

# Soft Related Lending: A Tale of Two Korean Banks \*

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## ABSTRACT

In this paper, we provide indirect evidence that the IMF's insistence on globalizing the Korean banking sector by permitting foreign control of major banks in exchange for short-term support during the 1997 financial crisis helped restrain soft related lending practices by two large nationwide banks. We estimate the effects on abnormal stock price returns accruing to related borrowers of news regarding the proposed sales of two Korean banks to foreign financial institutions. We find that 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 during a three-day window surrounding the event. In addition, we find that news indicating the Korean government's difficulty in finding an interested foreign investor generates an increase in the stock price of related borrowers of about the same magnitude. Moreover, we find some evidence that these signals have larger impacts on firms that are both less liquid and more reliant on short-term bank loans and that stock prices of more unprofitable firms react more strongly to some of the events. Taken together, these results indicate that these two Korean banks engaged in soft lending practices on non-market terms with related borrowers and our estimates suggest that the resulting rents were substantial. As a policy implication, we conclude that the credibility of a government's commitment to end soft lending can be established by sale of the bank to a foreign owner.

JEL Classifications: G21, O53

## **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 19<sup>th</sup> 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 bright side, related lending can solve problems of information and missing institutions.

On the dark side, related lending is fraught with incentive issues 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. In addition, La Porta, Lopez-de-Silanes, and Zamarripa (2003) use detailed loan data from Mexican banks to show that interest rates on related loans are low and insensitive to risk relative to unrelated loans and that related loans have a higher probability of becoming nonperforming loans. Moreover, 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, i.e., 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 indicate severe problems before the crisis. The combination of an economy dominated by large conglomerates, i.e., *chaebols*, and permissive regulatory practices toward banks proved to be lethal. Jeon and Miller (2004) attribute the flight of short-term foreign capital, especially bank lending, in Korea to the bankruptcy of several *chaebols*, i.e., Kia, Hanbo, Haitai, Sammi, and Daewoo, and the practice of syndicated loans to other *chaebols*. By November 1997, the Korean central bank was unable to defend the domestic currency against an attack that spread quickly throughout the region after the devaluation of the Thai baht in July 1997. The Korean government sought an emergency standby credit package from the IMF in December 1997. The *quid pro quo* demanded by the IMF for short-term support involved opening up the banking sector to foreign ownership and permitting foreign control of large nationwide banks, which had been prohibited by the Korean government. This action set in motion a chain of events that had significant implications for related lending practices in two relatively large Korean banks.

At the beginning of December 1997, the Korean government nationalized two banks that had extensive relationships with financially weak and bankrupt *chaebols*. Korea First Bank and Seoul Bank, with market shares of around 5% each, were considered to be too big to fail but too weak to be viable without recapitalization. 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 subsequent 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. The court released the name of only one company involved, the International Valve Company.” Moreover, despite ranking eighth and tenth of eleven nationwide commercial banks in terms of assets, Korea First Bank and Seoul Bank ranked third and fifth, respectively, among these same eleven banks in number of companies identifying them as their main bank. 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.

As a bank-centered system in which a large company is associated with only one main bank, Korea is a natural laboratory in which to study related lending. Bae, Kang, and Lim (2002) investigate the extent to which company value is related to the financial health of its main bank in Korea using data from 1997 and 1998. These authors identify 113 adverse events and attribute to these an average decline in bank stock prices of 2.5% and an average decline in company stock prices of 1.3%. In a similar study of related

lending for 29 insolvent banks in three Asian countries, one of which is Korea, Djankov, Jindra, and Klapper (2005) find that a bank relationship adds value to a company's stock but that this value depends on the expected continuance of this relationship. Using data from Argentina, Berger, Clapper, and Udell (2001) demonstrate that foreign banks rely less on relationship lending than do domestic banks. In the 1999 Annual Report of Korea First bank, Wilfred Y. Horie, a Japanese-American and the first non-Korean CEO of a Korean bank, states that all troubled banks have poor credit evaluation systems and that a sound loan portfolio is more important than anything else for a bank. Hence, the intended sale of two large Korean banks to foreign owners provides an ideal experiment for investigating the value of soft related lending to the recipient companies.

In this paper, we examine the impact of news that provides information about the likely change in bank ownership, and thus the 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 when news indicates that a sale to a foreign financial institution is more likely and a positive response to when news suggests 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 those 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 and 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 the 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 the 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.

The first three events constitute the initial steps in preparing Korea First Bank and Seoul Bank for sale to a foreign owner resulting in the end of soft related lending in these banks. On December 9, 1997,<sup>1</sup> 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.<sup>2</sup> 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, among other things, the bank of Korea would provide no short-term liquidity to financial institutions, the government would assume complete control of insolvent banks and

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<sup>1</sup> We use Korean dates for all events.

remove the existing management, and the government would appoint outside experts to oversee the restructuring and privatization of Korea First Bank and Seoul Bank.<sup>3</sup> 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 efforts for 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.

The next important news event is a serious setback in the privatization process. On November 5, 1998, a delay in the privatization of Korea First Bank and Seoul Bank was announced.<sup>4</sup> 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 and Seoul Bank to Newbridge Capital

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<sup>2</sup> 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.

<sup>3</sup> See the IMF website (<http://www.imf.org/external/np/loi/122497.htm>) for further details.

<sup>4</sup> See "Korean sell-offs postponed" *Financial Times*. November 5, 1998

Group and 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 pursuing 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 difficulty with the finalization of agreements to sell the banks to foreign owners and, as such, these setbacks may signal to related borrowers that soft lending practices will 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, on the principle of actions speaking louder than words, our presumption is stronger for the latter of the two events.

### **3. The Data and the Methodology**

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. We adapt the standard methodology used widely in event studies; MacKinlay (1997) provides an overview of this literature. 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) data base. 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. As the table indicates, the relationship is relatively stable over time. However, of the 83 firms associated with Korea First Bank in 1998, 29 firms or about 35% have left for other banks by 2000. The corresponding number of exits for Seoul

Bank is 14 firms or 24% of the 59 related firms in 1998.<sup>5</sup> We use the main bank relationships in 2000 in our baseline model to capture firms that remain with each bank throughout the data period and to avoid including any bankrupt firms that continued to operate in 1998. However, as a robustness check, we also use a sample consisting only of firms that were associated with either bank in both 1998 and 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 relevant banks as their main bank.

We regress the daily changes in 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.<sup>6</sup> The regression equation takes the following form:

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

where  $R_{it}$  is the change in the stock price of firm  $i$  on day  $t$ ,  $\alpha_i$  is the intercept coefficient for firm  $i$ ,  $R_{mt}$  is the change in the market index (KOSPI) for day  $t$  so that  $\beta_i$  is the estimated market risk coefficient for firm  $i$ , and  $D_{kt}$  is a binary variable that equals 1 if day  $t$  is within the three-day event window  $k$ . Hence,  $\gamma_k$  measures the average daily abnormal returns associated with event window  $k$ . Equation (1) is estimated as a system of equations for the individual firms to allow for contemporaneous correlation of the error terms across firms.<sup>7</sup>

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<sup>5</sup> For comparison, the exit rates of firms during the same period for the three other banks with large numbers of related companies are 21%, 16%, and 12%.

<sup>6</sup> We experimented with five-day and eleven-day windows in the baseline model; our main results are not changed qualitatively in either case.

<sup>7</sup> We assume that the error terms are independent but heteroskedastic within each equation and uncorrelated with the market index and event dummies. In addition, the non-contemporaneous correlations of error

In addition, we investigate the differential impact on the value of firms relying on Korea First Bank and Seoul Bank depending on their financial characteristics. For this exercise, the regression equation is specified as:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \sum_{k=1}^l \gamma_k D_{kit} + \sum_{k=1}^l \theta_k X_i D_{kit} + \varepsilon_{it}, \quad (2)$$

where  $X_i$  is a financial characteristic of firm  $i$  that we hypothesize to be correlated with related lending. Hence, we interact the  $X_i$  variables with the dummy variables identifying events in the regression. Since we include the market index in equation (2), the interacted terms measure the impact of firm-specific characteristics on abnormal returns. We consider three characteristics, namely, the ratio for gross profit to assets, the ratio of cash and bank deposits to assets, and the ratio of short-term bank loans to assets.

The first characteristic is ratio of gross profit to assets, which represents the profitability of firms. Profitable firms are expected to be affected less by these events because they are better able than unprofitable firms to obtain funds from sources other than their main bank on market terms. However, profitable firms will also lose the rent accruing to soft related loans if their main bank begins to make loans only according to commercial conditions. Hence, the impact of these events on the stock prices of profitable firms is somewhat ambiguous and may even be opposite of the expected signs reported in the last section. To investigate this possibility, we estimate the interacted terms in equation (2) to discern the average effect of a firm's profitability, by itself, on abnormal stock returns. We expect this term to have the opposite sign to that of the event. In addition, we divide the sample into quintiles based on profitability and estimate the

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terms across firms are assumed to be zero. Given this assumption, we use the *cluster* option of STATA's *regress* command to obtain correct standard errors.

impact of an event on each quintile to probe the distribution of abnormal returns across profitability.

The second characteristic is the ratio of cash and bank deposits to assets, which measures the liquidity of the firms. Even if the lending is reduced upon the foreign takeover of the bank, firms with sufficient liquidity do not need to 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 the interacted term to be of the opposite sign to that of the event. For the quintile analysis, we expect the impact of an event on abnormal returns to be larger for less-liquid firms. The third characteristic is the ratio of short-term bank loans to assets, which measures the extent to which firms rely on bank loans relative to other sources of funds. 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.<sup>8</sup> Hence, we expect the reliance on short-term bank loans to magnify the impact of an event so that the interacted term should have the same sign as that of the event and that the change in abnormal returns will be larger for more-reliant firms.

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. For events that occur before July 1, 1998, we take averages for 1996 and 1997 since the accounting period in Korea is the calendar year and income statements and balance sheets are available at the end of the year. Similarly, for events that occur between July 1, 1998 and July 1, 1999, we take averages for 1997 and 1998. Although 1998 information is not

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<sup>8</sup> 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.

published until the end of the year, market participants are likely to have information about the current financial situation of firms from more frequent earnings reports.<sup>9</sup> Finally, for the two events relevant to companies related only to Korea First Bank that occur in 1999, we use averages of 1998 and 1999 financial characteristics. Because July 1 is an arbitrary dividing date, we estimated the interacted coefficients using only the previous year's financial characteristics and the results were not qualitatively different.<sup>10</sup> Hence, we report only the estimations using two-year averages to represent the information available to market participants at the time of an event.<sup>11</sup>

#### **4. Estimated Abnormal Returns**

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

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<sup>9</sup> Moreover, the 1998 events that use 1998 data occur in the last two months of the year so that market participants are likely to be reasonably well informed about the current financial situation of the firm. In addition, the two 1997 events that use 1997 data occur in December.

<sup>10</sup> We also estimated the effects using averages of the firm characteristics for 1997 through 1999 and found qualitatively similar results.

<sup>11</sup> For the three sets of two-year averages, the three financial characteristics do not display much collinearity. Simple correlation coefficients range from minus 0.13 to plus 0.19. Interestingly, the three correlation coefficients between liquidity and bank reliance are all negative.

in 2000.<sup>12</sup> 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 requirement is to appoint an outside lead manager for the 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 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.

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<sup>12</sup> 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.

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.<sup>13</sup> However, when the first deadlines stipulated in the memoranda passed without any formal agreement with the 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.

Turning to the events that capture 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.<sup>14</sup> 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 they lost during the two first events in

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<sup>13</sup> 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.

<sup>14</sup> Only companies using Korea First Bank as their main bank are included in the estimation of this coefficient leading to relatively large standard errors.

December 1997 when the banks were nationalized and the letter of intent with the IMF was signed.

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. If this is the case, the estimates of abnormal returns may be affected by industry-specific shocks. As a robustness check, we estimate the following equation that includes an industry stock index as well as the market index (KOSPI):

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

In equation (3), an industry index,  $R_{jt}$ , is included to account for the effects of industry-specific shocks on estimated abnormal returns. Column 4 of Table 1 reports the estimated coefficients; abnormal returns are qualitatively similar to the baseline results with three notable changes. First, the coefficient for the announcement of the memorandum of understanding is negative and statistically significant indicating that this event yielded negative abnormal returns for related firms once we control for industry effects. Second, the coefficients associated with nationalization and the missed 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 with the exception of the attribution of negative abnormal returns to the final acquisition of Korea First Bank, which loses its statistical significance.

In the baseline model, we have assumed 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 on abnormal returns caused by estimating the firm-specific risk coefficients over the entire period is likely to be less severe when these sub-samples are used and the coefficient is allowed to differ among the four periods. Column 5 of Table 2 reports the resulting estimates of abnormal returns. Once again, the baseline results are corroborated and strengthened. The major difference is the statistically significant negative coefficients for the appointment of Morgan Stanley as the outside advisor and for the memorandum of understanding. In addition, unlike in the previous column, negative abnormal returns are attributable to 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, as Table A1 indicates, 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. 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 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. These results are reported in column 6 of Table 2 for

firms that stayed with the banks throughout the sample period. A comparison of the coefficients in columns 3 and 6 of the table indicates that the chosen group of related borrowers has virtually no impact on estimated abnormal returns.

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 statistically insignificant coefficients. Market participants do not appear to have taken the memoranda of understanding as credible commitments to jump starting the privation processes. To an extent, 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 events is that market participants are taking a wait-and-see attitude in which actions speak louder than words. The 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 behavior.

## **5. The Impact of Firm Characteristics on Abnormal Returns**

Turning to the issue of whether the benefits to soft related lending depend on the type of the 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 firms depending more heavily on short-term bank lending and unprofitable firms, which may even be zombie firms, 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 the events because these firms are financially sound with considerable cash flow so that they have internal funds available to substitute for bank financing.

Table 3 displays the results of this regression for the baseline model. For each event, the reported intercept coefficient measures abnormal returns when the value of each firm characteristic is 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. Given this interpretation, 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 reliant firms should be impacted more by the news.

Table 3 contains twelve interactive coefficients that are statistically significant at the five percent or better levels. Of the twelve, ten have the expected signs and seven of these are related to the early events of nationalization, signing the letter of intent, or the

postponement of sales. All three events have robust significant abnormal returns associated with them in Table 2. The two unexpected signs in Table 3 are attached to coefficients corresponding to 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 equations to control for industry effects (Table A2), to allow for different firm-specific risk coefficients (Table A3), and to include only firms that stayed with each bank during the entire sample period (Table A4).

The results from the different specifications indicate that all three coefficients on the postponement of sales in Table 3 are robust. In addition, the coefficients with unexpected signs in Table 3 lose their statistical significance in the alternative specifications.<sup>15</sup>

Considering the individual specifications, the impact on firms reliant on bank loans is strengthened when industry effects are included. In general, most of the coefficients are not statistically significant when the regressions are run over four sub-periods, although liquidity gains in importance. Considering only the firms that stay with the two banks throughout the period enhances the importance of profitability and decreases the role of bank reliance. Overall, the coefficients are somewhat fragile to the different specifications. However, the results are broadly consistent with the hypothesis that more profitable and more liquid firms lose less value from negative news and gain less from positive news taking the perspective of a borrower hoping for the continuation soft related lending practices in its main bank. In addition, we find that borrowers relying

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<sup>15</sup> In the unreported regressions using firm characteristics lagged one year and averaged over three years from 1996 to 1998, these coefficients are also not significant.

more heavily on their main bank for financing are impacted more by most of the events, as expected.

To probe further the relative impact of the 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 are interested in finding out 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. In addition, 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 pattern of what is expected 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 as 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. Finally, 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 three tables yields an insight into the firms using Korea First Bank as their main bank. Abnormal returns are impacted more strongly by news events for firms that are more profitable, less reliant on the bank, and in either of the tails of the liquidity distribution. Clearly 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 than do old firms. Although the last comparison is expected, the first two suggest that Korea First Bank was attracting financially better firms during the sample period. Any

further implications must await analysis of the aftermath of 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 showing that related lending provides 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 have larger impacts on abnormal returns in firms that are both more unprofitable and less liquid and also rely more on bank loans. 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 reflect soft, non-market, terms or relationship-specific surplus is difficult to determine directly. Analyzing the impact of news events concerning the likely or not sale of a main bank to a foreign institution on abnormal returns of related borrowers provides indirect evidence of the softness of related lending. Second, the Korean stock market appears to process information relatively efficiently. As market participants anticipate that foreign control of a main bank will end soft related lending practices, the stock price of related borrowers respond 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 is not sold to a foreign investor as HSBC, which is a bank, loses interest. Rather, 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, Newbridge Capital Group, which is not a bank, was required to hold its shares

in Korea First Bank 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 that are interested in selling a domestic bank to a foreign bank should not reject offers from non-bank foreign financial institutions that can provide the credibility necessary to clean up lending practices in preparation for the eventual sale to a foreign bank.

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**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* (1.182)	-2.000*** (0.576)	-1.798*** (0.315)	-2.226* (1.136)
Letter of Intent with IMF	-	-2.448*** (0.791)	-1.579*** (0.579)	-2.467*** (0.303)	-2.472*** (0.775)
Morgan Stanley Appointed	-	-1.087 (0.939)	-0.455 (0.460)	-0.821*** (0.302)	-1.057 (0.920)
Sales Postponed	+	2.537*** (0.728)	2.299*** (0.679)	2.384*** (0.315)	2.285*** (0.699)
Memorandum of Understanding	-	-0.567 (0.446)	-0.825** (0.373)	-0.727** (0.334)	-0.313 (0.377)
1st Deadline	+	1.626* (0.913)	1.388** (0.646)	1.372*** (0.335)	1.505* (0.844)
2nd Deadline	+	-0.247 (0.603)	-0.054 (0.443)	-0.512 (0.336)	-0.196 (0.526)
Agreement to Sell KFB	-	0.223 (0.624)	-0.123 (0.191)	-0.000 (0.457)	0.531 (0.650)
Acquisition of KFB	-	-2.335** (0.955)	-1.402 (0.879)	-1.799*** (0.464)	-2.068* (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 (-)	Aquisition of KFB (-)
Intercept	-1.756 (3.297)	-2.512*** (0.539)	-0.815 (1.080)	3.868*** (0.307)	-1.153 (1.850)	0.874 (0.705)	0.154 (0.828)	-1.122** (0.497)	-0.916* (0.522)
Profitability (opposite)	-2.094 (2.996)	1.455*** (0.435)	1.182 (1.039)	-6.485*** (0.437)	0.070 (2.539)	0.089 (1.617)	-3.493** (1.392)	1.848 (4.255)	-5.849*** (2.128)
Liquidity (opposite)	10.378 (9.098)	11.993** (5.751)	6.391* (3.731)	-10.820*** (1.525)	3.425 (5.040)	-5.634 (4.032)	2.211 (3.198)	7.678 (5.808)	-6.326 (7.741)
Reliance on Bank Loans (same)	-2.914*** (1.121)	-6.647*** (0.795)	-4.694*** (1.363)	5.633*** (1.433)	2.299* (1.350)	4.904** (2.051)	3.064** (1.398)	2.247 (6.306)	5.782*** (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 (1.686)	-3.224*** (1.190)	-3.184 (2.089)	-0.575 (0.588)	-1.454* (0.767)
Letter of Intent with IMF	(-)	-3.083*** (0.637)	-3.315*** (0.514)	-2.300* (1.390)	-1.849* (1.068)	-1.676 (1.132)
Morgan Stanley Appointed	(-)	-1.041 (0.760)	-0.987 (0.785)	-2.084* (1.072)	-0.113 (0.527)	-1.213 (1.860)
Sales Postponed	(+)	3.085*** (0.635)	1.331** (0.581)	2.849*** (0.630)	1.324* (0.705)	4.097*** (1.494)
Memorandum of Understanding	(-)	-0.281 (1.071)	-1.162*** (0.220)	-0.837 (0.840)	0.584 (0.421)	-1.122* (0.647)
1st Deadline	(+)	0.801 (0.933)	2.433** (1.037)	1.089 (0.979)	1.763** (0.884)	2.024 (1.279)
2nd Deadline	(+)	-0.638 (0.908)	0.132 (0.670)	-0.330 (0.462)	-0.054 (0.706)	-0.362 (1.160)
Agreement to Sell KFB	(-)	-0.118 (0.636)	0.889 (0.863)	-1.006 (0.957)	1.004 (0.782)	0.620 (1.707)
Acquisition of KFB	(-)	-2.240* (1.317)	-3.280*** (0.507)	-0.558 (2.360)	-2.846*** (0.678)	-3.118** (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											Totals: Other 1998
	CHOHUNG	HANA	HANVIT	KOOKMIN	KORAM	KEB	KFB	PEACE	SEOUL	SHINHAN	Other	
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 (-)	Aquisition of KFB (-)
Intercept	-2.605 (2.175)	-1.545** (0.633)	0.038 (0.345)	3.603*** (0.359)	-1.783 (1.588)	0.461 (0.557)	0.194 (0.588)	-0.992* (0.560)	-0.601 (1.115)
Profitability (opposite)	0.987 (1.950)	0.220 (0.764)	1.216* (0.631)	-6.545*** (1.066)	1.882 (1.908)	0.659 (1.402)	-3.329** (1.321)	1.619 (3.914)	-3.786 (3.764)
Liquidity (opposite)	12.925* (6.920)	9.908* (5.879)	2.251 (2.124)	-10.399*** (1.947)	3.328 (4.919)	-5.449 (4.359)	2.166 (3.324)	2.548 (4.128)	-9.245 (6.366)
Reliance on Bank Loans (same)	-3.623*** (1.354)	-4.697*** (0.965)	-4.365*** (1.131)	6.232*** (1.742)	1.595 (1.658)	5.058*** (1.862)	3.859** (1.685)	1.466 (7.405)	6.455** (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 (-)	Aquisition of KFB (-)
Intercept	-1.634 (1.117)	-2.265** (1.091)	-0.673 (1.083)	3.691*** (0.993)	-1.376 (1.104)	0.510 (1.132)	-0.147 (1.140)	-1.564 (1.590)	-0.426 (1.633)
Profitability (opposite)	-1.691 (2.297)	0.716 (2.262)	1.193 (2.260)	-6.180*** (2.081)	0.365 (2.318)	0.500 (2.642)	-3.129 (2.650)	0.661 (4.507)	-6.067 (4.573)
Liquidity (opposite)	11.124** (4.733)	10.417** (4.673)	6.064 (4.849)	-10.661** (4.649)	3.609 (5.022)	-5.213 (4.999)	1.847 (5.037)	12.833 (10.266)	-5.945 (10.428)
Reliance on Bank Loans (same)	-2.917 (2.433)	-6.296*** (2.314)	-4.313* (2.338)	5.538** (2.528)	2.083 (2.767)	4.757* (2.763)	2.918 (2.791)	2.420 (3.902)	5.582 (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 (-)	Aquisition of KFB (-)
Intercept	-1.674 (2.729)	-2.259*** (0.507)	-0.572 (0.892)	2.113*** (0.432)	-1.281 (1.321)	0.997** (0.485)	-0.389 (0.539)	-0.584 (1.188)	-1.965 (1.599)
Profitability (opposite)	-5.454* (2.992)	-0.816 (0.791)	2.189*** (0.749)	-6.387*** (0.647)	-0.649 (2.991)	-0.076 (1.200)	-3.133** (1.278)	2.046 (6.689)	-5.628 (6.069)
Liquidity (opposite)	8.507 (9.229)	14.177*** (5.243)	6.544* (3.348)	-9.368*** (1.819)	5.210 (4.958)	-5.222 (3.259)	3.106 (3.515)	6.303 (6.151)	-7.753 (12.090)
Reliance on Bank Loans (same)	-1.071 (1.186)	-5.690*** (0.719)	-5.651*** (1.399)	7.649*** (1.563)	3.532*** (0.939)	4.068* (2.259)	2.018 (1.384)	2.011 (7.624)	7.405 (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 (1.814)	-2.924* (1.637)	-1.537** (0.693)	-2.959*** (1.076)	-1.765** (0.707)
Letter of Intent with IMF	(-)	-3.722*** (1.014)	-2.857*** (0.748)	-1.251 (0.903)	-2.658*** (0.408)	-1.742 (1.136)
Morgan Stanley Appointed	(-)	-1.489 (1.095)	-1.505** (0.706)	-0.337 (0.348)	-0.830 (1.200)	-1.256 (1.607)
Sales Postponed	(+)	3.680*** (0.775)	3.165*** (0.579)	1.241*** (0.373)	1.420* (0.853)	3.140*** (1.149)
Memorandum of Understanding	(-)	-0.898 (1.399)	0.482 (0.893)	0.054 (0.239)	-2.680*** (0.596)	0.354 (0.649)
1st Deadline	(+)	0.838 (1.404)	1.499** (0.612)	2.247*** (0.862)	1.839* (1.106)	1.689 (1.308)
2nd Deadline	(+)	0.284 (0.816)	0.067 (0.744)	-0.010 (0.598)	-1.132* (0.583)	-0.462 (0.923)
Agreement to Sell KFB	(-)	-0.449 (0.476)	-0.735 (1.200)	0.364 (0.492)	0.783 (0.573)	1.159 (2.051)
Acquisition of KFB	(-)	-1.722 (1.065)	-2.185 (1.779)	-0.918 (1.385)	-3.492*** (0.632)	-3.452** (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* (0.883)	-3.009* (1.678)	-1.682 (1.025)	-2.857* (1.584)	-2.008** (0.966)
Letter of Intent with IMF	(-)	-0.705 (0.623)	-2.860** (1.380)	-2.248*** (0.445)	-3.358*** (1.140)	-2.997*** (0.729)
Morgan Stanley Appointed	(-)	-0.167 (0.308)	-0.741 (1.058)	-1.450* (0.789)	-1.664 (1.104)	-1.464 (1.740)
Sales Postponed	(+)	0.649 (0.745)	1.607** (0.741)	1.532*** (0.232)	4.423*** (0.590)	4.540** (1.793)
Memorandum of Understanding	(-)	0.094 (0.802)	-1.635*** (0.625)	-0.837*** (0.319)	-0.198 (0.982)	-0.303 (0.615)
1st Deadline	(+)	0.728 (0.603)	-0.235 (0.680)	2.102 (1.346)	2.675** (1.254)	2.952*** (1.062)
2nd Deadline	(+)	-0.884*** (0.303)	-0.160 (0.807)	-0.330 (0.636)	0.699 (0.894)	-0.571 (1.094)
Agreement to Sell KFB	(-)	-0.041 (1.476)	-0.227 (0.491)	0.849*** (0.180)	0.087 (0.389)	0.462 (1.041)
Acquisition of KFB	(-)	-3.121*** (1.130)	-2.686*** (0.770)	-2.576** (1.130)	-1.718 (1.830)	-1.694 (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.