-0.867***
	[0.164]	[0.299]	[0.116]	[0.212]	[0.167]	[0.305]	[0.120]	[0.211]
French Origin	-0.488***	-0.800***	-0.454***	-0.459***	-0.482***	-0.795***	-0.447***	-0.458***
	[0.115]	[0.187]	[0.086]	[0.146]	[0.113]	[0.177]	[0.084]	[0.138]
German Origin	0.000	-0.347*	-0.076	0.248*	0.012	-0.353*	-0.078	0.284**
	[0.104]	[0.168]	[0.078]	[0.133]	[0.114]	[0.193]	[0.089]	[0.127]
Private Credit Adjusted	-0.173***	-0.332***	-0.138***	-0.194***	-0.203***	-0.350***	-0.162***	-0.232***
	[0.043]	[0.064]	[0.032]	[0.069]	[0.052]	[0.063]	[0.040]	[0.077]
Rule of Law	-0.206**	-0.203	-0.231**	-0.188*	-0.176*	-0.18	-0.200**	-0.152
	[0.091]	[0.161]	[0.083]	[0.100]	[0.090]	[0.163]	[0.079]	[0.106]
Bnkown_nff2	-0.904***	-1.546***	-0.939***	-1.091***	-0.843***	-1.576***	-0.878***	-1.049***
	[0.123]	[0.239]	[0.099]	[0.142]	[0.168]	[0.247]	[0.134]	[0.190]
Bnkown_nff3	-0.740***	-1.489***	-0.867***	-0.633***	-0.649***	-1.512***	-0.794***	-0.538***
	[0.147]	[0.274]	[0.134]	[0.142]	[0.180]	[0.309]	[0.166]	[0.169]
High_ConcA	-0.547***	-0.708***	-0.796***	-0.475***				
	[0.109]	[0.219]	[0.083]	[0.125]				
Hca_bnk2	0.802***	0.823***	0.982***	0.885***				
	[0.139]	[0.289]	[0.095]	[0.180]				
Hca_bnk3	1.108***	1.346***	1.271***	1.078***				
	[0.157]	[0.328]	[0.117]	[0.174]				
High_ConcD					-0.469***	-0.728***	-0.740***	-0.390**
					[0.151]	[0.225]	[0.124]	[0.163]
Hcd_bnk2					0.731***	0.833***	0.919***	0.830***
					[0.181]	[0.277]	[0.132]	[0.226]
Hcd_bnk3					1.022***	1.361***	1.207***	0.987***
					[0.188]	[0.335]	[0.149]	[0.202]
AAA	-1.322***	-0.647**	-1.431***	-1.306***	-1.320***	-0.648**	-1.423***	-1.313***
	[0.240]	[0.306]	[0.272]	[0.269]	[0.241]	[0.305]	[0.274]	[0.271]
AA	-1.517***	-1.772***	-1.432***	-1.533***	-1.522***	-1.773***	-1.434***	-1.539***
	[0.128]	[0.259]	[0.117]	[0.306]	[0.128]	[0.254]	[0.118]	[0.306]
A	-1.128***	-1.501***	-1.107***	-1.095***	-1.135***	-1.501***	-1.108***	-1.113***
	[0.134]	[0.163]	[0.109]	[0.301]	[0.134]	[0.160]	[0.109]	[0.305]
BBB	-0.780***	-0.884***	-0.763***	-0.766***	-0.777***	-0.885***	-0.760***	-0.752***
	[0.138]	[0.107]	[0.072]	[0.267]	[0.138]	[0.106]	[0.072]	[0.271]
BB	-0.158	-0.203	-0.083	-0.328	-0.154	-0.203	-0.081	-0.314
	[0.111]	[0.130]	[0.080]	[0.242]	[0.112]	[0.130]	[0.079]	[0.245]
NR	-0.517***	-0.447**	-0.511***	-0.550**	-0.520***	-0.447**	-0.513***	-0.553**

	[0.121]	[0.216]	[0.071]	[0.233]	[0.120]	[0.212]	[0.071]	[0.235]
Recapitalization	0.177***	0.306***	0.106**	0.225***	0.178***	0.307***	0.107**	0.227***
	[0.050]	[0.097]	[0.047]	[0.063]	[0.050]	[0.096]	[0.047]	[0.064]
Acquisition	0.671***	0.563***	0.620***	0.745***	0.675***	0.564***	0.621***	0.755***
	[0.079]	[0.128]	[0.066]	[0.072]	[0.080]	[0.128]	[0.066]	[0.073]
Ln(Loan Size)	-0.141***	-0.119**	-0.134***	-0.171***	-0.141***	-0.119**	-0.134***	-0.171***
	[0.024]	[0.047]	[0.022]	[0.021]	[0.024]	[0.046]	[0.022]	[0.020]
Ln(Num Lenders)	-0.041*	0.013	-0.039**	-0.080***	-0.039*	0.013	-0.039**	-0.076**
	[0.022]	[0.041]	[0.019]	[0.028]	[0.022]	[0.041]	[0.019]	[0.028]
Constant	7.710***	9.085***	7.215***	8.599***	7.662***	9.109***	7.167***	8.553***
	[0.592]	[1.003]	[0.476]	[0.517]	[0.594]	[0.971]	[0.480]	[0.515]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	12303	1706	6746	3851	12303	1706	6746	3851
R-squared	0.495	0.426	0.567	0.464	0.493	0.425	0.566	0.461
Adjusted R-square	0.493	0.413	0.565	0.459	0.492	0.413	0.564	0.456
F-stat	1016.524	16752.232	1906.257	139.49	1172.044	12490.009	2790.547	201.076

Table 12: The Impact of Banking-Commerce Integration and Banking Concentration for Unrated Borrowers only.

This table reports the impact of banking commerce integration and banking concentration and their interactions on loan pricing after controlling the effects of legal, institutional and other loan variables for unrated borrowers only. We report the impact separately for 3 different lender categories; domestic, foreign and mixed, as well as the full sample. The dependent variable is Ln (loan price). The two banking concentration variables, high_concA and high_concD are constructed as dummies as defined in Table 3. We consider the level of integration from the perspective of banks owning non-financial firms. All variables are defined in Table 3. All regressions control for year fixed effects. White heteroskedasticity-consistent standard errors are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

	Concentration of Assets				Concentration of Deposits			
	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign
	Reg 1	*Reg 2*	*Reg 3*	*Reg 4*	*Reg 5*	*Reg 6*	*Reg 7*	*Reg 8*
Ln(Maturity)	0.140***	0.102***	0.230***	0.078***	0.139***	0.101***	0.229***	0.077***
	[0.012]	[0.026]	[0.017]	[0.022]	[0.012]	[0.026]	[0.017]	[0.022]
Has Secured	-0.161***	-0.099	-0.186***	-0.063	-0.172***	-0.105	-0.188***	-0.093
	[0.046]	[0.110]	[0.068]	[0.072]	[0.046]	[0.112]	[0.068]	[0.070]
Secured	0.373***	0.270**	0.325***	0.413***	0.378***	0.270**	0.321***	0.440***
	[0.050]	[0.115]	[0.075]	[0.078]	[0.050]	[0.117]	[0.075]	[0.076]
Scandinavian Origin	-0.548***	-0.730***	-0.578***	-0.571***	-0.613***	-0.893***	-0.631***	-0.608***
	[0.047]	[0.156]	[0.063]	[0.097]	[0.046]	[0.158]	[0.063]	[0.095]
French Origin	-0.604***	-1.364***	-0.597***	-0.442***	-0.591***	-1.307***	-0.577***	-0.429***
	[0.026]	[0.092]	[0.036]	[0.047]	[0.026]	[0.091]	[0.036]	[0.048]
German Origin	0.145**	0.808***	0.103	0.285***	0.132**	0.790**	0.055	0.239**
	[0.058]	[0.313]	[0.081]	[0.100]	[0.064]	[0.326]	[0.087]	[0.112]
Private Credit Adjusted	-0.145***	-0.235***	-0.135***	-0.172***	-0.209***	-0.350***	-0.185***	-0.220***
	[0.015]	[0.044]	[0.020]	[0.032]	[0.015]	[0.042]	[0.019]	[0.033]
Rule of Law	-0.319***	-1.034***	-0.342***	-0.188***	-0.247***	-0.852***	-0.266***	-0.102**
	[0.026]	[0.139]	[0.040]	[0.040]	[0.028]	[0.130]	[0.040]	[0.044]
GAAP Dummy	-0.400***	-1.282***	-0.297***	-0.211***	-0.358***	-1.190***	-0.252***	-0.171**
	[0.040]	[0.112]	[0.055]	[0.075]	[0.041]	[0.112]	[0.056]	[0.077]
Bnkown_nff2	-0.986***	-1.142***	-1.124***	-1.080***	-0.927***	-1.273***	-1.006***	-1.106***
	[0.057]	[0.214]	[0.090]	[0.084]	[0.057]	[0.236]	[0.092]	[0.087]
Bnkown_nff3	-0.695***	-0.803***	-0.965***	-0.585***	-0.575***	-1.018***	-0.810***	-0.529***
	[0.056]	[0.221]	[0.096]	[0.076]	[0.056]	[0.243]	[0.099]	[0.078]
High_ConcA	-0.517***	0.159	-0.809***	-0.506***				
	[0.061]	[0.322]	[0.100]	[0.075]				
Hca_bnk2	1.012***	0.556	1.163***	1.085***				
	[0.068]	[0.345]	[0.106]	[0.097]				
Hca_bnk3	1.337***	1.501***	1.529***	1.172***				
	[0.067]	[0.309]	[0.104]	[0.097]				
High_ConcD					-0.439***	0.153	-0.712***	-0.508***
					[0.068]	[0.381]	[0.110]	[0.088]
Hcd_bnk2					0.944***	0.354	1.064***	1.150***
					[0.075]	[0.419]	[0.116]	[0.109]
Hcd_bnk3					1.219***	1.462***	1.392***	1.132***
					[0.070]	[0.362]	[0.110]	[0.102]
Ln(Bank Supervision)	0.130***	0.168***	0.086***	0.124***	0.124***	0.154***	0.080***	0.128***
	[0.014]	[0.049]	[0.020]	[0.028]	[0.014]	[0.051]	[0.020]	[0.027]
Bank Overhead Costs	1.345***	4.621***	0.505**	2.450***	1.479***	5.382***	0.577**	2.479***
	[0.236]	[1.439]	[0.252]	[0.513]	[0.241]	[1.605]	[0.255]	[0.516]
Bnk Assets Govt Owned	-0.003**	-0.025***	-0.004**	-0.002	-0.002	-0.028***	-0.003	0.001
	[0.001]	[0.007]	[0.002]	[0.002]	[0.001]	[0.008]	[0.002]	[0.002]
Recapitalization	0.193***	0.269***	0.140***	0.192***	0.196***	0.289***	0.143***	0.192***
	[0.021]	[0.051]	[0.030]	[0.038]	[0.021]	[0.052]	[0.030]	[0.038]

Project Finance	0.119***	0.346***	0.08	-0.004	0.114***	0.347***	0.079	-0.021
	[0.036]	[0.080]	[0.051]	[0.065]	[0.037]	[0.081]	[0.052]	[0.066]
Acquisition	0.544***	0.443***	0.478***	0.618***	0.554***	0.461***	0.483***	0.630***
	[0.022]	[0.050]	[0.032]	[0.040]	[0.022]	[0.050]	[0.032]	[0.040]
Miscellaneous	0.169***	0.206***	0.136***	0.119***	0.170***	0.229***	0.141***	0.107**
	[0.030]	[0.076]	[0.046]	[0.046]	[0.030]	[0.077]	[0.046]	[0.045]
Line of Credit Dummy	-0.209***	-0.137***	-0.273***	-0.164***	-0.205***	-0.129***	-0.272***	-0.163***
	[0.015]	[0.040]	[0.020]	[0.029]	[0.015]	[0.041]	[0.020]	[0.029]
Ln(Loan Size)	-0.092***	-0.062***	-0.072***	-0.119***	-0.092***	-0.068***	-0.072***	-0.117***
	[0.007]	[0.016]	[0.009]	[0.013]	[0.007]	[0.015]	[0.009]	[0.013]
Facility Ratio	-0.522***	-0.420***	-0.610***	-0.489***	-0.527***	-0.408***	-0.613***	-0.492***
	[0.027]	[0.061]	[0.036]	[0.052]	[0.027]	[0.061]	[0.037]	[0.052]
Ln(Num Lenders)	-0.057***	0.004	-0.081***	-0.066***	-0.055***	0.006	-0.080***	-0.059***
	[0.008]	[0.022]	[0.013]	[0.014]	[0.008]	[0.022]	[0.013]	[0.014]
Covenant Dummy	0.087***	0.157***	0.041	0.037	0.079***	0.150***	0.034	0.027
	[0.020]	[0.054]	[0.025]	[0.043]	[0.020]	[0.054]	[0.025]	[0.043]
Constant	6.464***	7.408***	6.199***	7.039***	6.397***	7.716***	6.064***	6.881***
	[0.174]	[0.563]	[0.253]	[0.334]	[0.172]	[0.573]	[0.252]	[0.327]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9263	1493	4922	2848	9263	1493	4922	2848
R-squared	0.515	0.52	0.572	0.523	0.512	0.512	0.57	0.522
Adjusted R-square	0.513	0.506	0.569	0.516	0.509	0.498	0.567	0.515
F-stat	288.774	45.861	204.105	84.545	283.12	43.627	199.616	84.044

Table 13: The Impact of Banking-Commerce Integration and Banking Concentration for Loans made after 1993 only.

This table reports the impact of banking commerce integration and banking concentration and their interactions on loan pricing after controlling the effects of legal, institutional and other loan variables for loans made after 1993 only. We report the impact separately for 3 different lender categories; domestic, foreign and mixed, as well as the full sample. The dependent variable is Ln (loan price). The two banking concentration variables, high_concA and high_concD are constructed as dummies as defined in Table 3. We consider the level of integration from the perspective of banks owning non-financial firms. All variables are defined in Table 3. All regressions control for year fixed effects. White heteroskedasticity-consistent standard errors are in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

	Concentration of Assets				Concentration of Deposits			
	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign
	Reg 1	*Reg 2*	*Reg 3*	*Reg 4*	*Reg 5*	*Reg 6*	*Reg 7*	*Reg 8*
Ln(Maturity)	0.149***	0.128***	0.203***	0.105***	0.147***	0.127***	0.202***	0.105***
	[0.011]	[0.026]	[0.014]	[0.020]	[0.011]	[0.026]	[0.014]	[0.020]
Has Secured	-0.147***	-0.121	-0.145***	-0.075	-0.151***	-0.119	-0.145***	-0.085
	[0.035]	[0.091]	[0.046]	[0.063]	[0.035]	[0.093]	[0.046]	[0.063]
Secured	0.341***	0.299***	0.280***	0.406***	0.341***	0.291***	0.276***	0.416***
	[0.040]	[0.097]	[0.052]	[0.071]	[0.040]	[0.099]	[0.052]	[0.071]
Scandinavian Origin	-0.555***	-0.739***	-0.537***	-0.645***	-0.605***	-0.894***	-0.579***	-0.666***
	[0.043]	[0.153]	[0.054]	[0.094]	[0.043]	[0.157]	[0.053]	[0.092]
French Origin	-0.525***	-1.375***	-0.546***	-0.352***	-0.513***	-1.320***	-0.526***	-0.346***
	[0.023]	[0.088]	[0.031]	[0.046]	[0.024]	[0.087]	[0.031]	[0.046]
German Origin	0.135**	0.699*	0.12	0.183*	0.127**	0.638	0.082	0.16
	[0.053]	[0.377]	[0.073]	[0.100]	[0.059]	[0.399]	[0.079]	[0.112]
Private Credit Adjusted	-0.137***	-0.244***	-0.130***	-0.168***	-0.186***	-0.351***	-0.168***	-0.203***
	[0.014]	[0.046]	[0.018]	[0.030]	[0.014]	[0.042]	[0.018]	[0.031]
Rule of Law	-0.259***	-1.002***	-0.312***	-0.086**	-0.204***	-0.825***	-0.252***	-0.029
	[0.025]	[0.147]	[0.037]	[0.039]	[0.027]	[0.137]	[0.038]	[0.042]
GAAP Dummy	-0.306***	-1.282***	-0.256***	-0.137*	-0.270***	-1.199***	-0.217***	-0.111
	[0.037]	[0.109]	[0.048]	[0.073]	[0.037]	[0.109]	[0.049]	[0.075]
Bnkown_nff2	-0.930***	-1.217***	-1.000***	-0.993***	-0.867***	-1.319***	-0.909***	-0.992***
	[0.048]	[0.202]	[0.077]	[0.079]	[0.050]	[0.221]	[0.079]	[0.083]
Bnkown_nff3	-0.699***	-0.954***	-0.881***	-0.619***	-0.592***	-1.142***	-0.770***	-0.551***
	[0.047]	[0.207]	[0.081]	[0.069]	[0.048]	[0.224]	[0.083]	[0.073]
High_ConcA	-0.460***	0.173	-0.712***	-0.444***				
	[0.053]	[0.317]	[0.085]	[0.068]				
Hca_bnk2	0.873***	0.492	1.001***	0.941***				
	[0.060]	[0.322]	[0.092]	[0.092]				
Hca_bnk3	1.227***	1.527***	1.379***	1.112***				
	[0.058]	[0.301]	[0.089]	[0.092]				
High_ConcD					-0.374***	0.146	-0.637***	-0.402***
					[0.059]	[0.365]	[0.094]	[0.080]
Hcd_bnk2					0.787***	0.317	0.912***	0.949***
					[0.066]	[0.387]	[0.101]	[0.101]
Hcd_bnk3					1.108***	1.511***	1.269***	1.039***
					[0.061]	[0.345]	[0.094]	[0.097]
Ln(Bank Supervision)	0.113***	0.185***	0.068***	0.135***	0.108***	0.172***	0.062***	0.142***
	[0.013]	[0.049]	[0.018]	[0.027]	[0.012]	[0.052]	[0.018]	[0.026]
Bank Overhead Costs	2.721***	4.431***	0.852**	4.912***	2.892***	5.146***	0.951***	4.934***
	[0.309]	[1.385]	[0.333]	[0.653]	[0.318]	[1.558]	[0.337]	[0.663]
Bnk Assets Govt Owned	-0.004***	-0.026***	-0.005***	-0.003*	-0.003**	-0.028***	-0.004**	-0.001
	[0.001]	[0.007]	[0.002]	[0.002]	[0.001]	[0.008]	[0.002]	[0.002]
AAA	-1.283***	0.015	-1.355***	-1.271***	-1.277***	0.004	-1.345***	-1.279***
	[0.080]	[0.155]	[0.088]	[0.138]	[0.080]	[0.152]	[0.088]	[0.139]
AA	-1.328***	-1.350***	-1.329***	-1.101***	-1.333***	-1.406***	-1.331***	-1.110***
	[0.051]	[0.157]	[0.059]	[0.153]	[0.051]	[0.160]	[0.059]	[0.153]

A	-1.032***	-1.289***	-1.021***	-0.932***	-1.037***	-1.319***	-1.023***	-0.943***
	[0.042]	[0.171]	[0.051]	[0.090]	[0.042]	[0.171]	[0.051]	[0.091]
BBB	-0.671***	-0.898***	-0.673***	-0.551***	-0.664***	-0.933***	-0.669***	-0.534***
	[0.042]	[0.154]	[0.051]	[0.085]	[0.042]	[0.154]	[0.051]	[0.085]
BB	-0.178***	-0.184	-0.143***	-0.188**	-0.169***	-0.209	-0.139***	-0.172**
	[0.040]	[0.170]	[0.049]	[0.079]	[0.040]	[0.172]	[0.049]	[0.080]
NR	-0.453***	-0.239*	-0.463***	-0.431***	-0.455***	-0.279**	-0.465***	-0.431***
	[0.033]	[0.125]	[0.043]	[0.053]	[0.033]	[0.124]	[0.043]	[0.053]
Recapitalization	0.177***	0.285***	0.119***	0.181***	0.181***	0.305***	0.122***	0.183***
	[0.019]	[0.051]	[0.024]	[0.036]	[0.019]	[0.051]	[0.024]	[0.036]
Project Finance	0.124***	0.334***	0.095**	0.026	0.121***	0.335***	0.094*	0.013
	[0.035]	[0.081]	[0.048]	[0.062]	[0.035]	[0.082]	[0.048]	[0.063]
Acquisition	0.533***	0.477***	0.466***	0.602***	0.542***	0.492***	0.469***	0.611***
	[0.019]	[0.048]	[0.026]	[0.037]	[0.020]	[0.048]	[0.026]	[0.037]
Miscellaneous	0.157***	0.190***	0.147***	0.109***	0.159***	0.211***	0.150***	0.105**
	[0.027]	[0.072]	[0.040]	[0.042]	[0.027]	[0.073]	[0.040]	[0.041]
Line of Credit Dummy	-0.234***	-0.131***	-0.282***	-0.198***	-0.232***	-0.125***	-0.282***	-0.199***
	[0.014]	[0.041]	[0.018]	[0.028]	[0.014]	[0.041]	[0.018]	[0.028]
Ln(Loan Size)	-0.085***	-0.054***	-0.071***	-0.103***	-0.084***	-0.060***	-0.071***	-0.101***
	[0.006]	[0.016]	[0.008]	[0.013]	[0.006]	[0.015]	[0.008]	[0.013]
Facility Ratio	-0.511***	-0.366***	-0.580***	-0.515***	-0.515***	-0.351***	-0.582***	-0.521***
	[0.024]	[0.058]	[0.031]	[0.049]	[0.024]	[0.058]	[0.031]	[0.050]
Ln(Num Lenders)	-0.057***	0.014	-0.078***	-0.064***	-0.055***	0.015	-0.077***	-0.059***
	[0.008]	[0.020]	[0.012]	[0.013]	[0.008]	[0.021]	[0.012]	[0.013]
Covenant Dummy	0.098***	0.146***	0.068***	0.051	0.092***	0.139***	0.064***	0.044
	[0.017]	[0.050]	[0.020]	[0.038]	[0.017]	[0.050]	[0.020]	[0.038]
Constant	6.647***	7.283***	6.779***	6.709***	6.584***	7.588***	6.692***	6.555***
	[0.163]	[0.560]	[0.220]	[0.335]	[0.162]	[0.579]	[0.220]	[0.332]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10790	1465	6152	3173	10790	1465	6152	3173
R-squared	0.573	0.568	0.635	0.552	0.57	0.561	0.633	0.549
Adjusted R-square	0.571	0.555	0.632	0.546	0.568	0.548	0.63	0.543
F-stat	470.755	51.155	395.961	104.905	463.633	48.802	388.917	103.658

Table 14: The Impact of Banking-Commerce Integration and Banking Concentration on Loan Pricing with Bootstrapped Standard Errors.

This table reports the impact of banking commerce integration and banking concentration and their interactions on loan pricing after controlling the effects of legal, institutional and other loan variables. We report the impact separately for 3 different lender categories; domestic, foreign and mixed, as well as the full sample. The dependent variable is Ln (loan price). The two banking concentration variables, high_concA and high_concD are constructed as dummies as defined in Table 3. We consider the level of integration from the perspective of banks owning non-financial firms. All variables are defined in Table 3. All regressions control for year fixed effects. In these regressions no restrictions are placed on the borrower countries, i.e., all countries are included in the sample, irrespective of the number of loans from a country and all US loans are also included in the sample. For each regression, bootstrapped standard errors are in parentheses, calculated using 1000 replications. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

	Concentration of Assets				Concentration of Deposits			
	Full	Domestic	Mixed	Foreign	Full	Domestic	Mixed	Foreign
	Reg 1	*Reg 2*	*Reg 3*	*Reg 4*	*Reg 5*	*Reg 6*	*Reg 7*	*Reg 8*
Ln(Maturity)	0.054***	0.016	0.160***	0.082***	0.054***	0.016	0.160***	0.081***
	[0.017]	[0.019]	[0.013]	[0.023]	[0.017]	[0.019]	[0.012]	[0.024]
Has Secured	-0.157***	-0.184***	-0.113***	-0.094*	-0.157***	-0.184***	-0.113***	-0.098*
	[0.026]	[0.027]	[0.026]	[0.051]	[0.026]	[0.026]	[0.027]	[0.050]
Secured	0.482***	0.528***	0.367***	0.412***	0.483***	0.528***	0.367***	0.416***
	[0.041]	[0.034]	[0.046]	[0.065]	[0.040]	[0.034]	[0.047]	[0.063]
Scandinavian Origin	-0.434***	-0.639***	-0.478***	-0.569***	-0.492***	-0.757***	-0.532***	-0.585***
	[0.136]	[0.212]	[0.093]	[0.162]	[0.113]	[0.217]	[0.087]	[0.135]
French Origin	-0.408***	-0.961***	-0.475***	-0.274**	-0.395***	-0.931***	-0.460***	-0.264**
	[0.040]	[0.114]	[0.046]	[0.109]	[0.040]	[0.111]	[0.047]	[0.103]
German Origin	0.261***	-0.1	0.141	0.367***	0.238**	-0.101	0.129	0.323***
	[0.098]	[0.394]	[0.128]	[0.083]	[0.113]	[0.394]	[0.139]	[0.087]
Private Credit Adjusted	-0.110**	-0.222	-0.098	-0.155***	-0.153**	-0.301	-0.138*	-0.179***
	[0.047]	[0.190]	[0.064]	[0.028]	[0.073]	[0.226]	[0.080]	[0.039]
Rule of Law	-0.212***	-0.469***	-0.282***	-0.139**	-0.160***	-0.353*	-0.232***	-0.089
	[0.041]	[0.144]	[0.052]	[0.055]	[0.048]	[0.187]	[0.057]	[0.059]
GAAP Dummy	-0.389***	-0.832***	-0.268***	-0.288***	-0.351***	-0.794***	-0.241***	-0.254***
	[0.080]	[0.237]	[0.052]	[0.052]	[0.075]	[0.229]	[0.050]	[0.047]
Bnkown_nff2	-0.622***	-0.764**	-0.448***	-0.798***	-0.572***	-0.608*	-0.412***	-0.774***
	[0.082]	[0.348]	[0.093]	[0.107]	[0.082]	[0.347]	[0.095]	[0.122]
Bnkown_nff3	-0.367***	-0.436	-0.315***	-0.397***	-0.326***	-0.372	-0.288**	-0.341***
	[0.086]	[0.317]	[0.111]	[0.098]	[0.097]	[0.339]	[0.119]	[0.095]
High_ConcA	-0.292***	0.073	-0.303***	-0.416***				
	[0.066]	[0.614]	[0.107]	[0.087]				
Hca_bnk2	0.673***	0.436	0.610***	0.816***				
	[0.108]	[0.640]	[0.137]	[0.097]				
Hca_bnk3	1.016***	1.119**	0.939***	1.096***				
	[0.075]	[0.545]	[0.100]	[0.126]				
High_ConcD					-0.286***	0.274	-0.306**	-0.386***
					[0.077]	[0.700]	[0.119]	[0.083]
Hcd_bnk2					0.612***	0.057	0.563***	0.804***
					[0.107]	[0.747]	[0.152]	[0.096]
Hcd_bnk3					0.979***	0.903	0.915***	1.032***
					[0.078]	[0.622]	[0.108]	[0.115]
Ln(Bank Supervision)	0.152***	0.296***	0.106***	0.083*	0.139***	0.281***	0.092***	0.086**
	[0.049]	[0.112]	[0.033]	[0.044]	[0.043]	[0.103]	[0.030]	[0.035]
Bank Overhead Costs	1.441	6.140**	0.378	2.987**	1.566	6.685**	0.471	3.001**

	[1.098]	[3.091]	[0.728]	[1.272]	[1.160]	[3.359]	[0.821]	[1.282]
Bnk Assets Govt Owned	-0.004**	-0.005	-0.004	-0.005*	-0.004	-0.008	-0.004	-0.003
	[0.002]	[0.008]	[0.002]	[0.003]	[0.003]	[0.008]	[0.003]	[0.003]
AAA	-1.511***	-1.619***	-1.500***	-0.833***	-1.509***	-1.619***	-1.497***	-0.835***
	[0.078]	[0.111]	[0.061]	[0.220]	[0.077]	[0.115]	[0.063]	[0.223]
AA	-1.480***	-1.643***	-1.367***	-1.075***	-1.480***	-1.644***	-1.367***	-1.076***
	[0.055]	[0.072]	[0.054]	[0.181]	[0.054]	[0.075]	[0.052]	[0.180]
A	-1.187***	-1.316***	-1.065***	-0.981***	-1.187***	-1.316***	-1.066***	-0.986***
	[0.036]	[0.053]	[0.032]	[0.099]	[0.038]	[0.050]	[0.031]	[0.101]
BBB	-0.612***	-0.694***	-0.509***	-0.611***	-0.612***	-0.694***	-0.509***	-0.607***
	[0.020]	[0.025]	[0.022]	[0.065]	[0.019]	[0.024]	[0.022]	[0.065]
BB	-0.148***	-0.185***	-0.114***	-0.135**	-0.148***	-0.185***	-0.114***	-0.130**
	[0.018]	[0.023]	[0.024]	[0.067]	[0.017]	[0.021]	[0.023]	[0.065]
NR	-0.269***	-0.259***	-0.286***	-0.305***	-0.270***	-0.259***	-0.287***	-0.305***
	[0.018]	[0.023]	[0.019]	[0.060]	[0.018]	[0.021]	[0.019]	[0.060]
Recapitalization	0.033	0.025	0.026	0.152***	0.033	0.026	0.027	0.152***
	[0.021]	[0.024]	[0.018]	[0.032]	[0.022]	[0.025]	[0.019]	[0.035]
Project Finance	0.039	0.072***	0.063	-0.039	0.036	0.070***	0.061	-0.049
	[0.034]	[0.022]	[0.064]	[0.046]	[0.035]	[0.021]	[0.062]	[0.045]
Acquisition	0.263***	0.196***	0.305***	0.410***	0.264***	0.197***	0.307***	0.412***
	[0.014]	[0.018]	[0.018]	[0.035]	[0.014]	[0.019]	[0.019]	[0.039]
Miscellaneous	-0.040*	-0.083***	0.078***	-0.003	-0.039*	-0.082***	0.080***	-0.007
	[0.020]	[0.018]	[0.029]	[0.066]	[0.021]	[0.017]	[0.028]	[0.068]
Line of Credit Dummy	-0.190***	-0.184***	-0.260***	-0.162***	-0.189***	-0.184***	-0.259***	-0.162***
	[0.013]	[0.012]	[0.019]	[0.023]	[0.013]	[0.012]	[0.019]	[0.022]
Ln(Loan Size)	-0.136***	-0.130***	-0.121***	-0.128***	-0.137***	-0.130***	-0.121***	-0.127***
	[0.010]	[0.010]	[0.014]	[0.021]	[0.010]	[0.010]	[0.014]	[0.020]
Facility Ratio	-0.176***	-0.093***	-0.290***	-0.398***	-0.176***	-0.092***	-0.290***	-0.399***
	[0.031]	[0.033]	[0.030]	[0.051]	[0.032]	[0.033]	[0.029]	[0.050]
Ln(Num Lenders)	-0.045***	-0.033***	-0.074***	-0.056***	-0.045***	-0.032***	-0.073***	-0.054***
	[0.007]	[0.007]	[0.015]	[0.017]	[0.007]	[0.007]	[0.014]	[0.016]
Covenant Dummy	-0.030*	-0.076***	0.036	-0.058**	-0.030*	-0.076***	0.035	-0.060**
	[0.016]	[0.016]	[0.024]	[0.026]	[0.016]	[0.016]	[0.024]	[0.026]
Constant	7.328***	7.222***	6.833***	7.337***	7.373***	7.200***	6.893***	7.220***
	[0.316]	[0.926]	[0.225]	[0.645]	[0.276]	[0.941]	[0.222]	[0.597]
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	65147	39529	19065	6553	65147	39529	19065	6553
R-squared	0.596	0.541	0.670	0.504	0.595	0.541	0.670	0.503
Replications	1000	1000	1000	1000	1000	1000	1000	1000