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Abstract

In this paper, we present indirect evidence that the IMF's insistence on foreign control of two large nationwide Korean banks in exchange for short-term support during the 1997 financial crisis helped restrain soft related lending practices. News signaling the likely sale of a bank to a foreign financial institution yields an average daily decrease of about 2% in the stock price of related borrowers. News indicating difficulty in finding an interested foreign investor generates an increase in the stock price of related borrowers of about the same magnitude. These signals have larger impacts on less-profitable, less-liquid, and more bank-dependent firms.

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1. Introduction: Soft Related Lending

Stable, long-term, relationships between banks and their clients are often claimed to be beneficial because they allow banks to acquire private information that permits more efficient debt contracts to be transacted. In economies having less developed financial sectors, bank-centered systems are considered to be preferable to market arrangements that require considerable supporting infrastructure. Rajan and Zingales (1998) maintain that a legal system supporting prompt and unbiased enforcement of contracts by the courts is a pre-condition for the viability of a market-based system. In 19th century New England, Lamoreaux (1986) argues that pocket banks raising the necessary external funds for growing firms filled a vacuum in the underdeveloped financial system. Haber (2004) considers related lending to have been a second-best outcome in Mexico during the early development period when the financial infrastructure was nascent. On the positive side, related lending can solve problems of information and missing institutions.

On the negative side, related lending is fraught with incentive problems that may lead to inefficient, and even fraudulent, insider lending, tunneling, and looting. Laeven (2001) finds that large shareholders of Russian banks were able to extract loans on favorable terms at the expense of the bank's equity. Cull, Matesova and Shirley (2002) demonstrate that the Czech Republic's voucher privatization program, which resulted in interlocking ownership between banks and firms, facilitated asset stripping because firms had access to soft bank loans. La Porta, Lopez-de-Silanes, and Zamarripa (2003) use detailed loan data from Mexican banks to show that, compared with unrelated loans, related loans have lower interest rates, which are less sensitive to risk, and have a higher probability of becoming nonperforming loans. Peek and Rosengren (2003) show that Japanese banks

extend related loans to financially weak borrowers and that this tendency to prop up weak firms is strongest among the weakest banks. Finally, Rajan and Zingales (1998) argue that the Asian financial crisis of 1997 is attributable partly to the prevalence of related lending and the reluctance of main banks to cut off funds to weak zombie borrowers. Hence, soft related lending, defined as lending on favorable non-market terms to privileged clients, tends to be inefficient and to increase the costs of resolution in the event of a banking crisis.

Jeon and Miller (2004) identify Korea as the Asian country that best illustrates this problem because its macroeconomic indicators did not suggest any severe problems before the crisis. However, the permissive regulatory practice of the Korean government allowed the banking sector to continue to provide funds to unviable large conglomerates, *chaebols*. In particular, the lending practices of two insolvent Korean banks, Korea First Bank and Seoul Bank, were identified. An article in the *Financial Times* on January 30, 1997 reports that "Korea First, with shareholders' equity of Won 1,800bn (£1.3bn), lent almost Won 1,100bn to Hanbo." A later article in the *Financial Times* on February 7, 1997 reports: "The former Seoul Bank chief, Mr Song Hong-kyun, was arrested in December and accused of taking $ 244,100 (£150,000) in kickbacks after extending preferential loans to four companies." Toward the end of December 1997, the Korean government and the IMF agreed on a letter of intent that singles out these two banks for recapitalization and restructuring in preparation for sales to foreign financial institutions. Such an ownership change was intended to put an end to soft related lending practices in both banks.

In this paper, we use the experience with implementing this program for these two large Korean banks as an experiment to investigate the value of soft related lending to recipient companies. In particular, we examine the impact of news that provides information about the likely change in bank ownership, with its expected end of soft lending practices, on the stock prices of related companies. We begin with the nationalization of the two Korean banks on December 9, 1997 and identify eight other pertinent news events through December 23, 1999 when Korea First Bank is sold to Newbridge Capital Group. Our first objective is to evaluate the impact of these news events on the abnormal stock returns of Korean companies having one of these two banks as their main bank. The maintained hypothesis is that a foreign owner will not continue lending practices that are detrimental to the financial performance of the bank, i.e., soft related lending. Hence, we expect to find a negative response in the stock prices of companies attached to the bank to news indicating that a sale to a foreign financial institution is more likely and a positive response to news suggesting that such a sale is delayed or even in jeopardy. In addition, we investigate whether these effects tend to be stronger for less-profitable firms and for those firms having less liquidity and relying more on short-term bank loans.

Our paper is organized as follows. The next section provides a detailed description of the news events that we identify as pertinent to our study of the impact of foreign ownership on soft related lending and specifies their expected effects on the stock prices of the related borrowers. Section 3 discusses the data and describes the methodology that we use. In section 4, we present and discuss the estimates of abnormal returns for related borrowers attributed to each event for the baseline model. In this section, we report

robustness checks in which we control for industry effects; we also examine the sensitivity of the results to the selection of the group of borrowers identified as related to the two banks and to the estimation period. Section 5 contains the results of the regressions that take into account three firm characteristics, namely, profitability, liquidity, and bank reliance, to investigate differential impacts of the news on abnormal returns for firms of different types. Section 6 concludes with a brief summary of the results and some policy implications.

2. The News Events and Their Expected Effects

In return for IMF standby credit support at the end of 1997, the Korean government agreed to change its bank regulatory policy from forbearance to prompt corrective action. Two banks, Korea First Bank and Seoul Bank, were singled out as major offenders in continuing to provide loans to insolvent related borrowers. The Korean government agreed to change the governance of these two banks and recapitalize them in preparation for sales to foreign financial institutions. Over the next two years, a series of events occurred that resulted in one of the banks, Korea First Bank, being sold to a foreign owner but the other, Seoul Bank, being left at the altar. We intend to use these events to examine the effect of soft related lending on the value of client companies of these two banks. The relevant news events are discussed below and their expected impact is specified. We obtained the announcement dates from a comprehensive search of the Lexus-Nexus database, which includes the *Financial Times*, *AFX News-Asia,* and the *Korea Times*. Table 1 provides a brief chronology of the relevant news events.[1]

The first three events constitute the initial steps in preparing Korea First Bank and Seoul Bank for sale to a foreign owner, which would result in the end of soft related

[1] We use Korean dates for all events.

lending in these banks. On December 9, 1997, the Korean government announced its purchase of 59% of the shares of these two banks resulting in their partial nationalization. In return for this capital injection, the government required the banks to undertake stringent restructuring. On the same day, bank officials announced that they would lay off 1,500 workers over the next 2 years. This event indicates a critical change in government policy toward these two banks from forbearance to more stringent prompt corrective action.[2] Hence, we expect to find a negative impact on the stock prices of related borrowers.

The second event is the signing of the letter of intent with the IMF on December 26, 1997. In negotiations with the Korean government, the IMF insisted that the banking sector be restructured and that foreign investors be allowed to take majority stakes in domestic Korean banks. In the letter of intent, the Korean government agreed that the bank of Korea would provide no short-term liquidity to financial institutions. In addition, the government assumed complete control of insolvent banks and agreed to remove the existing management. Finally, the government agreed to appoint outside experts to oversee the restructuring and privatization of Korea First Bank and Seoul Bank.[3] Based on these conditions, we expect this event to have a negative effect on the market value of related borrowers. The third event is the actual appointment of Morgan Stanley as lead manager of the restructuring and privatization of both banks on April 22, 1998. Although this move is likely to have been anticipated because of the agreement with the IMF, we check to see if it has any independent effect on related borrowers because action speaks louder than words in financial markets.

[2] Prior to this, the Korean government had been purchasing non-performing loans through the Korean Asset Management Company (KAMCO) without imposing any stringent restructuring requirements on banks.
[3] See the IMF website (http://www.imf.org/external/np/loi/122497.htm) for further details.

The next important news event is a serious setback in the privatization process. On November 5, 1998, a delay in the privatizations of both Korea First Bank and Seoul Bank was announced.[4] In the letter of intent with the IMF, the Korean government promised that these two banks would be sold by November 15, 1998. However, the government encountered difficulty in obtaining bids from foreign financial institutions so that it decided to postpone the sales until the end of January. Postponement based on a lack of foreign interest could signal to related borrowers that lending practices will not change as drastically as they would have if foreign ownership of the two banks were imminent. Hence, we expect this news to have a positive impact of the stock prices of related borrowers.

The next three events occur on different dates for the two banks but we consider each as a single news item. Momentum is regained with the signings of memoranda of understanding for the sales of Korea First Bank to Newbridge Capital Group and Seoul Bank to HSBC on December 28, 1998 and February 22, 1999, respectively. Unlike the postponement news, this fifth event should have a negative impact on the stock prices of related borrowers because it signals a renewed commitment to pursue the sales of both banks to foreign owners. Although the memoranda of understanding were signed, negotiations for the sales of the two banks stalled. In fact, the government and the foreign financial institutions failed twice to reach agreement by the deadlines specified in the memoranda. In the case of Korea First Bank, the government and Newbridge Capital failed to reach any agreement by April 30, 1999, which was the first deadline, or by May 12, 1999, which was the second deadline. The corresponding missed deadlines for Seoul Bank were May 31, 1999 and June 28, 1999. These two events indicate continuing

[4] See "Korean sell-offs postponed" *Financial Times*. November 5, 1998

difficulty with finalizing the agreements to sell the banks to foreign owners and, as such, these setbacks signal to related borrowers that soft lending practices may continue in the immediate future. Hence, we expect each event to have a positive impact on the stock price of related borrowers.

The final two events relate to the privatization of only Korea First Bank and its effect on related borrowers. Negotiations for the purchase of Seoul Bank by HSBC broke down irreconcilably and this bank's promised sale to a foreign owner was abandoned. In November 2002, which is outside of our sample period, the Korean government arranged a takeover of Seoul Bank by Hana Bank, which is a nationwide Korean bank with about a third of its shares held by foreign investors. Returning to the privatization of Korea First Bank, Newbridge Capital Group agreed to acquire the bank on July 1, 1999. The transaction was actually consummated on December 23, 1999. Both of these events indicate the end of soft related lending for the related borrowers of this bank. Hence, we expect to see the stock prices of companies using Korea First Bank as their main bank to decline in response to both events. However, invoking the principle that actions speak louder than words, our presumption is stronger for the latter of the two events.

3. The Data and the Methodology

3.1 Data

To estimate the abnormal returns of related companies associated with the news events concerning the likelihood of foreign takeovers of Korea First Bank and Seoul Bank, we run a standard market-model regression adapting methodology common to event studies, the literature on which is surveyed in MacKinlay (1997). Our sample consists of daily stock prices from November 1, 1997 to February 29, 2000 for publicly

traded firms taken from the University of Rhode Island's Pacific Basin Capital Market Research Center (PACAP) database. PACAP also provides annual balance sheets and income statements for these companies from 1996 to 2000. We use this information to construct measures of firm characteristics.

To establish the main bank links, we use the annual publication *Korean Company Information (Kankoku Kaisha Joho)*, which identifies the most important bank for each Korean firm. In our baseline model, we use the 2000 edition and merge PACAP data with this information. Table A1 of the Appendix identifies the number of firms related to each of the eleven nationwide Korean banks from the 1998 and the 2000 editions. The entries along the diagonal are the number of firms that stay with the same main bank over this two-year period. We use the main bank relationships in 2000 in our baseline model to include firms that that became associated with the bank during the data period but to exclude any firms that might have been operating in 1998 but were bankrupt in 2000. The sample for the baseline model consists of 106 firms for which we have information about stock market returns and that identify one of the two banks as their main bank.

3.2. Empirical Model

We regress the daily changes in the stock market prices of firms on the daily change in a market index given by Korean Stock Price Index (KOSPI) and on dummy variables that represent three-day event windows consisting of the event date plus one day before and one day after its occurrence.[5] The regression equation takes the following form:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \sum_{k=1}^{l} \gamma_k D_{kit} + \varepsilon_{it}\,, \qquad (1)$$

[5] We experimented with five-day and eleven-day windows in the baseline model; our main results are not changed qualitatively in either case.

where R_{it} is the change in the stock price of firm *i* on day *t*, α_i is the intercept coefficient for firm *i*, R_{mt} is the change in the market index (KOSPI) for day *t* so that β_i is the estimated market risk coefficient for firm *i*, and D_{kit} is a binary variable that equals one if day *t* is within the three-day event window *k* and zero otherwise. Hence, equation (1) is estimated as a system with a cross-equation equality restriction for the excess returns coefficient, γ_k, which measures the average daily abnormal returns associated with event window *k*.[6]

In addition, we investigate how abnormal returns are related to observable financial characteristics of firms that we hypothesize to be correlated with related lending, namely, profitability, liquidity, and reliance on short-term bank loans. If the market participants expect that foreign takeover will reduce the extent of related lending, firms that are unprofitable, illiquid, and largely dependent on bank loans should be affected more adversely by these events. In other words, we expect that events signaling an increase in the likelihood of ownership change should have a larger impact on unprofitable, illiquid, and bank-dependent firms. For this exercise, we allow the abnormal returns associated with each event to depend on three observable characteristics of firms, namely, the return on assets (*ROA*), the ratio of cash plus bank deposits to assets (*LIQ*), and the ratio of short-term bank loans to total assets (*LOANS*).[7] The regression equation is specified as follows:

[6] Standard errors are adjusted for contemporaneous correlation in error terms.

[7] To capture the information about firm characteristics available to market participants at the time of an announcement, we use a two-year average of each variable. We also estimated the effects using averages of the firm characteristics for 1997 through 1999 and found qualitatively similar results. We report only the estimations using two-year averages to represent the information available to market participants at the time of an event.

$$R_{it} = \alpha_i + \beta_i R_{mt} + \sum_{k=1}^{l} \gamma_k D_{kit} + \sum_{k=1}^{l} \theta_{ROA,k} ROA_{it} \times D_{kit} + \sum_{k=1}^{l} \theta_{LIQ,k} LIQ_{it} \times D_{kit} + \sum_{k=1}^{l} \theta_{LOAN,k} LOAN_{it} \times D_{kit} + \varepsilon_{it} \quad (2)$$

We expect profitable firms to be affected less by these events because they are better able to obtain funds from sources other than their main bank on market terms than are unprofitable firms. Hence, $\theta_{ROA,k}$, which captures the effects of profitability on the abnormal return associated with event *k*, should be positive if event *k* signals a higher likelihood of foreign takeover of main banks but negative if the event indicates a lower likelihood of ownership change.

Even if lending is reduced after the foreign takeover of the bank, firms with sufficient liquidity do not rely as extensively on bank loans. Alternatively, firms with low liquidity are more beholden to their main banks for financing. In addition, liquidity is an indication of the short-term financial health of the firm. Hence, as with profitability, we expect foreign takeover of main banks to have a smaller impact on liquid firms than illiquid ones; i.e. $\theta_{LIQ,k}$ should be positive for events signaling a higher likelihood of foreign takeover and negative for events indicating the opposite. Finally, firms having a large percentage of short-term bank loans in their portfolios are more likely to be dependent on their main bank for funds.[8] Hence, we expect the reliance on short-term bank loans to magnify the impact of an event; i.e. $\theta_{LOAN,k}$ should be negative if event *k* signals a higher likelihood of foreign takeover and positive for events suggesting the opposite. In addition, we divide the sample into quintiles based on these characteristics and estimate the impact of an event on each quintile to determine the distribution of abnormal returns across different

[8] Ideally, we would like to include a direct measure of the reliance of the firm on its main bank but no such variable is available in the data.

types of firms. For these quintile analyses, we expect the impact of an event on abnormal returns to be larger for less-profitable, less-liquid, and bank-dependent firms.

4. Estimated Abnormal Returns

4.1 Baseline Model

The estimated average daily abnormal returns of affiliated firms during the three-day event window for the baseline model from equation (1) are reported in column 3 of Table 2. The coefficients for the firm-specific intercepts and risk coefficients are omitted to keep the table relatively uncluttered. The first event to signal a change in the ownership for Korea First Bank and Seoul Bank is the announcement of the nationalization that renders the government the majority owner. The abnormal return is negative 2.2%, which is statistically significant at the ten percent level. As predicted, investors perceived this event as bad news for firms that have close borrowing relationship with these two banks in 2000.[9] Similarly, the announcement of a finalized agreement with the IMF that commits the Korean government to restructuring these two banks and selling them to foreign financial institutions generates a strongly statistically significant negative 2.5% abnormal return for related borrowers. In both cases, the anticipated change in ownership has the expected negative effect on the stock prices of companies using these banks as a main bank.

The letter of intent that the Korean government signed with IMF includes specific steps to be taken to re-privatize Korea First Bank and Seoul Bank. In particular, the first

[9] Djankov *et al*. (2005) find that nationalization leads to a 3% short-term increase in abnormal returns of related borrowers for their sample of insolvent banks in three Asian countries. However, they interpret this event differently because they consider nationalized banks to be those that will continue soft lending relationships. For Korea First Bank and Seoul Bank, we consider nationalization to be the first step in transferring ownership to a foreign financial institution. Djankov *et al*. recognize this expectation by classifying both of these Korean banks as foreign owned in their study.

requirement is to appoint an outside lead manager for restructuring and preparation for privatization. When the Korean government actually took this step on April 22, 1998, negative abnormal returns are indicated for related borrowers but the coefficient is not statistically significant in column 3 of Table 2. The first setback occurred on November 5, 1998, when the government announced that the anticipated sales of both Korea First Bank and Seoul Bank were postponed. Abnormal returns accruing to related borrowers of both banks are estimated to be a strongly statistically significant 2.5%. This evidence confirms our hypothesis that news indicating the likely continuation of soft related lending will have a positive impact on the value of companies using these banks as their main bank. In addition, the average gain for related borrowers of these banks is equal to the loss in value they experienced when the letter of intent with the IMF was finalized.

After the announcement of a postponement in privatization of the banks, memoranda of understanding were signed with two foreign financial institutions, Newbridge Capital Group for Korea First Bank and HSBC for Seoul Bank. The coefficient for this event is negative, as expected, but it is not statistically significant.[10] However, when the first deadlines stipulated in the memoranda passed without any formal agreement with a foreign owner for either bank, related borrowers earned positive abnormal returns of 1.6%, which are statistically significant at the ten percent level. A second deadline was also missed but the coefficient for this event is not statistically significant perhaps because the expectation of a delay had already been captured by the market reaction to the first deadline passing without any action.

[10] This coefficient and the following two coefficients reflect the impact of the event on the related borrowers for each bank in different time periods due to the different dates of the event for each bank.

Turning to the events that correspond to the sale of Korea First Bank to Newbridge Capital Group, the announcement of the agreement did not have a statistically significant effect on related borrowers of this bank. However, the actual privatization event on December 23, 1999 resulted in strongly statistically significant negative abnormal returns of 2.3% for companies using Korea First Bank as their main bank in 2000.[11] Taken together, these later five events indicate that considerable uncertainty surrounded the sale of both banks after the Korean government announced a postponement in privatization plans at the beginning of November 1998. Not until more than a year later when Korea First Bank was actually purchased by Newbridge Capital did the market find this bank's change in ownership credible. At that time, firms using Korea First Bank as their main banks lost value on average equal to the value lost during the two first events in December 1997 when the banks were nationalized and the letter of intent with the IMF was signed.

4.2. Robustness Checks

To investigate the strength of the evidence of abnormal returns to related lending, we conduct several robustness checks. First, we recognize the possibility that related borrowers of Korea First Bank and Seoul Bank may be concentrated in a few industries. Without accounting for the performance of industry to which each firm in the sample belong, the estimated abnormal returns will have some bias. As a robustness check, we include an industry stock index in addition to the market index (KOSPI) in the following equation:

[11] Only companies using Korea First Bank as their main bank are included in the estimation of this coefficient leading to relatively large standard errors.

$$R_{it} = \alpha_i + \beta_{1i} R_{mt} + \beta_{2i} R_{jit} + \sum_{k=1}^{l} \gamma_k D_{kit} + \varepsilon_{it} . \quad (3)$$

where an industry index, R_{jit}, is the percentage change in the stock index of industry j to which firm i belongs. Column 4 of Table 1 reports the estimated coefficients; abnormal returns are qualitatively similar to the baseline results with three notable changes. First, the negative coefficient for the announcement of the memorandum of understanding is now statistically significant after controlling for industry effects. Second, the coefficients associated with nationalization and missing the first deadline take on increased statistical significance. Third, the eventual acquisition of Korea First Bank by Newbridge Capital Group no longer yields statistically significant abnormal returns, although its sign remains negative. In summary, controlling for industry-specific shocks corroborates and strengthens the results in the baseline model except for the attribution of statistically significant negative abnormal returns to the final acquisition of Korea First Bank.

In the baseline model, we assume that the relationship between the stock price of the firms and the Korean stock price index (KOSPI) remains the same throughout the entire twenty-eight-month period. To allow for the possibility that this relationship may change over this period, we divide the sample into four sub-samples, namely, November 1, 1997 to May 17, 1998; May 18, 1998 to November 24, 1998; November 25, 1998 to July 14, 1999; and July 15, 1998 to February 29, 2000. Any bias in abnormal returns caused by assuming that the firm-specific risk coefficients, i.e., α_i and β_i, are constant over the entire period is likely to be less severe when we allow these coefficients to take on different values in each of the four periods. Column 5 of Table 2 reports the resulting estimates of abnormal returns attributable to the events, which corroborate and strengthen

the baseline results. In particular, the negative coefficients for the appointment of Morgan Stanley as the outside advisor for the memorandum of understanding become statistically significant. In addition, unlike in the previous column, statistically significant negative abnormal returns are associated with the final privatization of Korea First Bank.

Our final robustness check concerns the selection of the sample of related borrowers. Although related borrowers tend to stay with their main banks in Korea, the financial difficulty of these two banks and the uncertainty about their ownership during the sample period resulted in more changes in main-bank relationships for these two banks than for the other nationwide banks. As Table A1 indicates, about 65% of related borrowers of Korea First Bank and about 80% of related borrowers of Seoul Bank remained with their main bank during the entire two-year period. Hence, we have re-run our baseline regression taking only the firms that identify Korea First Bank or Seoul Bank as their main bank in both 1998 and 2000. The results reported in column 6 of Table 2 are for firms that stayed with their main bank throughout the sample period. A comparison of the coefficients in columns 3 and 6 of the table indicates that the group of related borrowers has virtually no impact on the estimated abnormal returns associated with the events.

In summary, our robustness checks indicate that the baseline results capture well the impact of the events surrounding the sale of these two Korean banks to foreign owners on abnormal returns to related borrowers. The events occurring earlier in the sample period have statistically significant coefficients of the expected signs with the exception of the appointment of Morgan Stanley as the privatization advisor, an event that may have already been anticipated by market participants. However, the events occurring later in the sample period have mainly insignificant coefficients. Market participants do not

appear to have taken the memoranda of understanding as credible commitments to the rejuvenation of the privation processes. To an extent, subsequent events prove the expectations of the market participants to be correct as the first two deadlines specified in the memoranda are missed for both banks. One interpretation of the results for the later period is that market participants are taking a wait-and-see attitude in which actions speak louder than words. The finding of significant negative abnormal returns to related borrowers attributable to the actual privatization of Korea First Bank in the baseline model corroborates this view of market expectations.

5. The Impact of Firm Characteristics on Abnormal Returns

Turning to the dependence of the benefits to soft related lending on the type of borrower, we examine the impact of each announcement interacted with each of the three firm characteristics, namely, profitability, liquidity, and reliance on bank loans. In estimating equation (2), we expect to find that unprofitable firms, which may even be zombie firms, as well as firms depending more heavily on short-term bank lending are affected more by any perceived change in soft lending practices. In addition, we expect to find that highly liquid firms are less impacted by these events because they have considerable cash flow to substitute for bank financing.

Table 3 displays the results of the regression based on equation (2) for the baseline model. For each event, the reported intercept coefficient measures abnormal returns if the value of each firm characteristic were zero. Hence, the coefficients for each characteristic measure the average differential impact on abnormal returns attributable to this characteristic in a regression that takes account of the other two characteristics. For example, the significant negative coefficient of 6.5 for profitability interacted with sales

postponed indicates that more-profitable firms have less increase in abnormal returns on average than less-profitable firms when the news indicates a setback in the privatization of the banks. Therefore, the coefficients of events interacted with profitability and liquidity are expected to have signs opposite to those of the corresponding event, as indicated in the first column of Table 3. In contrast, the coefficients of events interacted with reliance on bank loans are expected to have the same signs as those of the corresponding event because the abnormal returns of highly dependent firms should be affected more seriously by news of either sort.

Table 3 contains twelve interactive coefficients that are statistically significant at the five percent or better level. Of the twelve, ten have the expected signs and seven of these are related to three early events, namely nationalization, signing the letter of intent, and the postponement of sales, that have robust significant abnormal returns associated with them in Table 2. The two unexpected signs on statistically significant coefficients in Table 3 are associated with the actual acquisition of Korea First Bank. With respect to the firm characteristics, bank reliance has the most coefficients that are both statistically significant and of the expected sign at 5, followed by profitability with 3, and liquidity with 2. To check again for robustness, we estimate the same equations with an additional control for industry index, with the sample divided into four sub-periods to allow for different firm-specific risk coefficients, and with only firms that stayed with each bank during the entire sample period included. Tables A2, A3, and A4 in the Appendix present the results. Although the interactive coefficients are somewhat fragile to the different specifications, seven of the twelve significant coefficients in Table 3 are robust to these changes. Moreover, the two coefficients with unexpected signs in the last column

of Table 3 lose their statistical significance in the other specifications. The statistical significance of four of the six remaining significant coefficients in the last row is retained in all specifications. Hence, we find strong support for the hypothesis that borrowers relying more heavily on their main bank for financing are affected more by these events. In addition, we find some evidence that more profitable and more liquid firms lose less value from negative news but also gain less value from positive news.

To probe further the relative impact of these events on borrowers of different types, we re-estimate equation (1) with dummy variables added to identify quintiles for each firm characteristic. Using the baseline model, we investigate whether the abnormal returns of the best firms, i.e., those in the fifth quintile with respect to profitability or liquidity, actually react differently from the rest of the firms to news about the likely continuation or not of soft related lending. Table 4 reports the results for the dummy variables based on liquidity; we expect to find less impact on abnormal returns as liquidity increases. This pattern is discernable for the first two events only. Focusing on the statistically significant coefficients, the distribution for the first setback resembles a roller coaster and the distribution for the final privatization of Korea First Bank is U-shaped. Finally, we find no statistically significant sign reversals with respect to liquidity. Table A5 in the Appendix contains the results for the dummy variables based on quintiles of profitability. The notable differences are a somewhat roller-coaster distribution for nationalization, the expected distribution for the postponement of sales with the exception of the fifth quintile, a reasonably normal distribution for missing the first deadline, and the opposite-from-expected pattern for the acquisition of Korea First Bank. Once again, no sign reversal is statistically significant at the 5% or better level.

Table A6 in the Appendix presents the results for the dummy variables based on bank reliance. We expect to find more impact on abnormal returns in higher quintiles because firms are more beholden to their main bank. This pattern is clearly discernible for two events that signal setbacks for privatization, namely, sales postponed and first deadline missed. Less strongly, the pattern appears for the first two steps, i.e., nationalization and letter of intent, and for the memoranda of understanding. More importantly, we find two statistically significant coefficients exhibiting sign reversals. Specifically, for firms in the first quintile, abnormal returns attributable to missing the second deadline are negative and, for firms in the third quintile using Korea First Bank as their main bank, abnormal returns are positive. In addition, the final privatization of Korea First Bank has more impact on abnormal returns for firms that are less reliant on this bank, which is counter to our expectation.

Combining the results in the last row of these three tables yields some insight into firms using Korea First Bank as their main bank. Abnormal returns are impacted more strongly by news for firms that are more profitable, less reliant on the bank, and in ether of the tails of the liquidity distribution. Clearly, the firms associated with Korea First Bank in 2000 have special characteristics that cause their abnormal returns to respond in an unexpected manner to news about the privatization of the bank. Perhaps, this phenomenon is due to the type of firm that becomes associated with Korea First Bank during the sample period. Table A1 indicates that 22% of the firms that consider Korea First Bank to be their main bank in 2000 were not associated with the bank in 1998. We compared the means of the three characteristics for firms that were associated with Korea First Bank for the entire sample period, i.e., old firms, and those that joined the bank

during the period, i.e., new firms. New firms have higher profitability, more liquidity, and less reliance on the bank compared with old firms. Although the last of these comparisons is expected, the first two suggest that Korea First Bank was attracting financially better firms during the sample period. This observation may also explain the unexpected signs in the last column of Table 3. Any further analysis of these firms requires data from the period following the privatization of Korea First Bank.

6. Conclusion: Globalizing the Korean Banking Sector

In return for emergency short-term support during the 1997 financial crisis, the IMF required the Korean government to allow majority foreign ownership of large nationwide banks. In this paper, we provide indirect evidence that the IMF's insistence that two large, insolvent nationwide banks be sold to foreign financial institutions was influential in restraining the practice of soft related lending by these banks. For firms that identify Korea First Bank or Seoul Bank as their main bank, we find that events signaling strongly a change of management and a sale of a bank to a foreign financial institution yield an average decrease of about 2% in the stock price of related borrowers over a three-day window surrounding the event. In addition, we find that events indicating clearly a setback in the Korean government's ability to sell these two banks to foreign investors generate an increase in the stock price of related borrowers of about the same magnitude.

Our results are consistent with the literature in which related lending is asserted to provide rent to borrowers in a main bank financial system. The magnitude of our estimated abnormal returns is roughly comparable to the average decline in the stock prices of companies affiliated with a main bank experiencing financial difficulty found by

Bae *et al*. (2002) in the pre-financial crisis period in Korea. In summary, the evidence indicates that Korea First Bank and Seoul Bank were engaged in soft related lending and that selling these banks to a foreign owner was perceived by market participants in Korea as putting an end to such non-commercial behavior. Moreover, we find some evidence to support our hypotheses that these events had larger impacts on abnormal returns for firms that are more unprofitable, less liquid, and more reliant of their main bank. Taken together, these results support the claim that the previous owners and managers of these two Korean banks engaged in soft related lending practices and, perhaps, kept afloat zombie insolvent firms.

Several policy implications can be drawn from our analysis. First, rents to firms involved in a relationship with a main bank can be considerable. However, to what extent these rents are attributable to soft, non-market, contractual terms or to relationship-specific surplus is difficult to determine directly. Analyzing the impact of news events concerning the likelihood of the sale of a main bank to a foreign institution on abnormal returns of related borrowers provides only indirect evidence of the softness of related lending. Second, the Korean stock market appears to process information relatively efficiently. We infer that market participants anticipate that foreign control of a main bank will end soft related lending practices because the stock price of related borrowers responds considerably to news indicating that such an event is more or less likely to occur. Third, credible market discipline can be established by the sale of a bank to a foreign institution in an emerging market economy in which relational lending has become common practice for domestic banks. However, finding a willing foreign purchaser is not easy.

After mid-1999, the fates of the two Korean banks take different paths. Seoul Bank was not sold to a foreign investor because HSBC lost interest. The Korean government arranged the takeover of Seoul Bank by Hana Bank, another large nationwide domestic Korean bank, in November 2002. As part of the privatization agreement for Korea First Bank, Newbridge Capital Group, which is not a bank, was required to hold its shares for five years. In April 2005, Newbridge exercised its exit option by selling a majority stake in the bank to Standard Chartered Bank of London for $3.3 billion U.S. dollars. Interestingly, the new owner outbid HSBC for Korea First Bank. Clearly, Newbridge Capital Group played an important intermediary role in preparing Korea First Bank for its eventual sale to a foreign bank. As a final lesson, governments in emerging market economies interested in selling a domestic bank to a foreign bank should not reject offers from non-bank foreign financial institutions because these institutions are able to provide the credibility necessary to clean up lending practices in preparation for the eventual sale of the bank to a foreign bank.

References

Bae, K-H, Kang, J-K., Lim, C-W., 2002. The Value of Durable Bank Relationships: Evidence from Korean Banking Shocks. *Journal of Financial Economics.* 64, *181-214.*

Cull, R., Matesova, J., Shirley, M., 2002. Ownership and the Temptation to Loot: Evidence from Privatized Firms in the Czech Republic. Journal of Comparative Economics 30, 1--24.

Djankov, S., Jindra, J., and Klapper, L., 2005. Corporate Valuation and the Resolution of Bank Insolvency in East Asia. *Journal of Business and Finance*, 29*,* 2095 – 2118.

Haber, S., Maurer N., 2004. Related Lending and Economic Performance: Evidence from Mexico. unpublished paper. Stanford University.

Jeon, Y., Miller, S. M., 2004. The Effect of the Asian Financial Crisis on the Performance of Korean Nationwide Banks. Applied Financial Economics 14, 351--60.

La Porta, R., Lopez-de-Silanes, F., Zamarripa, G., 2003. Related Lending. The Quarterly Journal of Economics 118, 231--68.

Laeven, L., 2001. Insider Lending and Bank Ownership: The Case of Russia. Journal of Comparative Economics 29, 207-29.

Lamoreaux, N. R., 1986. Banks, Kinship, and Economic Development: The New England Case. The Journal of Economic History 46, 647--67.

MacKinlay, A C. 1997. Event Studies in Economics and Finance. Journal of Economic Literature 35, 13--39.

Peek, J., Rosengren, E. S., 2005. Unnatural Selection: Perverse Incentives and the Misallocation of Credit in Japan. American Economic Review 95, 1114—1116.

Rajan, R., Zingales, L., 1998. Which Capitalism? Lessons from East Asian Crisis. Journal of Applied Corporate Finance 11, 40--48.

Table 1: Relevant Events
Source: *Lexus-Nexus database*. All dates are Korean dates.

Date	Event
December 9, 1997	Korean government became the majority owner of Korea First Bank and Seoul Bank and promised stringent restructuring of the banks with 1,500 workers to be laid off.
December 26, 1997	Korean government and the IMF agreed on the letter of intent, which aims at prompt restructuring and eventual sales of Korea First Bank and Seoul Bank to foreign banks.
April 22, 1998	Korean government appointed Morgan Stanley as a lead manager for restructuring and privatization.
November 5, 1998	Korean government postponed the sales of Korea First Bank and Seoul Bank due to the difficulty in obtaining foreign bids.
December 28, 1998	Korean government signed the memorandum of understanding with Newbridge Capital for the sale of Korea First Bank.
February 22, 1999	Korean government signed the memorandum of understanding with HSBC for the sale of Seoul Bank.
April 30, 1999 (Korea First Bank) May 31, 1999 (Seoul Bank)	Korean government failed to reach any agreement with foreign institutions by the first deadline.
May 12, 1999 (Korea First Bank) June 28, 1999 (Seoul Bank)	Korean government failed to reach any agreement with foreign institutions by the second deadline.
July 1, 1999	Korean government agreed with Newbridge on the sale of Korea First Bank
December 23, 1999	Newbridge acquired 51% of Korea First Bank's share.

Table 2: Estimated Abnormal Returns

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

	Expected Sign	Baseline Model	Industry Index Added	Four Sub-Periods	Firms That Stayed with Banks
Nationalization	-	-2.203*	-2.000***	-1.798***	-2.226*
		(1.182)	(0.576)	(0.315)	(1.136)
Letter of Intent with IMF	-	-2.448***	-1.579***	-2.467***	-2.472***
		(0.791)	(0.579)	(0.303)	(0.775)
Morgan Stanley Appointed	-	-1.087	-0.455	-0.821***	-1.057
		(0.939)	(0.460)	(0.302)	(0.920)
Sales Postponed	+	2.537***	2.299***	2.384***	2.285***
		(0.728)	(0.679)	(0.315)	(0.699)
Memorandum of Understanding	-	-0.567	-0.825**	-0.727**	-0.313
		(0.446)	(0.373)	(0.334)	(0.377)
1st Deadline	+	1.626*	1.388**	1.372***	1.505*
		(0.913)	(0.646)	(0.335)	(0.844)
2nd Deadline	+	-0.247	-0.054	-0.512	-0.196
		(0.603)	(0.443)	(0.336)	(0.526)
Agreement to Sell KFB	-	0.223	-0.123	-0.000	0.531
		(0.624)	(0.191)	(0.457)	(0.650)
Acquisition of KFB	-	-2.335**	-1.402	-1.799***	-2.068*
		(0.955)	(0.879)	(0.464)	(1.061)
Adjusted R-sq		0.13	0.20		0.13

R-squares are 0.25, 0.13, 0.12, and 0.06 for four separate sample periods
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.

Table 3: Differential Effects of Events (Baseline Model)

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

	Nationali-zation (-)	Letter of Intent (-)	Morgan Stanley (-)	Sales Postponed (+)	MOU (-)	1st Deadline Passed (+)	2nd Deadline Passed (+)	Agreement to Sell KFB (-)	Acquisition of KFB (-)
Intercept	-1.756	-2.512***	-0.815	3.868***	-1.153	0.874	0.154	-1.122**	-0.916*
	(3.297)	(0.539)	(1.080)	(0.307)	(1.850)	(0.705)	(0.828)	(0.497)	(0.522)
Profitability (opposite)	-2.094	1.455***	1.182	-6.485***	0.070	0.089	-3.493**	1.848	-5.849***
	(2.996)	(0.435)	(1.039)	(0.437)	(2.539)	(1.617)	(1.392)	(4.255)	(2.128)
Liquidity (opposite)	10.378	11.993**	6.391*	-10.820***	3.425	-5.634	2.211	7.678	-6.326
	(9.098)	(5.751)	(3.731)	(1.525)	(5.040)	(4.032)	(3.198)	(5.808)	(7.741)
Reliance on Bank Loans (same)	-2.914***	-6.647***	-4.694***	5.633***	2.299*	4.904**	3.064**	2.247	5.782***
	(1.121)	(0.795)	(1.363)	(1.433)	(1.350)	(2.051)	(1.398)	(6.306)	(1.954)

R-square is 0.15.
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.

Table 4: Estimated Abnormal Returns for Firms with Varying Liquidity (Baseline)

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank in 2000. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

		1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Nationalization	(-)	-2.668	-3.224***	-3.184	-0.575	-1.454*
		(1.686)	(1.190)	(2.089)	(0.588)	(0.767)
Letter of Intent with IMF	(-)	-3.083***	-3.315***	-2.300*	-1.849*	-1.676
		(0.637)	(0.514)	(1.390)	(1.068)	(1.132)
Morgan Stanley Appointed	(-)	-1.041	-0.987	-2.084*	-0.113	-1.213
		(0.760)	(0.785)	(1.072)	(0.527)	(1.860)
Sales Postponed	(+)	3.085***	1.331**	2.849***	1.324*	4.097***
		(0.635)	(0.581)	(0.630)	(0.705)	(1.494)
Memorandum of Understanding	(-)	-0.281	-1.162***	-0.837	0.584	-1.122*
		(1.071)	(0.220)	(0.840)	(0.421)	(0.647)
1st Deadline	(+)	0.801	2.433**	1.089	1.763**	2.024
		(0.933)	(1.037)	(0.979)	(0.884)	(1.279)
2nd Deadline	(+)	-0.638	0.132	-0.330	-0.054	-0.362
		(0.908)	(0.670)	(0.462)	(0.706)	(1.160)
Agreement to Sell KFB	(-)	-0.118	0.889	-1.006	1.004	0.620
		(0.636)	(0.863)	(0.957)	(0.782)	(1.707)
Acquisition of KFB	(-)	-2.240*	-3.280***	-0.558	-2.846***	-3.118**
		(1.317)	(0.507)	(2.360)	(0.678)	(1.538)

R-square is 0.13.
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.

Table A1: Main Bank Relationships: Number of Firms for Each Bank

Main Bank:1998 \ Main Bank:2000	CHOHUNG	HANA	HANVIT	KOOKMIN	KORAM	KEB	KFB	PEACE	SEOUL	SHINHAN	Other	Totals: 1998
CHOHUNG	76	2	5	0	2	2	1	0	1	2	5	96
HANA	0	3	0	0	0	0	0	0	0	0	0	3
HANVIT	1	2	172	0	1	3	7	0	3	2	4	195
KOOKMIN	0	0	2	5	1	0	0	0	1	1	0	10
KORAM	2	0	1	0	16	0	0	0	0	0	0	19
KEB	4	0	3	0	0	62	1	0	0	1	3	74
KFB	1	0	12	0	4	3	54	0	0	2	7	83
PEACE	0	0	1	0	0	0	0	0	0	0	0	1
SEOUL	1	0	5	1	0	1	2	0	45	2	2	59
SHINHAN	1	0	1	1	0	1	2	0	0	21	1	28
Other	3	1	6	0	1	1	2	1	2	3		20
Totals: 2000	89	8	208	7	25	73	69	1	52	34	22	566

Source: Korea Company Information 1998 and 2000

Table A2: Differential Effects of Events (Industry Index Added)

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

	Nationali-zation (-)	Letter of Intent (-)	Morgan Stanley (-)	Sales Postponed (+)	MOU (-)	1st Deadline Passed (+)	2nd Deadline Passed (+)	Agreement to Sell KFB (-)	Acquisition of KFB (-)
Intercept	-2.605	-1.545**	0.038	3.603***	-1.783	0.461	0.194	-0.992*	-0.601
	(2.175)	(0.633)	(0.345)	(0.359)	(1.588)	(0.557)	(0.588)	(0.560)	(1.115)
Profitability	0.987	0.220	1.216*	-6.545***	1.882	0.659	-3.329**	1.619	-3.786
(opposite)	(1.950)	(0.764)	(0.631)	(1.066)	(1.908)	(1.402)	(1.321)	(3.914)	(3.764)
Liquidity	12.925*	9.908*	2.251	-10.399***	3.328	-5.449	2.166	2.548	-9.245
(opposite)	(6.920)	(5.879)	(2.124)	(1.947)	(4.919)	(4.359)	(3.324)	(4.128)	(6.366)
Reliance on	-	-	-	6.232***	1.595	5.058***	3.859**	1.466	6.455**
Bank Loans	3.623***	4.697***	4.365***						
(same)	(1.354)	(0.965)	(1.131)	(1.742)	(1.658)	(1.862)	(1.685)	(7.405)	(2.765)

R-square is 0.22.
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.

Table A3: Differential Effects of Events (Four Sub-Periods)

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

	Nationali-zation (-)	Letter of Intent (-)	Morgan Stanley (-)	Sales Postponed (+)	MOU (-)	1st Deadline Passed (+)	2nd Deadline Passed (+)	Agreement to Sell KFB (-)	Acquisition of KFB (-)
Intercept	-1.634	-2.265**	-0.673	3.691***	-1.376	0.510	-0.147	-1.564	-0.426
	(1.117)	(1.091)	(1.083)	(0.993)	(1.104)	(1.132)	(1.140)	(1.590)	(1.633)
Profitability (opposite)	-1.691	0.716	1.193	-6.180***	0.365	0.500	-3.129	0.661	-6.067
	(2.297)	(2.262)	(2.260)	(2.081)	(2.318)	(2.642)	(2.650)	(4.507)	(4.573)
Liquidity (opposite)	11.124**	10.417**	6.064	-10.661**	3.609	-5.213	1.847	12.833	-5.945
	(4.733)	(4.673)	(4.849)	(4.649)	(5.022)	(4.999)	(5.037)	(10.266)	(10.428)
Reliance on Bank Loans (same)	-2.917	-6.296***	-4.313*	5.538**	2.083	4.757*	2.918	2.420	5.582
	(2.433)	(2.314)	(2.338)	(2.528)	(2.767)	(2.763)	(2.791)	(3.902)	(3.998)

R-squares are 0.26, 0.16, 0.13, and 0.07 for four separate sample periods
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.

Table A4: Differential Effects of Events (Firms That Stayed with Banks)

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

	Nationali-zation (-)	Letter of Intent (-)	Morgan Stanley (-)	Sales Postponed (+)	MOU (-)	1st Deadline Passed (+)	2nd Deadline Passed (+)	Agreement to Sell KFB (-)	Acquisition of KFB (-)
Intercept	-1.674	-2.259***	-0.572	2.113***	-1.281	0.997**	-0.389	-0.584	-1.965
	(2.729)	(0.507)	(0.892)	(0.432)	(1.321)	(0.485)	(0.539)	(1.188)	(1.599)
Profitability (opposite)	-5.454*	-0.816	2.189***	-6.387***	-0.649	-0.076	-3.133**	2.046	-5.628
	(2.992)	(0.791)	(0.749)	(0.647)	(2.991)	(1.200)	(1.278)	(6.689)	(6.069)
Liquidity (opposite)	8.507	14.177***	6.544*	-9.368***	5.210	-5.222	3.106	6.303	-7.753
	(9.229)	(5.243)	(3.348)	(1.819)	(4.958)	(3.259)	(3.515)	(6.151)	(12.090)
Reliance on Bank Loans (same)	-1.071	-5.690***	-5.651***	7.649***	3.532***	4.068*	2.018	2.011	7.405
	(1.186)	(0.719)	(1.399)	(1.563)	(0.939)	(2.259)	(1.384)	(7.624)	(6.921)

R-square is 0.14.
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.

Table A5: Estimated Abnormal Returns with Varying Profitability (Baseline)

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

		1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Nationalization	(-)	-1.842	-2.924*	-1.537**	-2.959***	-1.765**
		(1.814)	(1.637)	(0.693)	(1.076)	(0.707)
Letter of Intent with IMF	(-)	-3.722***	-2.857***	-1.251	-2.658***	-1.742
		(1.014)	(0.748)	(0.903)	(0.408)	(1.136)
Morgan Stanley Appointed	(-)	-1.489	-1.505**	-0.337	-0.830	-1.256
		(1.095)	(0.706)	(0.348)	(1.200)	(1.607)
Sales Postponed	(+)	3.680***	3.165***	1.241***	1.420*	3.140***
		(0.775)	(0.579)	(0.373)	(0.853)	(1.149)
Memorandum of Understanding	(-)	-0.898	0.482	0.054	-2.680***	0.354
		(1.399)	(0.893)	(0.239)	(0.596)	(0.649)
1st Deadline	(+)	0.838	1.499**	2.247***	1.839*	1.689
		(1.404)	(0.612)	(0.862)	(1.106)	(1.308)
2nd Deadline	(+)	0.284	0.067	-0.010	-1.132*	-0.462
		(0.816)	(0.744)	(0.598)	(0.583)	(0.923)
Agreement to Sell KFB	(-)	-0.449	-0.735	0.364	0.783	1.159
		(0.476)	(1.200)	(0.492)	(0.573)	(2.051)
Acquisition of KFB	(-)	-1.722	-2.185	-0.918	-3.492***	-3.452**
		(1.065)	(1.779)	(1.385)	(0.632)	(1.544)

R-square is 0.13.
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.

Table A6: Estimated Abnormal Returns Varying Bank Reliance (Baseline)

The multiple regression models are estimated with ordinary least squares. The standard errors are adjusted for heteroskedasticity and contemporaneous correlation across firms using STATA's *cluster* option. The dependent variable is the daily percentage change in stock price of firms whose main bank is reported to be either Korea First Bank or Seoul Bank. Firm-specific intercepts and risk coefficients are included but not reported to keep the table relatively uncluttered.

		1st Quintile	2nd Quintile	3rd Quintile	4th Quintile	5th Quintile
Nationalization	(-)	-1.478*	-3.009*	-1.682	-2.857*	-2.008**
		(0.883)	(1.678)	(1.025)	(1.584)	(0.966)
Letter of Intent with IMF	(-)	-0.705	-2.860**	-2.248***	-3.358***	-2.997***
		(0.623)	(1.380)	(0.445)	(1.140)	(0.729)
Morgan Stanley Appointed	(-)	-0.167	-0.741	-1.450*	-1.664	-1.464
		(0.308)	(1.058)	(0.789)	(1.104)	(1.740)
Sales Postponed	(+)	0.649	1.607**	1.532***	4.423***	4.540**
		(0.745)	(0.741)	(0.232)	(0.590)	(1.793)
Memorandum of Understanding	(-)	0.094	-1.635***	-0.837***	-0.198	-0.303
		(0.802)	(0.625)	(0.319)	(0.982)	(0.615)
1st Deadline	(+)	0.728	-0.235	2.102	2.675**	2.952***
		(0.603)	(0.680)	(1.346)	(1.254)	(1.062)
2nd Deadline	(+)	-0.884***	-0.160	-0.330	0.699	-0.571
		(0.303)	(0.807)	(0.636)	(0.894)	(1.094)
Agreement to Sell KFB	(-)	-0.041	-0.227	0.849***	0.087	0.462
		(1.476)	(0.491)	(0.180)	(0.389)	(1.041)
Acquisition of KFB	(-)	-3.121***	-2.686***	-2.576**	-1.718	-1.694
		(1.130)	(0.770)	(1.130)	(1.830)	(2.097)

R-square is 0.13.
Robust standard errors are in parentheses.
The symbols *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively.