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Bank Loan Announcements and Borrower Stock Returns: Does Bank Origin Matter?

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Summary

Banks play a special role as providers of informative signals about the quality and value of their borrowers. Such signals, however, have a quality of their own as the banks' selection and monitoring abilities differ. Using an event study methodology, we study the importance of the geographical origin and organization of the banks for the investors' assessments of firm's credit quality and economic worth during loan announcements. Our sample comprises 986 U.S. firms over a period of 1980-2003. We find that investors react positively to relationships with foreign or local banks, but not with banks that are located outside firm's headquarter state but in the same country. Investor's reaction is, in fact, the largest when the lender's headquarter is abroad. Our evidence suggest that investors value relationships with more competitive and skilled banks rather than banks that have easier access to firm's private information.

Keywords: Asymmetric relationship banking, bank organization, bank origin, loan announcement return

JEL classification: G21, G32, H11, D80

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ABSTRACT

Banks play a special role as providers of informative signals about the quality and value of their borrowers. Such signals, however, have a quality of their own as the banks' selection and monitoring abilities differ. Using an event study methodology, we study the importance of the geographical origin and organization of the banks for the investors' assessments of firm's credit quality and economic worth during loan announcements. Our sample comprises 986 U.S. firms over a period of 1980-2003. We find that investors react positively to relationships with foreign or local banks, but not with banks that are located outside firm's headquarter state but in the same country. Investor's reaction is, in fact, the largest when the lender's headquarter is abroad. Our evidence suggest that investors value relationships with more competitive and skilled banks rather than banks that have easier access to firm's private information.

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1. Introduction

A previous literature has emphasized the special role of banks as providing certification of their borrowers' quality (James, 1987). Equity investors for example may perceive the credit quality and value of a firm to improve when it obtains a renewal of a bank loan (Lummer and McConnell, 1989). However, the certification itself can be of a varying quality, depending on the bank's assessment ability and reputation (Billet, Flannery and Garfinkel, 1995). In this paper we investigate if the origin of the bank may affect the equity investors' reactions to the bank loan announcements. That equity investors may react differently to the announcement of bank loans granted by local or foreign banks has not been investigated before as far as we know.

This apparent lack of evidence is somewhat surprising, as a fast developing literature has recently raised serious concerns about the willingness and ability of foreign banks to lend to domestic firms. Foreign banks may cherry-pick clients and be more reluctant than domestic financial intermediaries to lend to opaque borrowers for example (Dell'Ariccia and Marquez, 2004). Hence, many firms may be permanently excluded from foreign banks' financing (Mian, 2006). Credit to the private sector may consequently be lower in countries with widespread foreign bank presence (Detragiache, Tressel, and Gupta, 2008).

But as argued by Giannetti and Ongena (2008) this may be too pessimistic a view of the existing literature. All firms possibly indirectly benefit from the entry of foreign banks. Foreign banks may select borrowers more judiciously and their presence may discourage local banks from earning rents from creditworthy firms to subsidize locally connected borrowers for example. However, directly comparing borrower selection by local and foreign banks may be difficult because the true borrower quality may remain unobservable.

We therefore, and in contrast to the previously cited research, focus on publicly traded US firms so we can easily observe informative firm equity values over time. Because publicly traded US firms face fewer information asymmetries, they are less reliant on local bank financing than small businesses in emerging markets and have access to a

wider menu of financing alternatives, including foreign bank loans. If markets are efficient, then abnormal returns provide direct signals about whether borrowing from foreign banks helps or hurts shareholders of the borrowing firms more or less than borrowing from local banks.

If foreign banks only lend to very transparent firms, the observed abnormal returns following a foreign bank loan announcement should be close to zero, as investors already know the quality of the firm. If, however, foreign banks select their borrowers better than local banks, the abnormal returns following the loan announcements should be larger than those observed for local bank loans. If, on the other hand, local banks are more informed than foreign banks because of their geographical proximity for example the reverse should hold.

We rely on a sample of 985 bank loan announcements that were published between 1980 and 2003 and collected by Fields, Fraser, Berry, and Byers (2006). We augment their announcements with the origin of the bank gleaned from the *BankScope* and *Bank Regulatory* databases. On the basis of firm and bank headquarters location, we distinguish between loans from in-state, neighbor-state, non-neighbor state, and foreign banks.

We find that when firms announce a loan from a foreign bank, the two-day cumulative abnormal return on the firm stock is on average 91*** basis points (bps).¹ In contrast, in-state loan announcements yield only 44 bps in excess returns, neighbor-state loans -20 bps and non-neighbor state loans 32* bps. This difference according to bank origin becomes even larger when we control for firm and loan characteristics and macro conditions. On the other hand, the difference seemingly decreases over time towards the end of the sample. Overall our results indicate that investors assess foreign banks to be more selective in financing firms than the domestic banks, but that this difference between banks dissipates over time.

The rest of the paper is organized as follows. In section 2, we discuss the relevant literature. Section 3 presents the methodology, while Section 4 describes the sample se-

¹ As in the tables, we star the coefficients to indicate their significance levels: *** significant at 1%, ** significant at 5%, and * significant at 10%.

lection and the variables employed in our empirical analysis. In section 5 we analyze the cumulative abnormal returns on firms stock during bank loan announcements, first, in a univariate setting, and then in a multivariate setting, while in Section 6 we discuss a number of robustness tests. Section 7 concludes.

2. Literature Review

Bank Loan Announcements

Equity market reactions to bank loan announcements have been studied extensively. Motivated by conjectures regarding the uniqueness of bank loans (Fama, 1985) and following work by Mikkelson and Partch (1986), James (1987) studies the average stock price reaction of firms that publicly announce a bank loan agreement or renewal. James finds that bank loan announcements are associated with positive and statistically significant stock price reactions that equal 193*** bps in a two-day window, while announcements of privately placed and public issues of debt experience zero or negative stock price reactions. This result holds independently of the type of loan, the default risk and size of the borrower. The results in the seminal paper by James (1987) are key in our current thinking of the role banks play in credit markets.

Results in {James, 1987 #120} spawned numerous other event studies (for a review see Degryse and Ongena, 2008). Lummer and McConnell (1992) for example find positive equity price reactions to loan renewals only, while Slovin, Johnson, and Glascock (1992) show that equity prices react significantly to both loan initiations and renewals, but only for small firms. More recently, Fields, Fraser, Berry and Byers (2006) find that equity price reactions to bank loan announcements have considerably decreased over time, possible due to increased competition and the changing nature of the banking sector. The impact, however, is still considerable for small, poor performing firms. In line with the latter findings, Ongena, Roscovan, Song, and Werker (2008) find a similar, smaller reaction to equity prices to bank loan announcements and additionally, are the first to document that bond prices reactions are comparable in size. The authors show theoretically and empirically that contrary to bond prices, stock price reactions are independ-

ent of the borrowers' credit quality, while bond price reactions for riskier and smaller firms are more likely to be negative.²

Most studies explain the magnitude of the loan announcement returns in cross-sectional regressions featuring various firm and loan characteristics. Bank specific characteristics, however, have remained somewhat overlooked with the exception of James (1987) and Preece and Mullineaux (1994) who include bank type (bank versus nonbank) and Billet, Flannery and Garfinkel (1995) who investigate the importance of bank credit rating for their estimated excess returns. They find that announcements of banks loans granted by lenders with higher credit ratings are associated with larger abnormal returns on the borrowing firm shares. Different from these studies we focus on the impact of bank origin

Foreign Bank Presence

Why would bank origin matter for the assessment by equity investors of bank loan announcements? Local banks may have an informational and organizational advantage in screening and monitoring local borrowers. Information may deteriorate in quality across distance for example and loan officers working for a bank that is anchored locally may have stronger incentives for due diligence (similar to Berger and Udell, 2002 and Stein, 2002). Foreign outside banks as a result either cherry-pick clients and only engage the most transparent ones or break even on a pool containing many low-quality firms (Rajan, 1992 and von Thadden, 2004). Mian (2006) for example shows that foreign banks that have their headquarters farther away from local branches focus less on informationally difficult but economically sound borrowers. In this case equity investors will react positively to the announcement of a bank loan granted by a local bank (unless the local bank manages to extract all informational rents) but not react to announcements of foreign bank loans.

Alternatively, foreign banks may be better and more selective in financing local firms and less subject to social and political pressure to cross-subsidize low quality firms. Foreign banks may have a better lending technology, organization or other competitive

² Hence they provide an explanation for the results by Best and Zhang (1993) who relate firm's announcement returns to firm's risk and do not find statistically significant results.

advantage in screening or monitoring that allowed it to penetrate the local market. If this type of organizational or informational advantage is widely known to investors, announcements of loans to firms made by foreign banks may be followed by positive firm stock price reactions.

To the best of our knowledge, the previous literature has ignored the market valuation of local versus foreign bank borrowing. However differences in lending technologies and specialization of local and foreign banks have been studied extensively especially for developing countries. Stiglitz (1993), Levine (1996), Claessens, Demirguc-Kunt, and Huizinga (2001), Gelos and Roldos (2004), Micco, Panizza, and Yanez (2007), and Martinez, Soledad, and Mody (2004) study the effect of foreign bank entrance on domestic developing markets. They find significant improvements in the local financial system overall. Competition in the local banking markets intensifies, and the profitability of the local banks decreases. Interestingly, Levy-Yeyati and Micco (2003) find that in Latin-America competition actually softens following foreign bank entry, while Giannetti and Ongena (2008) find that foreign bank presence in Eastern European countries benefits all firms, with more pronounced effects for the largest firms and those less likely to be involved in relationship lending.

The operating efficiency of banks has been analyzed in cross-country studies such as those by Mian (2007) and Micco, Panizza, and Yanez (2004). These authors find that foreign banks have lower operation costs and higher profitability than domestic banks, while state owned banks are less efficient in terms of costs and profitability when compared to either foreign or domestic banks. According to Degryse, Havrylchyk, and Jurzyk (2008), foreign banks charge, on average, lower rates to transparent, larger borrowers who appear to be predominant in their portfolios. Clarke, Cull, Martinez-Peria, and Sanchez (2008) show that only foreign banks with significant local presence in Latin America focus on small business lending.

Most recently, Detragiache, Tressel, and Gupta (2008) build on an adverse selection model to study the effects of foreign bank entry in developing markets. In their model, foreign banks have a cost advantage over domestic banks in lending to larger, more transparent borrowers and a disadvantage in lending to smaller, more opaque firms.

Their model leads to multiple equilibria which suggest that, although possible, it is not necessary the case that foreign bank entry leads to improved total lending, cost efficiency, and aggregate welfare. Interestingly, it is the more transparent firms who will always benefit from foreign bank presence, while the more opaque firms will either lose or remain indifferent, depending on the resulting equilibrium under specific parameter values. Hence whether firms benefit and how equity investors react differently to announcements of local and foreign bank loans is ultimately an empirical question.

3. Methodology

We run variations of market model regressions, where in the simplest case we regress measures of the realized stock returns for event firm i at date t , R_{it} , on a measure of the realized daily return of a benchmark index, R_{Mt} . To compute abnormal returns, we augment the market model with a set of $2\tau + 1$ daily dummy variables, D_{ikt} , with $k = -\tau, -\tau+1, \dots, \tau-1, \tau$. The augmented dummies take the value of one for the event days (inside the event window) and zero otherwise. The simplest specification we estimate takes the following form:

$$R_{it} = \alpha_i + \beta_i R_{Mt} + \sum_{k=-\tau}^{\tau} \gamma_{ik} D_{ikt} + \varepsilon_{it} \quad (1)$$

We assume that the error terms are independent and have a mean zero. The estimated coefficients γ_{ik} measure the daily abnormal returns inside the event window. Contrary to the traditional two step approach for estimating abnormal returns, the one step approach we undertake has the advantage that the estimated abnormal returns and corresponding t -statistics are correctly estimated using ordinary least square methods (Karafiath, 1988). We also estimate variations of (1) by estimating alternative market model specifications. The latter results are discussed in Section 6 where we focus on the robustness of our estimates.

To get cumulative abnormal returns, CAR_{it} , we sum the estimated daily abnormal returns over various windows. These can be then tested for significance using Wald or Patell-Z tests. Finally, we relate the calculated cumulative abnormal returns to various

firm and bank specific as well as other characteristics in a univariate and multivariate setting. Generally speaking, we estimate:

$$CAR_{i\tau} = a_i + B_i X_{it} + e_i \quad (2)$$

where X_i is a matrix of firm and bank specific as well as other characteristics, among which our primary focus is on bank origin and organization variables, while τ is the event window over which the abnormal returns have been aggregated. Since some firms have been granted multiple loans over the sample period, we are forced to drop the classical assumption of independence of error terms for different observations. For robustness, we assume that the errors are independent across firms but allow for correlation within firms. This assumption leads to traditional cluster regression estimates.

4. Data and Sample Characteristics

Bank Loan Announcements

We obtain our loan announcements from Fields et al. (2006) who manually collected the largest bank loan announcement sample we are aware of. They searched all press releases in the Lexis/Nexis database from the period 1980-2003. For a detailed description of this dataset and a discussion of the sample selection issues we refer the reader to Fields et al. (2006).

The main advantage of relying on this sample is that the authors have comprehensively collected the name of the banks that participated in the loan deal, among other variables. In the original sample that contains 1,111 loan announcements, 113 bank names and 34 firm identifiers are missing. We revisit the respective press releases in the Lexis/Nexis database and are able to identify another 27 banks and 31 firms. We drop the observations with unidentifiable banks or firms and match the remaining, on bank names, with BankScope and Bank Regulatory, two datasets that are available in WRDS. The final match comprises 952 observations (matched with BankScope) and 978 observations (matched with Bank Regulatory). We will use the latter sample in robustness.

The possibility to match our dataset with BankScope and Bank Regulatory databases is essential for our study. Both datasets allow us to identify the origin of the lending bank. This differentiation is possible since both databases provide us with the location of

bank's headquarter (Bank Regulatory) and the respective bank's subsidiary (Bank Regulatory). As we are able to extract the firms' headquarters location from COMPUSTAT, also available via WRDS, we can measure firm-bank proximity.

Given that we have access to two different bank datasets in this study, we are more confident about our results as we are able to carefully test for robustness of our conclusions. However, the drawback is that in the Bank Regulatory set we are missing out a lot of bank specific observations, while the BankScope data set starts only 1986. Both restrict our samples considerably. Table 1 present the variables used in our study along with a definition and detailed description.

Insert Table 1 here

We now turn to a detailed description and motivation for each of these variables.

Firm Characteristics

Panel A in Table 1 presents firm specific variables employed in our study. The dependent variable is the cumulative abnormal return on the firm's stock at various event windows around a bank loan announcement. We consider various event windows and denote the cumulative abnormal returns for each of them by CAR01, CAR10, CAR11, CAR22, CAR33, and CAR55, for windows (-1, 0), (0, +1), (-1, +1), (-2, +2), (-3, +3), and (-5, +5), respectively. We note that our cumulative abnormal returns are somehow lower than those presented in earlier bank loan announcement studies, but are in line with the recent findings of Fields, Fraser, Berry, and Byers (2006) and Ongena, Roscovan, Song, and Werker (2008).

On the right hand side, we include typical measures of firm size, LNASSETS or LNMVE, as motivated by Slovin, Johnson, and Glascock (1992), to control for the existing informational asymmetries regarding firm's performance. Panel A in Table 1 present the log transformations of these values. When adjusted for inflation (in 1992 dollars), we find that borrowers' total assets had an average of 1,195 million dollars and a market value of equity of 818 million dollars, though these results are affected by a number of large outliers. The corresponding median values are 197 million dollars and 126 million dollars, respectively. The change in total assets in the year prior to the announcement has been 0.5 million dollars on average with a median of 0.1 million dollars.

Best and Zhang (1993) suggest that borrower risk plays an important role for the bank loan announcement reactions. Ongena, Song, Roscovan, and Werker (2008) develop a theoretical model and relate firm risk to both bond and stock price reactions around the bank loan announcements. To control for the credit quality of the borrowers in our sample, we include the standard deviation of firm's stock returns in the year prior to the loan agreement as an independent variable. Our sample comprises relatively risky borrowers as the standard deviation on their stock returns is quite high with an average value of 3.62% and a median of 3.32% in the year prior to the loan announcement. Despite this risk (or because of it), Panel A in Table 1 shows that on average the firms have been quite profitable with a median ratio of operation income to assets of 11.76% and an average of 10.61%. Firm's Tobin's Q values have a median of 1.30 and an average of 1.64. Despite their riskiness, our firms appear to be relatively mildly leveraged, with median debt ratios of 22% and average value of 23%.

As James and Smith (2000) point out that loan agreements are particularly important for borrowers with an undervalued stock, we also include the cumulative abnormal return on firm's stock during the last year prior to the announcement. Our equally weighted market-adjusted return in the year prior to the loan announcement is -1.05% on average and has a median value of -0.65%, which is consistent with the James and Smith's (2000) conjecture.

Bank Characteristics

To control for origin and organizational differences in lenders' characteristics, we employ four mutually exclusive dummy variables INSTATE, NEIGHBOR, NONNEIGHBOR, and FOREIGN. These dummies are defined to be equal to one if the borrower's and lender's headquarter are in the same state, in a neighbor (i.e., bordering) state, in a non-neighbor state but in the same country, or in different countries, respectively, and zero otherwise. The descriptive statistics presented in Panel B of Table 1 are those of the data from the BankScope database.

Our sample shows that 12.9% of the loan agreements have been conducted between lenders and borrowers that have their headquarters in the same state, 7.8% of the loan deals have been conducted between borrowers and lenders with headquarters in a

neighbor state, a majority of 53.0% were conducted between lenders and borrowers with headquarters that are not in the same state but in the same country, while 26.1% of the deals are with foreign banks.

Loan Characteristics

Among the loan specific characteristics we employ and list in Panel C of Table 1, is the variable LNAMOUNT, that is defined as the natural logarithm of the loan amount in dollars. Loan size provides a measure of the importance of the deal for both the lender and borrower and on the impact the announcement might have on the market valuation. While on average, borrowers have been granted loans of 135 million dollars, the median value of loan size is 30 millions dollars. These amounts are considerable and can reach on average 10% of firm's asset values.

Lummer and McConnell (1989) classify bank loans into new loans and renewals. Our right hand side dummy variable, RENEW, captures such differences in the loan deals. Out of 986 loan deals in our dataset, 52% (513) are renewals and 47% (473) are new loans. Lummer and McConnell (1989) report similar descriptive of about 49% of their sample being loan renewals.

Preece and Mullineaux (1996) find significant differences in syndicated and non-syndicated bank loan announcement returns with the syndicated loan announcement returns being considerably smaller and rather insignificant. To control for such differences we include a dummy variable, SYNDICATED, which equals one if the loan deal has multiple lenders and equals zero otherwise. Out of 986 loan deals in our sample 65% (639) are syndicated where Preece and Mullineaux (1996) report that 72% of their sample are syndicated loans.

Other Control Variables

As in James and Smith (2000), abnormal returns to bank loan announcement appear to differ with the size of relative credit spreads. To control for such differences we employ a variable SPREAD defined as the differences between the AAA and BBB credit spreads in the loan announcement month. Our results show that on average the spread between AAA and BBB bonds is 1.01% and a median value of 0.88%.

5. Empirical Results

We estimate market model regressions as shown in equation (1) to compute abnormal returns around bank loan announcements for a sample of 986 firms during 1980-2003. We first start by describing the behavior of abnormal returns around announcement dates in a univariate setting and then link the cumulative abnormal returns for various event windows to bank, firm and loan characteristics and macro conditions in a multivariate regression analysis.

Univariate Results

The results of our event study for the entire sample, and for in-state, neighbor state, non-neighbor state, and foreign loans separately are presented in Table 2. For each of these groups, we present both, the results from the equally-weighted as well as the Fama-French factors regressions.

Insert Table 2 here

Looking at the first two columns we observe that the market reactions for the whole sample of announcements are generally limited to the announcement day and are, on average, as large as 0.49% for the equally weighted regressions and 0.52% for the Fama-French regressions, both economically and statistically significant at 1% confidence levels using the Wilcoxon rank test. These magnitudes of loan announcement returns are considerably smaller than those reported in James (1987) but are very much in line with those reported in Preece and Mullineaux (1996), James and Smith (2000), Fields et al. (2006), and Ongena et al. (2008).

Columns 3 to 10 of Table 2 break the sample into in-state, neighbor state, non-neighbor state, and foreign bank loans. These results are already more insightful as they show significant differences between the average loan announcement returns across the four groups. In particular, the largest day-0 average abnormal returns are for the in-state loans. These are economically as large as 1.05% or 1.11% for the equally-weighted and Fama-French regressions, but their statistical significance is somehow smaller at 5% confidence.

The second group with largest average loan announcement returns is the foreign bank loans group, presented in Column 9 and 10 of Table 2. These are economically smaller than those for the in-state loans at .68% and .73% for the equally weighted and Fama-French regressions respectively, but have greater statistical significance at 1% confidence levels.

Columns 5 to 8 of Table 2 present the day-0 average loan announcement abnormal returns for the neighbor and non-neighbor state loans. While for the first of the two groups the average day-0 abnormal returns are both economically and statistically insignificant, for the latter, the abnormal returns are economically much smaller at .36% for the equally-weighted and Fama-French regressions, and are significant at 5% confidence levels.

These preliminary results already point out that there are significant differences in market valuations of bank-firm relationships when bank origin and organization characteristics vary. To provide further evidence that this is the case, we present in Table 3 the cumulative abnormal returns for various event windows, for both equally-weighted and Fama-French regressions.

Insert Table 3 here

The results in Table 3 provide more insights on the behavior of market reactions to bank loan announcements across different bank origin and organizational structures. In particular, we observe that on average the cumulative abnormal reactions for event windows $(-1, 0)$, $(0, +1)$, $(-1, +1)$, $(-2, +2)$, $(-3, +3)$, and $(-5, +5)$ are around .5% statistically and economically significant predominantly at 1% confidence levels. Again these results are in line with recent studies that have tested for various aspects of bank loan announcement returns.

When the sample is split into the four groups depending on the location of firm and bank headquarters, we observe, in columns 3 and 4 of Table 3, that the in-state loan announcement returns are again the largest, but they do not appear to be significant for any but the $(-1, 0)$ event window and only at 10% confidence levels. The neighbor state cumulative loan announcement returns presented in columns seem to be negative and insignificant for all event windows.

Contrary to these results, columns 5 and 6 of Table 3, show that the non-neighbor state loans have let to positive cumulative abnormal returns that vary from .30% to .45% depending on the event windows considered. The results for this particular group are very close to the results for the entire sample.

Most importantly, the cumulative abnormal returns on foreign bank loan announcements appear to be most significant and largest among the four groups considered. In particular, the results vary from 0.86% to 1.72% for various event windows and are statistically significant predominantly at 1% or 5% confidence levels.

So far, our univariate results convincingly show that the market reactions to bank loan announcements vary with bank origin, and are predominantly positive when lenders are from abroad. Recent research by Field et al (2006) shows that loan announcement returns have decreased considerably over time. In order to provide some perspective on this time pattern, we provide the cumulative abnormal returns for different time periods in Table 4. Since the announcements in our sample, as collected by Fields et al (2006), come from news wires we focus in what follows on the (0, +1) event window, but the results are robust to alternative event windows.

Insert Table 4 here

Panel A of Table 4 presents average cumulative abnormal returns for the entire sample as well as for different time periods grouped by decades (1980-1989, 1990-1999, and 2000-2003) and for in-state loans, neighbor-state loans, non-neighbor state loans, and foreign loans during these type periods. The average pattern in the cumulative abnormal returns suggests a significant decline for the neighbor state loans, non-neighbor state loans, and the foreign loans but not for the in-state loans over the 24 year period. In particular, the abnormal returns for all loans are positive and statistically significant only for the first sub-period. During this significantly positive abnormal returns are observed only in the foreign bank loan announcement. Non-neighbor state also illicit positive cumulative abnormal returns but these are much smaller and statistically significant only at 10%.

Contrary to above, in-state loans have increased over the 24-year period from being negative and insignificant in the first period and to almost 0% in the second period, and to about 3% in the last 4 years of our sample period. The results for the last sub-

period are statistically significant at 5% confidence levels. These results show, in fact, that there is no clear time pattern in the size of the loan announcement return during our sample period among the four groups, but rather, market reactions have shifted gradually from valuing foreign bank-firm relationships during the first sub-period to valuing local, in-state bank-firm relationships in the last sub-period. These results are, in fact, not surprising when put in perspective with those of Petersen and Rajan (2002) who show that the distance between firms and banks has considerably increased over time.

To provide some further evidence on the time pattern in the bank loan announcement returns across the four groups considered in this study, we present in Tabel 4, the cumulative abnormal returns for the (0, +1) event window on a 5-year interval (Panel B) and yearly (Panel C) basis.

The results for the 5-year sub-periods show that there is no consistent pattern behavior in the market reactions to bank loan announcements over the 24-year period considered in our sample. However, it is interesting to note that in-state and foreign bank loan announcements have been consistently opposite in sign in all but the sub-period 4 (1994-1999). For neighbor and non-neighbor state loans the results are inconclusive as in most the time periods we find no significant cumulative abnormal returns.

The cumulative abnormal returns presented on a yearly basis in Panel C of Table 4, show, consistently with above, that there has been a shifting pattern in the market reactions to in-state and foreign bank loans. In particular during the earlier years, the market reactions to foreign loans have been positive, while negative for the in-state loans. In the latter years, however, the market reactions to foreign loans have become negative, while positive for the in-state loans. These results however, should be interpreted with caution given the high volatility in the computed cumulative abnormal returns over time together with limited significance levels due to a small number of observations within each of the considered groups. These results may be sample specific, however, as Fields et al (2006) the characteristics of our sample are very much consistent with those of James (1987) and Lummer and McConnell (1989) and hence are more likely to be generally valid.

So far our results show that although overall the size of loan announcement returns appear to have decreased over time, it has not necessarily happened within the con-

sidered groups. In particular, our results show that while foreign loan announcements have decreased over time, market reactions to in-state loans appear to have increased in the latter years. These results suggest that changes in the banking and market competition have not completely eroded the informational advantage that banks have, as Field et al (2006) suggest, but rather have shifted the informational advantage from some type of banks to another. The univariate results, however, might not necessarily reflect the changes in market preferences over bank loan relationships, but rather changes in lender characteristics or sample composition. To overcome such issues we explore our data in a multivariate framework in the following subsection.

Multivariate Results

Tables 5-8 present our multivariate results where we regress the cumulative abnormal returns on firm's stock for various event windows on a number of variables suggested by prior research that might explain the market reaction to bank loan announcements. Our primary interests are in the bank origin dummies, but we also control for various proxies for firm size, change in the value of firm's assets, pre-announcement firm performance, firm's risk and capital structure, as well as some loan and macroeconomic characteristics. We turn now to the discussion of our results.

Insert Table 5 here

Table 5 presents the results of our multivariate models where the dependent variable is the 2-day cumulative abnormal return for day (-1, 0). Model 1-8 provide important insights on how different origin and organizational structures of lenders affect the cumulative abnormal returns on borrowers' stocks. Given our univariate results, where we have shown that the announcement returns are the lowest when the lender and the borrower are in neighbor-states, we take this group as our reference and include only the dummies for the in-state loans, non-neighbor state loans, and the foreign loans.

The estimates of the coefficients of the INSTATE, NONNEIGHBOR and FOREIGN dummy variables are positive and statistically significant in all specifications at 10% confidence or less, except for Model 4. Model 4, in fact, is troublesome due to multicollinearity issues between LNASSETS and LNAMOUNT of 72%, between STDRET and LNAMOUNT of -42%, and between SYNDICATE and LNAMOUNT of 52%. The

insignificance of estimates is not due to limited number of observations in the variable LNAMOUNT, as we obtain significant estimates when we regress the same specification without LNAMOUNT on the smaller sample where we observe LNAMOUNT. Except for model for, our estimates of INSTATE, NONNEIGHBOR, and FOREIGN seem to be robust among all models considered.

The effects of bank origin and organizational controls seem to be economically significant. First, we observe that across all models in Table 5 the magnitude of the coefficients next to INSTATE and FOREIGN are the largest amongst the bank dummies while the NONNEIGHBOR coefficient seem to be the lowest. These results are consistent with our conclusions in the univariate analysis and show that when lender's headquarter is located either abroad or in the same state as borrower's headquarter, the cumulative abnormal return on firm's stock will go up by 150 bps as compared to the abnormal return on a firm which has been granted a loan from a bank with its headquarter in a neighbor state. If the location of bank's headquarter is in a non-neighbor state, the loan announcement return will increase by 100 bps as compared to our reference group. These results imply that the average cumulative abnormal returns are larger by 20-25% when the lending bank's headquarter is not in a neighbor state.

In Models 2–8 we employ two measures for firm size: LNASSETS and LNMVE. In line with Slovin, Johnson, and Glascock (1992), we find that the cumulative abnormal returns on borrower's stock decrease with size. This effect is statistically significant at 10% confidence level when we include LNASSETS as a control variable, and at 1% confidence levels when our control for firm size is LNMVE. These results are economically significant as they suggest that the effect of an average size firm will decrease the cumulative abnormal return by 5-10 bps.

In models 3, 4, 7, and 8, we control for firm's credit quality by including on the right hand side of the regression the standard deviation on firm's stock in the year prior to the announcement. In line with Ongena, Roscovan, Song, and Werker (2008) we find that the cumulative abnormal return on firm's stock increases in firm's risk. This effect is statistically significant at 1% in Model 3, but its significance decreases to 10% as we extend our model with additional controls. The economic impact of firm's risk is nonnegligible,

as for an average firm, the cumulative abnormal return on firm's stock increases by 10 bps, similar in magnitude to the results in Ongena et al (2008).

In Models 5-8 we extend our specifications by controlling for alternative risk and performance measures as well as loan and macroeconomic characteristics. Although, in many cases the signs are in line with theoretical predictions, the remaining results have little, if any, economic or statistical significance. This, however, changes impressively as we switch to an alternative specification where we regress the cumulative abnormal return on firm's stock for days (0, +1) on similar controls. The results are presented in Table 6.

Insert Table 6 here

In table 6 we observe that while the economic and statistical significance of the INSTATE and NONNEIGBOR dummies has decreased considerably, the significance of the FOREIGN dummies has remained the same. Additionally, we observe an increase in significance for alternative risk and performance characteristics of the borrowers. In particular, in Models 5, 7, and 8 of Table 6 the return on firm's assets appear to negatively impact the size of the loan announcement returns. This effect is significant at 1% in all specifications considered. Its economic significance, however, is rather low of about -3 bps for an average firm.

Recent theories suggest that foreign and domestic banks specialize in serving different types of borrowers depending on the existing informational asymmetries. To control for such differences in technology, we include an interaction term in Models 7 and 8 in Table 6 and find a statistically and economically significant negative impact. Specifically, the cumulative abnormal return on firm's stock increases, *ceteris paribus*, by 10 to 15 bps when it is granted by a foreign bank. However, when the firm's size increases and there are less informational asymmetries involved this benefit is much smaller and decreases slightly.

6. Robustness

We employ two types of robustness tests. First, we alter the event windows over which we compute abnormal returns, and, second, we perform similar regressions on an alterna-

tive sample, collected from the Bank Regulatory database. The results for alternative event windows are presented in Table 7 and Table 8, while the results for the alternative sample are not reported.

Insert Table 7 and Table 8 here

The results in table 7, where the dependent variable is the cumulative abnormal return on firm's stock for days (-1, +1), are virtually unchanged. The estimates next to the foreign dummy are both statistically and economically significant and very similar to our previous results. When we increase the event windows, however, we observe little significance, if any, for the FOREIGN dummies and only in a limited number of specifications. We argue that as we increase the event windows are facing contamination effects that might decrease the economic and statistical importance of our results.

When we employ the alternative dataset, we obtain virtually the same results. The only difference however is that Bank Regulatory does not report the location of bank's headquarters, but rather the location of bank subsidiaries in US. Qualitatively, however, our results are very much similar, in the sense that only the closest and the farthest away banks lead to significantly positive abnormal returns during loan announcements. These results are available upon request.

7. Conclusions and Implications

We document substantial differences in the cumulative abnormal returns on firm's stock during bank loan announcements when lender's origin varies. Over our sample period, firms have experienced quite heterogeneous reactions to bank loan announcements from very negative to highly positive and significant. When we group, however, the cumulative abnormal returns by bank origin and organization dummies, constructed using the BankScope dataset, we find that the abnormal returns have been consistently positive when foreign bank-firm relationships and in some cases to closes local firm-bank relationships. We show that these findings are robust to alternative specifications, various event windows considered, and alternative definitions of bank origin and organization. Overall, our results suggest that markets value most relationships with high quality, com-

petitive, foreign borrowers that seem to perform better in selecting and monitoring their clients, rather than local lenders who have easier access to firm's private information.

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Table 2 Daily Loan Announcement Abnormal Returns for In-state, Neighbor, Non-neighbor, and Foreign Bank Loans

The table presents daily loan announcement abnormal returns for 985 firms that have announced a loan agreement with a bank during the sample period 1980-2003. We split the sample into four mutually exclusive groups: (i) In-state loans are loans that have been granted by banks whose headquarter is located in the same state as firm's headquarter; (ii) Neighbor-state loans are loans that have been granted by banks whose headquarter is located in a state that shares the border with firm's headquarter state, (iii) Non-neighbor state loans are loans granted by banks whose headquarter is located in a state that is not neighbor with firm's headquarter state but is in the same country, and (iv) Foreign loans are loans granted by banks whose headquarter are located outside firm's headquarter country location. For all loans and each of these groups, mean daily abnormal returns for days -5 to +5 are calculated using a market model with either the return on an equally weighted index or the returns on the Fama-French (FF) factor portfolios. To compute abnormal returns we append to each of these models a dummy variable that is equal to one when the corresponding day falls in the event window. Similar results are obtained using value weighted and four factor models (Fama-French plus momentum) and are omitted for brevity. The *, **, and *** indicate significant at 10%, 5%, and 1%, respectively.

Day	All Loans		In-state Loans		Neighbor-state Loans		Non-neighbor state Loans		Foreign Loans	
	EW	FF	EW	FF	EW	FF	EW	FF	EW	FF
-5	-0.07%	-0.10%	0.00%	-0.03%	-0.41%	-0.42%	-0.17%	-0.21%	0.19%	0.17%
-4	0.13%	0.12%	0.15%	0.07%	-0.27%	-0.28%	0.08%	0.09%	0.34%	0.35%
-3	-0.08%**	-0.07%	0.00%	-0.02%	-0.32%	-0.38%	0.08%*	0.11%	-0.36%	-0.38%
-2	0.12%	0.10%	0.29%	0.21%	0.57%	0.58%	-0.02%	-0.01%	0.17%	0.14%
-1	0.04%	0.02%	-0.09%	-0.14%	-0.49%	-0.56%	0.08%	0.08%	0.18%	0.16%
0	0.49%***	0.52%***	1.05%***	1.11%***	-0.11%	-0.13%	0.36%***	0.36%**	0.68%***	0.73%***
+1	-0.05%**	-0.05%*	-0.60%	-0.62%	-0.08%	-0.18%	-0.04%	-0.03%	0.23%*	0.23%*
+2	0.00%	0.00%	0.45%*	0.44%	0.86%	0.81%	-0.08%	-0.06%	-0.32%	-0.34%*
+3	-0.13%	-0.13%	0.04%	0.00%	-0.24%**	-0.15%	-0.18%*	-0.15%	-0.10%	-0.13%
+4	-0.02%	-0.01%	-0.16%	-0.16%	-0.17%	-0.16%	-0.14%*	-0.12%*	0.33%*	0.32%
+5	-0.01%*	0.01%	0.42%	0.38%	0.25%	0.17%	-0.34%**	-0.29%*	0.38%	0.41%
Nob	985		128		77		523		257	

Table 3 Cumulative Loan Announcement Abnormal Returns for In-state, Neighbor, Non-neighbor, and Foreign Bank Loans

The table presents daily cumulative abnormal returns for 985 firms that have announced a loan during the sample period 1980-2003. We split the sample into four mutually exclusive groups: (i) In-state loans are loans that have been granted by banks whose headquarters is located in the same state as firm's headquarter; (ii) Neighbor-state loans are loans that have been granted by banks whose headquarter is located in a state that shares the border with firm's headquarter state; (iii) Non-neighbor state loans are loans granted by banks whose headquarter is located in a state that is not neighbor with firm's headquarter state but is in the same country; and (iv) Foreign loans are loans granted by banks whose headquarters are located outside firm's headquarters country location. For all loans and each of these groups, cumulative abnormal returns are calculated for event windows (-1,0), (0,+1), (-2,+2), and (-5,+5) using a market model with either the return on an equally weighted index or the returns on the Fama-French (FF) factor portfolios. To compute cumulative abnormal returns we aggregate the daily abnormal returns estimated from (1) where we append to each of the models a dummy variable that is equal to 1 when the corresponding day falls in the event window. Similar results are obtained using value weighted and four factor models (Fama-French plus momentum) and are omitted for brevity. The number of positive and negative (denoted by +/-) cumulative abnormal returns for the corresponding event window and model are presented in parentheses. The *, **, and *** indicate significant at 10%, 5%, and 1% respectively.

Event Window	All Loans		In-state Loans		Neighbor-state Loans		Non-neighbor state Loans		Foreign Loans	
	EW	FF	EW	FF	EW	FF	EW	FF	EW	FF
(-1,0)	0.53% *** (516:469)	0.54% *** (516:469)	0.95% * (67:61)	0.98% * (64:64)	-0.60% (42:35)	-0.69% (43:34)	0.43% ** (269:254)	0.44% ** (266:257)	0.86% ** (138:119)	0.89% *** (143:114)
+/-	0.45% *** (507:478)	0.46% *** (517:468)	0.44% (66:62)	0.49% (63:65)	-0.20% (40:37)	-0.31% (41:36)	0.32% * (261:262)	0.32% * (264:259)	0.91% *** (140:117)	0.97% *** (149:108)
(0,+1)	0.48% ** (511:474)	0.49% *** (521:464)	0.35% (64:64)	0.35% (66:62)	-0.69% (42:35)	-0.87% (39:38)	0.39% * (271:252)	0.40% * (280:243)	1.09% *** (134:123)	1.12% ** (136:121)
(-1,+1)	0.60% ** (506:479)	0.59% *** (506:479)	1.09% (63:65)	1.00% (67:61)	0.75% (41:36)	0.52% (40:37)	0.30% (267:256)	0.33% (264:259)	0.94% ** (135:122)	0.92% ** (135:122)
(-2,+2)	0.42% (481:504)	0.41% * (484:501)	1.55% (66:62)	1.23% ** (70:58)	-0.42% (38:39)	-0.70% (37:40)	-0.37% * (243:280)	-0.25% * (244:279)	1.72% (134:123)	1.66% ** (133:124)
+/-										
Nob	985		128		77		523		257	

Table 4 Cumulative Loan Announcement Abnormal Returns for In-state, Neighbor, Non-neighbor, and Foreign Bank Loans grouped by period (Panel A and B) and by year (Panel C)

The table presents daily cumulative abnormal returns for 985 firms that have announced a loan during the sample period 1980-2003. We split the sample into four mutually exclusive groups: (i) In-state loans are loans that have been granted by banks whose headquarter is located in the same state as firm's headquarter; (ii) Neighbor-state loans are loans that have been granted by banks whose headquarter is located in a state that shares the border with firm's headquarter state; (iii) Non-neighbor state loans are loans granted by banks whose headquarter is located in a state that is not neighbor with firm's headquarter state but is in the same country; and (iv) Foreign loans are loans granted by banks whose headquarters are located outside firm's headquarters country location. For all loans and each of these groups, cumulative abnormal returns are calculated for event windows (0,+1) using a market model with either the return on a equally weighted index (EW) or the returns on the Fama-French (FF) factor portfolios. To compute cumulative abnormal returns we aggregate the daily abnormal returns estimated from (1) where we append to each of the models a dummy variable that is equal to 1 when the corresponding day falls in the event window. Similar results are obtained using value weighted and four factor models (Fama-French plus momentum) and are omitted for brevity. Panel A presents cumulative abnormal returns grouped by decade, Panel B splits the sample into 5-year periods, and Panel C presents cumulative abnormal returns grouped by each year. The number of positive and negative (denoted by +/-) cumulative abnormal returns for the corresponding event window and model are presented in parentheses. The *, **, and *** indicate significant at 10%, 5%, and 1% respectively.

Period	All Loans				In-state Loans				Neighbor-state Loans				Non-neighbor State Loans				Foreign Loans			
	Nob	EW	FF	EW	FF	EW	FF	EW	FF	EW	FF	EW	FF	EW	FF	EW	FF			
Panel A: Cumulative abnormal returns grouped by decade																				
1980-2003	985	0.45%***	0.46%***	0.44%	0.49%	-0.20%	-0.31%	0.32%*	0.32%*	0.32%*	0.32%*	0.32%*	0.32%*	0.32%*	0.32%*	0.91%***	0.97%***			
+/-	985	(507:478)	(517:468)	(66:62)	(63:65)	(40:37)	(41:36)	(261:262)	(264:259)	(261:262)	(261:262)	(261:262)	(261:262)	(261:262)	(261:262)	(140:117)	(149:108)			
1980-1989	287	0.57%***	0.64%***	-1.33%	-0.98%	0.25%	-0.25%	0.22%*	0.22%*	0.22%*	0.22%*	0.22%*	0.22%*	0.22%*	1.43%***	1.49%***				
+/-	287	(157:130)	(161:126)	(11:12)	(12:11)	(10:9)	(10:9)	(61:69)	(61:69)	(61:69)	(61:69)	(61:69)	(61:69)	(61:69)	(66:48)	(70:44)				
1990-1999	495	0.42%*	0.41%	-0.04%	0.00%	-0.12%	0.01%	0.40%*	0.41%*	0.40%*	0.40%*	0.40%*	0.41%*	0.67%	0.81%*					
+/-	495	(246:249)	(54:241)	(34:41)	(33:42)	(18:18)	(21:15)	(129:141)	(135:135)	(129:141)	(129:141)	(129:141)	(135:135)	(54:60)	(65:49)					
2000-2003	203	0.35%	0.34%	2.94%**	2.85%**	-0.65%	-0.88%	0.12%	0.15%	0.12%	0.12%	0.12%	0.15%	-0.56%	-0.50%					
+/-	203	(104:99)	(102:101)	(20:10)	(18:12)	(9:13)	(10:12)	(60:62)	(60:62)	(60:62)	(60:62)	(60:62)	(60:62)	(15:14)	(14:15)					
Panel B: Cumulative abnormal returns grouped by 5-year periods																				
1980-1984	147	0.66%**	0.79%***	-0.94%	-0.45%	0.45%	0.09%	0.94%**	1.08%**	0.94%**	0.94%**	0.94%**	1.08%**	0.65%*	0.79%*					
+/-	147	(74:73)	(80:67)	(5:6)	(6:5)	(6:5)	(7:4)	(35:37)	(37:35)	(35:37)	(35:37)	(35:37)	(37:35)	(28:25)	(30:23)					
1985-1989	140	0.50%**	0.49%***	-1.69%	-1.46%	-0.03%	-0.72%	-0.68%	-0.62%	-0.68%	-0.68%	-0.68%	-0.62%	2.10%***	2.10%***					
+/-	140	(75:65)	(81:59)	(6:6)	(6:6)	(4:4)	(3:5)	(29:30)	(32:27)	(29:30)	(29:30)	(29:30)	(32:27)	(38:23)	(40:21)					
1990-1994	232	0.57%	0.66%	-0.66%	-0.56%	-1.41%	-1.21%	0.94%	1.01%	0.94%	0.94%	0.94%	1.01%	0.73%	0.81%					
+/-	232	(112:120)	(118:114)	(10:16)	(8:18)	(6:7)	(8:5)	(64:66)	(67:63)	(64:66)	(64:66)	(64:66)	(67:63)	(32:31)	(35:28)					
1994-1999	263	0.17%*	0.19%*	0.30%	0.29%	0.62%	0.70%	-0.10%	-0.15%	-0.10%	-0.10%	-0.10%	-0.15%	0.60%	0.82%*					
+/-	263	(123:140)	(136:127)	(24:25)	(25:24)	(12:11)	(13:10)	(65:75)	(68:72)	(65:75)	(65:75)	(65:75)	(68:72)	(22:29)	(30:21)					
2000-2003	203	0.35%	0.34%	2.94%**	2.85%**	-0.65%	-0.88%	0.12%	0.15%	0.12%	0.12%	0.12%	0.15%	-0.56%	-0.50%					
+/-	203	(104:99)	(102:101)	(20:10)	(18:12)	(9:13)	(10:12)	(60:62)	(60:62)	(60:62)	(60:62)	(60:62)	(60:62)	(15:14)	(14:15)					

(Table 4 continued)

Panel C: Cumulative abnormal returns grouped by year

Year	All Loans		In-state Loans		Neighbor-state Loans		Non-neighbor State Loans		Foreign Loans	
	Nob	EW	Nob	EW	Nob	EW	Nob	EW	Nob	EW
1980	33	0.18%	3	0.34%	4	1.63%	11	1.26%	15	-1.03%
1981	33	0.28%	2	1.73%	1	1.00%	18	0.61%	12	-0.32%
1982	30	1.73%**	3	-1.36%	3	-1.56%	16	1.23%	8	5.02%**
1983	24	1.44%**	1	-3.63%	1	-2.31%	12	2.73%***	10	0.78%*
1984	27	-0.23%	2	-3.54%**	2	2.24%	15	-0.62%	8	0.73%
1985	25	0.74%	1	0.07%	0	-	11	-0.03%	13	1.50%
1986	24	-1.02%	1	0.56%	1	-6.96%**	8	-4.38%**	14	1.21%*
1987	27	0.80%*	4	-0.52%	1	5.13%***	13	0.26%	9	1.69%*
1988	35	1.85%**	4	-1.82%	5	0.66%	16	-0.20%	10	7.09%**
1989	29	-0.36%	2	-5.75%	1	-1.66%	11	-0.29%	15	0.39%
1990	34	1.13%	3	-0.61%	0	-	13	-0.14%	18	2.33%
1991	28	0.07%	4	-2.66%	1	-0.76%	14	1.06%	9	-0.15%
1992	30	0.11%	4	-3.92%*	5	0.49%	16	0.56%	5	1.50%
1993	60	1.20%	6	1.23%	2	-1.35%	41	1.01%	11	2.70%*
1994	80	0.20%	9	0.39%	5	-3.47%	44	1.28%	22	-1.19%
1995	70	0.25%	13	0.11%	6	2.19%	34	-0.27%	17	0.38%
1996	72	-0.16%	16	0.78%	3	-2.69%	42	-0.39%	11	0.03%
1997	54	-1.21%	8	0.06%	7	-0.35%	29	-1.23%	10	-2.63%*
1998	42	1.07%	6	-0.70%	5	-0.44%	23	1.03%	8	3.44%*
1999	25	2.61%***	6	0.72%	3	4.22%*	12	1.92%	4	6.29%**
2000	26	0.19%	4	5.59%	1	-10.71%**	17	-0.03%	4	-1.54%
2001	50	1.13%	4	11.03%**	6	2.00%	34	-0.43%	6	2.48%*
2002	65	-0.03%	10	-0.04%	10	-0.25%	34	0.87%	9	-2.61%*
2003	62	0.20%	12	1.85%	5	-2.62%	37	-0.01%	8	0.45%

Table 5 Estimation Results: Dependent Variable - CAR10

This table presents the OLS estimates for Models 1-8 run on a sample of 985 firms that have announced a loan agreement with a bank during the period 1980-2003. The dependent variable is the cumulative abnormal return on firm's stock for the event window (-1, 0). Dependent variables are dummy variables that control for bank location (INSTATE, NEIGHBOR, NONNEIGHBOR, and FOREIGN); firm specific characteristics such as log of firm's assets (LNASSETS), log of firm's market value of equity (LNMVE), change in firm's assets in the year prior to the announcement (ASSETCHANGE), standard deviation on firm's stock for 250 days prior to the announcement (STDRET), the return on firm's assets (ROA) firm's Tobin Q ratio (TOBINQ); firm's leverage (DEBTATIO) and firm's sales from non-domestic and foreign sales as well as firm's cumulative abnormal return for a period of 250 days prior to the announcement (CAR250); loan specific characteristics such as log of loan amount (LNAMOUNT), a dummy variable that indicates if the announcement has been published in the Wall Street Journal (WSJ), a dummy variable that indicates that loan was a renewal (RENEW), and a dummy variable that indicates if the loan was syndicated (SYNDICATE); macroeconomic characteristics such the spread between the AAA and BBB bond indices (SPREAD). Models 7 and 8 also include an interaction term between the FOREIGN dummy and firm's size, i.e. FOREIGN x LNASSETS. The interaction terms have been demeaned prior to multiplication. Model 8 also contains time (5-year period) dummies. The *, **, and *** indicate significant at 10%, 5%, and 1% respectively.

	Dependent Variable: CAR10							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Bank Characteristics								
INSTATE	.016** (.0073)	.014* (.0073)	.014* (.0074)	.008 (.0077)	.013* (.0074)	.014* (.0074)	.013* (.0074)	.013* (.0074)
NONNEIGHBOR	.010* (.0062)	.011* (.0063)	.011* (.0074)	.009 (.0066)	.011* (.0063)	.011* (.0063)	.011* (.0063)	.012* (.0064)
FOREIGN	.015** (.0066)	.015** (.0067)	.015** (.0067)	.012* (.0069)	.015** (.0067)	.014** (.0067)	.014** (.0067)	.015** (.0068)
Firm Characteristics								
LNASSETS	-	-.001* (.001)	-.000 (.001)	-.001 (.0015)	-	-	-	-
LNMVE	-	-	-	-	-.003*** (.0012)	-.003*** (.0011)	-.002** (.0013)	.015* (.0013)
ASSETCHANGE	-	-	.000 (.000)	.000 (.0004)	-	-	-	-
STDRET	-	-	.316*** (.120)	.142 (.1286)	-	-	.248* (.1284)	.239* (.1302)
ROA	-	-	-	-	-.0169* (.0098)	-	-.012 (.0099)	-.014 (-.0140)
TOBINQ	-	-	-	-	.0017 (.0015)	-	.001 (.0015)	.002 (.0016)
DEBTATIO	-	-	.007 (.0087)	-.002 (.0093)	-	.005 (.0087)	-	-
FOREIGNACTIVITY	-	-	-	-.000 (.0156)	-	-	-	-
CAR250	-	-	-.004 (.0050)	-.000 (.0052)	-	-.005 (.0051)	-	-.006 (-.0056)

Table 6 Estimation Results: Dependent Variable - CAR01

This table presents the OLS estimates for Models 1-8 run on a sample of 985 firms that have announced a loan agreement with a bank during the period 1980-2003. The dependent variable is the cumulative abnormal return on firm's stock for the event window (0, +1). Dependent variables are dummy variables that control for bank location (INSTATE, NEIGHBOR, NONNEIGHBOR, and FOREIGN); firm specific characteristics such as log of firm's assets (LNASSETS), log of firm's market value of equity (LNMVE), change in firm's assets in the year prior to the announcement (ASSETCHANGE), standard deviation on firm's stock for 250 days prior to the announcement (STDRET), the return on firm's assets (ROA) firm's Tobin Q ratio (TOBINQ); firm's leverage (DEBTTRATIO) and firm's sales from non-domestic and foreign sales as well as firm's cumulative abnormal return for a period of 250 days prior to the announcement (CAR250); loan specific characteristics such as log of loan amount (LNAMOUNT), a dummy variable that indicates if the announcement has been published in the Wall Street Journal (WSJ), a dummy variable that indicates that loan was a renewal (RENEW), and a dummy variable that indicates if the loan was syndicated (SYNDICATE); macroeconomic characteristics such the spread between the AAA and BBB bond indices (SPREAD). Models 7 and 8 also include an interaction term between the FOREIGN dummy and firm's size, i.e. FOREIGN x LNASSETS. The interaction terms have been demeaned prior to multiplication. Model 8 also contains time (5-year period) dummies. The *, **, and *** indicate significant at 10%, 5%, and 1% respectively.

	Dependent Variable: CAR01							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Bank Characteristics								
INSTATE	.006 (.0074)	.005 (.0075)	.005 (.0074)	.003 (.0080)	.004 (.0074)	.005 (.0074)	.005 (.0073)	.005 (.0074)
NONNEIGHBOR	.005 (.0062)	.006 (.0063)	.007 (.0064)	.006 (.0069)	.007 (.0063)	.008 (.0063)	.006 (.0063)	.007 (.0063)
FOREIGN	.011* (.0067)	.012* (.0067)	.014** (.0078)	.013* (.0073)	.012* (.0067)	.013** (.0067)	.012* (.0066)	.012* (.0068)
Firm Characteristics								
LNASSETS	-	-.001 (.0010)	.001 (.001)	.000 (.0016)	-	-	-	-
LNMVE	-	-	-	-	-.003** (.0012)	-.003*** (.0011)	-.002 (.0013)	-.002 (.0013)
ASSETCHANGE	-	-	.001* (.0004)	.001* (.0004)	-	-	-	-
STDRET	-	-	.450*** (.1216)	.528*** (.000)	-	-	.364*** (.0099)	.370*** (.1292)
ROA	-	-	-	-	-.034*** (.0098)	-	-.028*** (.0015)	-.030*** (.0100)
TOBINQ	-	-	-	-	-.001 (.0015)	-	-.002 (.1276)	-.002 (.0015)
DEBTTRATIO	-	-	-.013 (.0087)	-.010 (.0098)	-	-.016* (.0087)	-	-
FOREIGNACTIVITY	-	-	-	-.001 (.0163)	-	-	-	-
CAR250	-	-	-.007 (.0051)	-.005 (.0054)	-	-.008 (.0051)	-	-.009* (.0051)

Table 7 Estimation Results: Dependent Variable – CAR11

This table presents the OLS estimates for Models 1-8 run on a sample of 985 firms that have announced a loan agreement with a bank during the period 1980-2003. The dependent variable is the cumulative abnormal return on firm's stock for the event window (-1, +1). Dependent variables are dummy variables that control for bank location (INSTATE, NEIGHBOR, NONNEIGHBOR, and FOREIGN); firm specific characteristics such as log of firm's assets (LNASSETS), log of firm's market value of equity (LNMVE), change in firm's assets in the year prior to the announcement (ASSETCHANGE), standard deviation on firm's stock for 250 days prior to the announcement (STDRET), the return on firm's assets (ROA) firm's Tobin Q ratio (TOBINQ); firm's leverage (DEBTTRATIO) and firm's sales from non-domestic and foreign sales as well as firm's cumulative abnormal return for a period of 250 days prior to the announcement (CAR250); loan specific characteristics such as log of loan amount (LNAMOUNT), a dummy variable that indicates if the announcement has been published in the Wall Street Journal (WSJ), a dummy variable that indicates that loan was a renewal (RENEW), and a dummy variable that indicates if the loan was syndicated (SYNDICATE); macroeconomic characteristics such the spread between the AAA and BBB bond indices (SPREAD). Models 7 and 8 also include an interaction term between the FOREIGN dummy and firm's size, i.e. FOREIGN x LNASSETS. The interaction terms have been demeaned prior to multiplication. Model 8 also contains time (5-year period) dummies. The *, **, and *** indicate significant at 10%, 5%, and 1% respectively.

	Dependent Variable: CAR11							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Bank Characteristics								
INSTATE	.010 (.0084)	.010 (.0085)	.009 (.0086)	.004 (.0092)	.008 (.0084)	.008 (.0085)	.008 (.0084)	.008 (.0084)
NONNEIGHBOR	.010 (.0071)	.012* (.0072)	.012* (.0073)	.009 (.0078)	.013* (.0072)	.013* (.0072)	.012* (.0072)	.012* (.0072)
FOREIGN	.017** (.0076)	.019** (.0077)	.019** (.0078)	.016* (.0083)	.019** (.0077)	.018** (.0076)	.018** (.0076)	.018** (.0077)
Firm Characteristics								
LNASSETS	-	-.001 (.0011)	.000 (.0013)	-.001 (.0018)	-	-	-	-
LNMVE	-	-	-	-	-.004*** (.0014)	-.004*** (.0013)	-.003** (.0015)	-.003** (.0015)
ASSETCHANGE	-	-	.001* (.0004)	.001* (.0004)	-	-	-	-
STDRET	-	-	.288** (.1396)	.282* (.1536)	-	-	.152 (.1458)	.151 (.1479)
ROA	-	-	-	-	-.039*** (.0112)	-	-.035*** (.0113)	-.036*** (.0114)
TOBINQ	-	-	-	-	.001 (.0017)	-	.001 (.0017)	.001 (.0017)
DEBTTRATIO	-	-	-.008 (.0100)	-.008 (.0111)	-	-.014 (.0099)	-	-
FOREIGNACTIVITY	-	-	-	-.004 (.0186)	-	-	-	-
CAR250	-	-	.002 (.0058)	.002 (.0062)	-	-.000 (.0058)	-	-.0014 (.0058)

Table 8 Estimation Results: Dependent Variable – CAR55

This table presents the OLS estimates for Models 1-8 run on a sample of 985 firms that have announced a loan agreement with a bank during the period 1980-2003. The dependent variable is the cumulative abnormal return on firm's stock for the event window (-5, +5). Dependent variables are dummy variables that control for bank location (INSTATE, NEIGHBOR, NONNEIGHBOR, and FOREIGN); firm specific characteristics such as log of firm's assets (LNASSETS), log of firm's market value of equity (LNMVE), change in firm's assets in the year prior to the announcement (ASSETCHANGE), standard deviation on firm's stock for 250 days prior to the announcement (STDRET), the return on firm's assets (ROA) firm's Tobin Q ratio (TOBINQ); firm's leverage (DEBTTRATIO) and firm's sales from non-domestic and foreign sales as well as firm's cumulative abnormal return for a period of 250 days prior to the announcement (CAR250); loan specific characteristics such as log of loan amount (LNAMOUNT), a dummy variable that indicates if the announcement has been published in the Wall Street Journal (WSJ), a dummy variable that indicates that loan was a renewal (RENEW), and a dummy variable that indicates if the loan was syndicated (SYNDICATE); macroeconomic characteristics such the spread between the AAA and BBB bond indices (SPREAD). Models 7 and 8 also include an interaction term between the FOREIGN dummy and firm's size, i.e. FOREIGN x LNASSETS. The interaction terms have been demeaned prior to multiplication. Model 8 also contains time (5-year period) dummies. The *, **, and *** indicate significant at 10%, 5%, and 1% respectively.

	Dependent Variable: CAR55							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Bank Characteristics								
INSTATE	.020 (.0154)	.021 (.0155)	.021 (.0152)	.021 (.0161)	.018 (.0153)	.019 (.0152)	.018 (.0153)	.017 (.0152)
NONNEIGHBOR	.000 (.0130)	.003 (.0132)	.000 (.0130)	.003 (.0138)	.005 (.0130)	-.000 (.0129)	.005 (.0131)	.000 (.0130)
FOREIGN	.021 (.0121)	.025* (.0140)	.021 (.0138)	.022 (.0145)	.023 (.0139)	.018 (.0137)	.023* (.0139)	.020 (.0139)
Firm Characteristics								
LNASSETS	-	-.003* (.0019)	-.001 (.0022)	.001 (.0032)	-	-	-	-
LNMVE	-	-	-	-	-.006* (.0025)	-.006** (.0023)	-.005** (.0027)	-.004 (.0027)
ASSETCHANGE	-	-	-.001 (.0008)	-.000 (.0008)	-	-	-	-
STDRET	-	-	.417* (.2477)	.361 (.2701)	-	-	.195 (.2660)	.238 (.2662)
ROA	-	-	-	-	-.079 (.0204)	-	-.076*** (.0206)	-.069*** (.0206)
TOBINQ	-	-	-	-	.001 (.0031)	-	.000 (.0031)	.000 (.0031)
DEBTTRATIO	-	-	-.011 (.0178)	-.020 (.0196)	-	-.024 (.0178)	-	-
FOREIGNACTIVITY	-	-	-	-.011 (.0327)	-	-	-	-
CAR250	-	-	.057* (.0103)	.051*** (.0108)	-	.055*** (.0104)	-	.052*** (.0104)

(Table 7 continued)

Loan Characteristics									
LNAMOUNT	-	-	-	-	-	-	-	-	-
WSJ	-	-	-	-	-	-	-	-	-
RENEW	-	-	-	-	.001	-	-	-	.003
					(.0069)				(.0069)
SYNDICATE	-	-	-	-	.011	.008	.011		.010
					(.0096)	(.0084)	(.0087)		(.0069)
Macroeconomic Characteristics									
SPREAD	-	-	-	-	.013	.014*	.013*		.010
					(.0079)	(.0078)	(.0079)		(.0087)
Interaction effects									
FOREIGN x LNASSETS	-	-	-	-	-	-	-.001		-.001
							(.0043)		(.0043)
Other controls									
Time Dummies	-	-	-	-	-	-	-	-	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R2									
Nob									