

Expropriation risk vs. government bailout: implications for minority shareholders of state-owned banks

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Abstract

Using a unique sample of bank loan announcements in Indonesia, we investigate how minority shareholders in publicly listed state-owned banks anticipate being affected by the new loans extended by such banks. Our empirical findings provide evidence that minority shareholders do not anticipate being negatively affected because even if a risk of expropriation exists (“grabbing hand” effect) it is offset by the “helping hand” effect (such as expected bailouts). Our findings furthermore show that shareholders do not anticipate benefiting from a twin “helping hand” effect when loans are extended to state-owned firms, or a cumulative effect of “helping hand” and co-insurance effects when loans are extended to firms belonging to a pyramidal business group.

JEL Classification: G21, G28

Keywords: Banks; government ownership; loan announcements; related party transactions.

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Abstract

Using a unique sample of bank loan announcements in Indonesia, we investigate how minority shareholders in publicly listed state-owned banks anticipate being affected by the new loans extended by such banks. Our empirical findings provide evidence that minority shareholders do not anticipate being negatively affected because even if a risk of expropriation exists (“grabbing hand” effect) it is offset by the “helping hand” effect (such as expected bailouts). Our findings furthermore show that shareholders do not anticipate benefiting from a twin “helping hand” effect when loans are extended to state-owned firms, or a cumulative effect of “helping hand” and co-insurance effects when loans are extended to firms belonging to a pyramidal business group.

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1. Introduction

In emerging countries, although governments have privatized many banks over the last twenty years, they still maintain their controlling shareholding positions in many unlisted but also publicly traded banks. Conversely, in developed countries, the bank failures triggered by the 2007-2008 global financial crisis have led governments to substantially increase their stakes and involvement in a number of large banks. The implications of government ownership on banks' corporate governance has therefore become an important area of research for developed as well as emerging economies.

According to the “grabbing hand” hypothesis of Frye and Shleifer (1997) and Shleifer and Vishny (1998), government ownership might be less efficient than private ownership and harmful to corporate governance if the state expropriates shareholders' wealth for the benefit of politicians. In line with this hypothesis, La Porta et al. (2002), Dinc (2005), Sapienza (2004) and Khwaja and Mian (2005) find that government ownership of banks facilitates the financing of projects that maximize the private welfare of politicians rather than banks' revenues. Meanwhile, the “helping hand” hypothesis argues that the state as a shareholder is in a position to provide preferential treatment and is unlikely to allow large state-owned firms to face bankruptcy (Faccio et al., 2006). These two hypotheses therefore indicate that two types of expropriation might be occurring with state ownership of banks. The state might expropriate shareholders, but might also be extracting value from taxpayers, which in turn could benefit shareholders. Consequently, an important research question that we address in this paper is how minority shareholders anticipate being affected by government ownership when banks extend their activities. On the one hand, as the bank invests in new projects, minority shareholders will expect higher expropriation (“grabbing hand” effect). On the other hand, if these new projects fail, they will expect specific support from taxpayers and to a larger extent than shareholders of private banks would (“helping hand” effect). Specifically, we investigate the market reaction to bank loan announcements for state-owned in comparison to private banks by taking the expropriation dimension into account. To thoroughly conduct our empirical investigation we use detailed data on related party loans as a proxy of the likelihood of expropriation, collected for Indonesia whose banking industry provides an ideal setting. Indeed, the Indonesian banking sector is characterized by strong government ownership and weak minority shareholder protection with therefore high expropriation risk. According to the World Bank Doing Business Index, Indonesia is ranked 88th regarding the protection of minority investors, far behind its neighboring countries such as Singapore (1st), Malaysia (4th), and Thailand (36th). Furthermore, because many private

banks in Indonesia operate along with state-owned banks, such an environment allows investigating expropriation in publicly traded banks which are either state-owned or private.

Previous studies have been carried out on non-financial firms and have compared the relative merits and disadvantages of state versus private ownership. Claessens et al. (1998) find, for a sample of publicly listed East Asian firms, that government ownership has no significant impact on market valuation. They also find that firms with family as controlling shareholders are associated with lower market values. They interpret these results as evidence that the risk of expropriation of minority shareholders is stronger when the controlling shareholder is a family than when it is the state. On the contrary, using a sample of listed non-financial Chinese firms, Bai et al. (2004) find that large holdings by the government have a negative effect on market valuation. Cheung et al. (2009) further find that the “grabbing hand” hypothesis only holds for Chinese firms controlled by local governments, while central government ownership is beneficial for minority shareholders in line with the “helping hand” hypothesis.

In this paper, we focus on banking firms and investigate how minority shareholders in publicly listed state-owned banks (SOBs) anticipate being affected by the new investments undertaken by such banks. Specifically, looking at banks and not firms from the real sector brings in an important dimension that has not been investigated so far. Government bailouts are much more common for banks than other firms and hence while minority shareholders might expect a lower return from these new projects, because of expropriation, they might also perceive them as less risky because of the higher probability of government support in case of distress. Unless default resolution mechanisms are credibly implemented to impose the losses on majority as well as minority shareholders in both government and private banks (bail-in and not bailout), such a behavior could be even more pronounced in the post 2007-2008 financial crisis era. In other words, minority shareholders of state-owned banks might therefore not be affected if the “grabbing hand” and “helping hand” effects offset each other, or they might even anticipate being positively affected if the “helping hand” effect dominates. To examine these hypotheses, we explore the valuation effect of loan announcements. More specifically, we use an event study approach to examine and compare the market reaction to bank loan announcements of state-owned and privately-owned banks and use the importance of loans to related parties as a proxy for the likelihood of expropriation. Among privately-owned banks, we identify those that are family-owned; as the existing literature shows that they are more likely to engage in extraction of private benefit (Claessens et al., 2002; Villalonga and Amit, 2006), we use them as a benchmark against which to evaluate the

valuation effect of loan announcements for state-owned banks by taking the likelihood of expropriation into account.

As the valuation effect of loan announcements from state-owned banks could also depend on the type of borrowers they lend to, we go further in our analysis by differentiating if borrowers are state- or privately-owned. When the borrower is a state-owned firm (SOE), minority shareholders of state-owned banks could anticipate benefiting from a twin “helping hand” effect as the possible bailout in case of financial distress should also apply to borrowers when they are SOEs. We therefore expect a positive market reaction to loan announcements from state-owned banks to state-owned borrowers if minority shareholders anticipate that the twin “helping hand” effect could outweigh the “grabbing hand” effect. Regarding privately-owned borrowers, they can have either a horizontal or a vertical pyramidal ownership structure. The fraction of firms belonging to a pyramidal business group is very high in Indonesia, with around two-thirds of firms affiliated to a group (Khanna and Yafeh, 2007). If borrowers belong to such a pyramidal business group, they could benefit from co-insurance within their business group (Friedman et al., 2003; Khanna and Yafeh, 2005, 2007; Gopalan et al., 2007). The ultimate owners could use group internal resources to bail out troubled member firms, in other word propping up weaker firms. When borrowers are privately-owned but belong to a pyramidal business group, this co-insurance effect can reduce their default risk as they are financially supported by their group. We therefore expect a positive market reaction to loan announcements from state-owned banks to privately-owned borrowers when they belong to a pyramidal business group if minority shareholders anticipate that the cumulative effect of the “helping hand” and co-insurance effects outweigh the “grabbing hand” effect.

To investigate the market reaction to state-owned banks loan announcements, we focus in this paper on a single country to provide a better understanding of possible channels through which loan announcements affect stock prices when the risk of expropriation is high. More specifically, we examine stock market reactions to state-owned bank loan announcements in comparison to family-owned banks during the 2010–2014 period in Indonesia, using an event-study methodology. To do so, we hand collected a unique dataset on 365 loan announcements of listed Indonesian banks, as well as on banks and borrowing firms ownership structure, and on banks’ related party transactions. Our findings show that announcement returns of state-owned banks are not significantly related to the extent of related lending in banks’ balance sheets. This result supports the argument that even if a risk of expropriation exists in state-owned banks, it is offset by the “helping hand” effect. The expected bailouts on state-owned banks contribute to offset the value discount associated with the government ownership risk

of expropriation. Further investigations show that the market does not positively value government ownership of banks when loans are extended to state-owned firms or to privately-owned firms affiliated to a group, as compared to loans extended to privately-owned firms not affiliated to a group.

This study makes two contributions to the literature. First, we examine the value of government ownership of banks and shed light on yet undocumented factors that make bank stock prices react to loan announcements. Second, we examine how related party transactions can act as a channel through which government ownership affects the value of publicly listed banks. Our findings are of interest to policymakers in countries with weak legal protection for shareholders and where governments maintain their controlling shareholdings as we highlight the channels that could help in reducing the value discount in banks with government ownership.

The rest of the paper is organized as follows. Section 2 presents related literature and the research questions we address. Section 3 describes our sample and defines our variables of interest. Section 4 presents the market reaction results. Section 5 examines the determinants of banks loan announcements. Section 6 contains robustness checks and section 7 concludes the paper.

2. Related literature and research questions

Meggison (2005) argues that state ownership of banks is driven by several factors. Firstly, government ownership of banks is a way to maintain domestic control over a nation's financial system. Secondly, state-owned banks can compensate a possible lack of private capital with sufficient risk tolerance to finance growth. Thirdly, state-owned banks can be used to finance sectors which play an important social role and which private would be less keen to finance because of lower profitability than other sectors. Globally, state-owned banks are also expected to lend countercyclically, providing credit when and where other banks do not. This could encourage industrialization and development at a more rapid pace than private financing would allow.

Controlling government shareholders are therefore more likely to adopt a non-profit maximization behavior to achieve social and political objectives, to the detriment of other shareholders' interest (Bai et al., 2000; Lin and Li, 2008). Schleifer and Vishny (1994) show that, even in a fully competitive market, state-owned firms will be inefficient because the state forces them to pursue non-economic objectives, such as maintaining employment. Shleifer and Vishny (1998) argue that this "grabbing hand" behavior, with governments expropriating shareholders' wealth from state-owned firms, implies that private ownership is preferable to

state ownership. In line with this argument, empirical evidence shows that government ownership of banks is detrimental to their performance (Berger et al, 2005; Bonin et al., 2005; Berger et al, 2009).²

However, prior research has also shown that shareholders in state-owned firms may benefit from government cross-subsidization to counter financial difficulties. Seshinski and Lopez-Calva (2003) demonstrate that governments will choose to provide subsidies to state-owned firms in financial distress whenever the political costs of allowing these firms to go bankrupt outweigh the political cost of subsidization. The large number of bailouts during the global financial crisis of 2007-2008 is indicative of how much the cost of allowing banks to go bankrupt outweighs the cost of subsidization in such severe circumstances. The first question address in this paper is then whether minority shareholders anticipate that government ownership might not be systematically detrimental to the value of state-owned banks if this “helping hand” effect offsets or even outweighs the “grabbing hand” effect.

To gain further insights into the market reaction to loan announcement of state-owned banks, we also need to consider if the borrower is state- or privately-owned. To avoid their failure, the state may provide preferential treatments to SOEs and cross-subsidize them if they encounter financial difficulties (Faccio et al., 2006). Minority shareholders of state-owned banks could therefore benefit from a twin “helping hand” effect when the borrower is a SOE. With respect to privately-owned borrowers, a particularly important feature we need to consider is that borrowers belonging to a pyramidal business group could present lower default risk. The business groups enable member firms to share risk by reallocating resources from one affiliate to another firm (Friedman et al., 2003; Khanna and Yafeh, 2005, 2007; Gopalan et al., 2007). There is some empirical evidence of co-insurance within pyramidal business groups. Chang and Hong (2000) find that pyramidal business groups in Korea use internal business transactions for cross-subsidization purposes. Gopalan et al. (2007) further find that group-affiliated firms in India are less likely to go bankrupt than stand-alone firms. Minority shareholders of state-owned banks could therefore benefit from the cumulative effect of the “helping hand” and co-insurance effects when borrowers belong to a pyramidal business group. The second research question we address is therefore whether the market reaction to loan announcements of state-owned banks depends on the borrowing firm type. Minority shareholders might react positively to loan announcements when the borrowing firm is either a SOE or a firm affiliated to a group if they anticipate that the twin “helping hand” effect, or the cumulative effect of helping hand” and co-insurance effects, outweigh the “grabbing hand” effect.

² See the survey of Shaban and James (2018).

The literature analyzing the reaction of bank stock prices to loan announcements is very scarce and does not examine market reactions of government ownership of banks. Working on a sample of 88 bank loan announcements in Japan, Kang and Liu (2008) find a negative impact of loan announcements on the stock returns of the lending banks, while they observe a positive impact on the valuation of borrowing firms. They conclude that such findings are consistent with the hypothesis that banks make suboptimal lending decisions that lead to wealth transfers to borrowers. Bailey et al. (2011), who find no significant response for the stock prices of Chinese banks, fail to confirm these results. However, their investigation is limited to 24 loan announcements made by Chinese banks listed on the stock market.

Our paper is more closely related to Claessens et al. (1998), Bai et al. (2004) and Cheung et al. (2009) that examine whether non-financial firms benefit from the presence of government shareholders. These three papers provide opposite results, with Bai et al. (2004) showing that government ownership has a negative impact on market valuation, while Claessens et al. (1998) find no significant impact and Cheung et al. (2009) find a positive impact but only for central government ownership. We contribute to this literature by focusing on government ownership of banks, with potentially a stronger expecting “helping hand” effect as government bailouts are much more common for banks than for non-financial firms. We furthermore investigate whether the type of the borrowing firm is a channel that make shareholders of state-owned banks react to loan announcements.

3. Data and variable definitions

3.1. Presentation of the sample

Our analysis is focused on Indonesia as government and family ownership are a prominent feature there, and the legal environment and the level of shareholder protection are relatively low compared to other emerging countries.

The Indonesian market authority obliges borrowing firms to report information on each loan contract no later than two working days after the transaction is undertaken to the Indonesian Financial Services Authorities (OJK) and in Indonesian newspapers. However, the information provided around the announcement date is often limited to the name of the lending bank and the loan size. More detailed information (contract date, interest rate, maturity, the relationship between the borrower and the lending bank) are only provided in the annual report of borrowing firms. We therefore collected our data on bank loan announcements from the annual reports of borrowing firms and not from announcements to the Stock Exchange.

Out of the 550 firms publicly listed on the Indonesian Stock Exchange (IDX) over the period 2010-2014, we find that 153 firms have taken out loans from banks and disclosed detailed information on the loan contracts. We obtain information on 421 loan contracts, involving 27 listed banks (among the 35 banks that are listed on the IDX over the period). We drop 23 loans announcement for which we identify other events that may affect banks' stock prices around the loan announcements. (e.g. dividend payments, change in managerial key position, etc.). Because all the relevant data (financial statements, ownership structure and related party transactions) on borrowing firms and lending banks are not available in either annual financial reports or in Bloomberg and Bankscope, we end up with a final sample of 365 loans involving 144 borrowers and 27 lending banks. Table 1 presents the distribution of loans, borrowing firms and lending banks by year over the 2010-2014 period.

[Insert Table 1]

3.2. Ownership structure of lending banks and borrowing firms

We assemble data on the ownership structure of banks using BvD Bankscope, Bloomberg and annual reports. Banks in Indonesia are generally controlled by one large shareholder. This could be due to the reforms imposed by the government over the 2000s. In 2005, the Indonesian government attempted to promote competition by preventing shareholders from having controlling stakes in multiple banks (PBI No. 7/15/PBI/2005), forcing them to divest or consolidate through mergers and acquisitions. In 2007, the government provided more incentives for consolidation by raising the minimum capital requirement up to IDR 100 billion (PBI No 9/16/2007).

We follow the existing literature (e.g. La Porta et al., 1999, 2002; Caprio et al., 2007; Lepetit et al., 2015) by using the control threshold of 10% to build the control chain of our 27 banks for each year and identify all owners that have a controlling stake. We find that all banks have at least one controlling owner, with the largest and the second largest owner holding on average around 55% and 8% of the shares, respectively, leaving minority shareholders with on average a 32% stake.

We find that the largest owner is the government for 7 banks, with a controlling stake of around 62%. These 7 state-owned banks account for a substantial market share with around 42% of the total assets of the banking system over the 2010-2014 period (for a total of 116 banks). We also have 12 family-owned banks, with families holding on average 42.5% of the shares, and 8 banks where the largest shareholder is an institutional investor who holds on average around 63% of the shares. We further find that the ownership structure of these banks is stable over the sample period, the largest controlling owners remaining the same with

however time-varying shareholdings. We then create the dummy variables *DSOB*, *DFamily* and *DInstit*, taking the value of one for loan contracts when the lender is state-owned, family-owned or controlled by institutional investors, respectively. As the existing literature shows that families, as controlling shareholders, are more prone to engage in extraction of corporate resources through perks or transfer of assets on non-market terms to related parties (Claessens et al., 2002; Villalonga and Amit, 2006), we use family-owned banks as benchmark to evaluate the impact of government ownership of banks on the market reaction to loan announcements.

For the borrowing firms, we identify if they are state- or privately-owned using the information provided by the company website, the IDX, the firms' annual report and the Ministry of SOEs. We have in our sample 10 borrowers that are SOEs among the 20 SOEs that are listed on the IDX, with the government holding more than 50% of the shares. These 10 borrowers account for 46 loan announcements. We therefore have 134 borrowers that are privately owned, accounting for 319 loan announcements. Among these privately-owned borrowers, we identify 123 borrowers belonging to a pyramidal business group and 11 with a horizontal ownership structure, accounting for 298 and 21 loan announcements, respectively. We create the dummy variables *DSOE* and *DPrivInGroup* that takes the value of one for loan contracts when the borrower is state-owned or belongs to a pyramidal business group, respectively.

3.3. Related loans as a proxy for the likelihood of expropriation

We try to identify which loans can be classified as related at the announcement date. In Indonesia, the regulator considers loans as related if: (i) borrowers and lenders are owned by the same controlling shareholder(s); (ii) borrowing firms are controlled by a key person in lenders' management (executive manager, director, etc.). Since 2008, regulation requires listed Indonesian firms to publicly announce any related party transaction (RPT) a maximum of two working days after the transaction takes place, except for related party transactions having a lower value than 0.5% of the firm's paid capital (BAPEPAM-LK Rule IX.E.1). Such rules might create incentives for firms to arrange RPT and split them into smaller ones; this implies that investors on the market might not be aware of all RPTs when they take place, but instead only have information, ex-post, on the total amount of RPTs that are disclosed in the annual report. Moreover, if the related parties and the controlling owners are in the same group with consolidated annual reports, the status of the transactions (RPT or non-RPT) do not need to be public announced to the IDX although they need to be reported to the Indonesian Financial Services Authorities (OJK) and in the borrowing firm's annual report.

Listed banks are furthermore subject to the rules imposed by Central Bank of Indonesia; since 2005, RPT cannot exceed 10% of the banks' equity (Peraturan Bank Indonesia No. 7/PBI/2005).

In this context, market participants will not be able to identify all loans that are related using publicly information available at the announcement date. We cannot therefore conduct our event study analysis using information on loans classified as related at the announcement date, as a large number of loans will be classified as non-related while they are related. The only reliable information is the information on related loans provided in the annual report. We therefore use the information published in the annual report on loans to related parties as a proxy for the likelihood of expropriation, as common in the existing literature (e.g. Bailey et al., 2011, Djankov et al., 2008; Huang et al., 2012). Related party transactions can be used by large shareholders as a vehicle to transfer resources from the company to its related parties (La Porta et al. 2003; Gordon et al., 2004; Jiang et al. 2010). Such expropriation behavior with the pursuit of non-profit maximizing objectives could affect minority shareholders through a reduction in firm value. Alternatively, related party transactions could also take the form of efficient arrangements that are of benefit to all shareholders when there is incomplete information (Ryngaert and Thomas, 2012). This can be the case if the availability of more information on related parties reduces the uncertainty on the risk characteristics of projects (Rajan, 1992). However, the existing empirical literature find that related party transactions are negatively related to firm value, supporting the expropriation hypothesis (Gordon et al., 2004; Cheung et al. 2009; Jiang et al. 2010; Kohlebeck and Mayhew, 2010; Ryngaert and Thomas, 2012).

We collect the data on the total amount of related loans provided in banks annual report for the years 2010 to 2014 and compute for each bank the ratio of related loans to total assets (*RPLTA*) and the ratio of related loans to total loans (*RPLTL*) (see Table 2 for descriptive statistics). We find that related loans represent on average around 2.20% of banks' total assets, and 20.03% of their total equity. Surprisingly, the proportion of related loans to total equity exceeds the maximum threshold, showing that banks can find ways to conduct related transactions without being constrained by the regulator.

[Insert Table 2]

4. Abnormal returns surrounding loan announcements

4.1. Event study methodology

To investigate the effect of loan announcements on stock prices of state-owned banks in comparison to privately-owned banks, we apply a standard event study methodology to

compute CARs for all announcements. We obtain daily stock prices and market index data from Bloomberg. We compute ex-post abnormal returns, defined as the difference between actual stock returns and expected returns in the event window, as follows:

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt}) \quad (1)$$

where R_{it} is the daily return of the i th lending bank at time t and R_{mt} is the daily market index return at time t ; $\hat{\alpha}_i$ and $\hat{\beta}_i$ are ordinary least squares (OLS) regression estimates from the market model. We compute the abnormal returns by estimating $\hat{\alpha}_i$ and $\hat{\beta}_i$ using 180 daily returns beginning with day $t = -200$ and ending with $t = -20$ relative to the announcement date $t=0$.

We calculate the cumulative abnormal returns between any two dates T_1 and T_2 as

$$CAR_i(T_1, T_2) = \sum_{t=T_1}^{T_2} AR_{it} \quad (2)$$

and we construct the cross-sectional average of CARs between dates T_1 and T_2 as

$$ACAR_i(T_1, T_2) = \frac{1}{N} \sum_{i=1}^N CAR_i(T_1, T_2) \quad (3)$$

We test the significance of average CARs using the standard cross-sectional t-statistic test that the average CARs over any given time interval are equal to zero. We also employ the Wilcoxon test (1945) that uses a median test of the null hypothesis to check if the mean return is not unduly influenced by outlier returns.

4.2. Results

Tables 3 reports the CARs for state-owned banks (Panel B) with either high or low levels of related loans, in comparison with family-owned banks (Panel C) and banks controlled by institutional investors (Panel D).³ Panel A also reports the results for the whole sample. We consider different event windows spanning from 3 days before and 3 days after the loan announcement date. We use the sample median value of the ratio of related loans to total loans ($RPLTL$) to differentiate banks with relative high and low levels of $RPLTL$, i.e. with high and low likelihood of expropriation. The sample median value of $RPLTL$ is 0.30%.

Panel A for the whole sample shows that there are significant negative CARs for banks with a relatively high levels of related loans in the three event windows we consider.

³ We also tried to compute CARs for state-owned, family-owned and institutional-owned banks depending on the level of their related loans (high or low) and also on the type of borrowers they lend to (SOEs, privately-owned affiliated or not to a group). However, dividing each sub-group of banks into six subsamples leaves some cases with a very small number of observations (or even no observations), and we prefer to not display and comment such results.

However, the results show that the market reaction is different depending on the type of the controlling owner.

We observe from Panel B of Table 3 that CARs are consistently non-significant for state-owned banks with relatively high and low levels of related party loans, for the three event windows we consider and for both the t -statistic and the Wilcoxon tests. These results show that the market does not negatively react to loan announcements from state-owned banks with higher levels of related party loans, indicating that minority shareholders do not anticipate being affected by government ownership when these banks extend their activities. This could be explained by minority shareholders expecting that the “helping hand” effect offsets the “grabbing hand” effect.

Results for family-owned banks (Panel C) show that CARs are significantly negative for banks with higher levels of related loans for the event window $[-3,+3]$ at a five percent level of confidence with the t -Test, and for the event window $[-1,+1]$ but only at a dix percent level of confidence. On the contrary, we observe that CARs for family-owned banks with lower levels of related loans are consistently non-significant. These results are consistent with the argument that minority shareholders anticipate being affected by family ownership when the likelihood of expropriation is relatively high.

Results are less straightforward for banks controlled by institutional investors (Panel D). We observe that CARs are negative and significant at either a five or one percent level of confidence for banks with higher levels of related loans for the event window $[-1,+1]$, but also for banks with lower levels of related loans for the event windows $[-1,+1]$ and $[-2,+2]$. These results suggest that minority shareholders in banks controlled by institutional investors negatively value loans extended to firms, which is not consistent with the conjecture that the market anticipates institutional investors to actively monitor insiders.

[Insert Table 3]

5. Determinants of loan announcement effects

5.1. “Grabbing hand” vs. “Helping hand” effect

We next conduct a cross-sectional regression analysis to determine how government ownership affect the market valuation of banks by taking into account the likelihood of expropriation as measured by the importance of related loans. We use a CAR event window of $[-2, +2]$ as the dependent variable and consider family-owned banks as a benchmark as follows:

$$CAR_i = \beta_0 + \beta_1 RPL_i + \beta_2 RPL_i \times DSOB_i + \beta_3 RPL_i \times DInstit_i$$

$$+\beta_4 DSOB_i + \beta_5 DInstit_i + \sum_m \theta_m Control_i + \varepsilon_i \quad (4)$$

where RPL is either the ratio of related loans to total loans ($RPLTL$) or the ratio of related loans to total assets ($RPLTA$); $DSOB$ and $DInstit$ take the value of one when the lending bank is state-owned or controlled by institutional investors, respectively.

We expect the coefficients β_1 to be negative and significant if minority shareholders of family-owned banks anticipate being negatively affected by loan announcements, to be in line with the literature showing that firms controlled by family are more likely to expropriate minority shareholders. We furthermore expect the sum of the coefficients ($\beta_1 + \beta_2$) to be either non-significant or significantly positive if minority shareholders of state-owned banks anticipate being not unaffected or even positively affected by loan announcements if the “helping hand” effect outweighs the “grabbing hand” effect. The valuation effect of loan announcements for banks controlled by institutional investors when there is potential expropriation ($\beta_1 + \beta_3$) is expected to be positive if minority shareholders anticipate that institutional investors actively monitor insiders. There are empirical evidence that institutional investors, as large shareholders, can impose greater monitoring on management and use their influence to push managers to make decisions that increase overall shareholder value (e.g. Chen et al., 2007; Ruiz-Mallorquí and Santana-Martín, 2011).

We include a set of control variables in Equation (4). All variables are defined in Table 2 with corresponding descriptive statistics. We include the ratio of loan size to the total assets of the borrowing firm ($LoanSize$). We expect a negative sign if the market perceives loans as suboptimal with a wealth transfer to borrowers, to be consistent with the findings of Kang and Liu (2008). We also include the maturity of loans in years ($TenureYear$); we expect a negative coefficient if loans with longer maturity are associated with higher probabilities of default. We control for the interest rate fixed by banks ($InterestRate$); a positive coefficient is expected if higher interest rates contribute to higher bank profits. We furthermore include three variables to control for borrowers’ characteristics: the lagged value of ROA ($BorrowerROA$), the leverage ratio ($BorrowerLev$), and the logarithm of total assets ($BorrowerSize$). We expect $BorrowerROA$ and $BorrowerSize$ to positively affect banks’ abnormal returns if granting loans to borrowers with higher profitability and larger size is less risky, while $BorrowerLev$ is expected to be negative if lending to firms with higher leverage incurs more risk. Table A1 in Appendix shows the correlation matrix of our variables and does not point to potential multicollinearity problems.

Results in Table 4 show that, for family-owned banks that we consider as a benchmark, announcement returns are negatively related to the extent of related lending in banks' balance

sheets (β_1 negative and significant). Our results show a different market reaction to state-owned banks loan announcements compared to family-owned banks as the coefficient β_2 is positive and significant. Wald tests show that announcements returns of state-owned banks are not significantly related to the importance of related lending. This finding is consistent with the argument that even if a risk of expropriation exists when the state is the controlling owner of banks, it is offset by the “helping hand” effect. Our empirical analysis provide therefore evidence that minority shareholders do not therefore anticipate being affected by government shareholdings in banks. For banks controlled by institutional investors, results from Table 4 indicate that the market does not positively value the presence of institutional investors in banks.

[Insert Table 4]

5.2. Influence of the borrowing firm’s type

We further examine whether market reactions to loan announcements of state-owned banks also depend on the type of firms they lend to. To examine this potential channel of impact, we augment Equation (4) with terms interacting the ratio of related loans, dummy variables for lending banks’ type, and dummy variables for borrowing firms’ type. We first examine the differential impact when borrowing firms are state- or privately-owned; the estimation results are given in Table 5, with Table 6 providing the associated Wald tests. We next further differentiate if privately-owned borrowing firms are affiliated or not to a pyramidal business group; the estimation results are reported in Table 7, and Wald tests in Table 8.

Results in Tables 5 to 8 show that for state-owned banks, announcement returns are not significantly related to the extent of related lending in banks' balance sheets, independently of whether loans are extended to state-owned firms or to privately-owned firms, and irrespective of whether or not they are affiliated to a business group. Our findings therefore show that the market does not positively value the presence of government ownership of banks when loans are extended to SOEs or to firms affiliated to a pyramidal business group, as compared to loans extended to privately-owned firms not affiliated to a group. These results confirm the results we found above that shareholders of state-owned banks anticipate not being affected by government ownership, with the “grabbing hand” and the “helping hand” effects offsetting each other. However, our findings do not support the arguments that the twin “helping hand” effect when loans are extended to SOEs, or the cumulative effect of helping hand” and co-insurance effects when loans are extended to firms belonging to a group, outweigh the “grabbing hand” effect.

Regarding family-owned banks, results in Tables 5 and 6 show that announcement returns are negatively related to the extent of related lending only when loans are extended to privately-owned firms. Results in Tables 7 and 8 further show that this negative market reaction is however lower when borrowing firms are affiliated to a pyramidal business group, indicating that the co-insurance effect does not offset the risk of expropriation but contributes to attenuate the negative market reaction. In contrast, our results show that banks' announcement returns are not significantly affected when loans are extended by family-owned banks to state-owned firms. This result possibly reflects that when borrowers are SOEs, the market anticipates that family-owned banks might benefit from a "helping hand" effect that might offset the risk of expropriation.

Results from Tables 5 to 8 show that CARs are positively impacted by loans extended by institutional-owned banks to state-owned firms. This result indicates that the market anticipates a positive effect of a "helping hand" effect for loans granted to SOEs when the lending bank is controlled by an institutional investor. This finding is consistent with the argument that even if a risk of expropriation exists, it seems to be lower in institutional-owned banks compared to state- and family-owned banks, and it is outweighed by the expected "helping hand" effect when loans are extended to SOEs.

[Insert Tables 5 to 8]

6. Robustness tests

To check the robustness of our results, we conduct several tests.

Alternative event windows and tests for abnormal returns

To determine whether our results are affected by the event-windows we consider, we compute CARs in $[0,+1]$, $[0,+2]$, and $[-1,+2]$ windows. The results, provided in Table A2 in Appendix, show that our main results remain unchanged. Furthermore, as the T-test is not immune to how abnormal returns are distributed across the event windows, we use both Pattel (1976) and Boehmer et al. (1991) tests that take into account abnormal returns distribution, event-induced volatility and serial correlation to tackle this issue. Again, we find that our main results remain unchanged (see Table A2).

We also rerun regressions of Tables 4 to 8 on the three alternative event windows $[0,+1]$, $[0,+2]$, and $[-1,+2]$ and find similar results than for the event-window $[-2,+2]$. To save space, we only report in Appendix (see Tables A3 and A4) the results of the last regressions (Table 7 and 8) that examine whether market reactions to loan announcements depend on the type of borrowing firms. Again, our results are unchanged.

Size of loans

As the market reaction to loan announcements might depend on the size of the loan, we next examine whether our results are not driven by a stronger market reaction for large loans. We therefore create the dummy variable *DLargeLoans* which takes the value one if the loan size is on percentile 75 and above. In our sample, the average amount of state-owned banks loans is relatively high around 523.44 Billion rupiahs compared to family-owned banks (177.20 Billion rupiahs) and institutionally-owned banks (108.79 Billion rupiahs). Loans from state-owned banks account therefore for 55.14% of the loans that we classify as large, while family-owned banks and institutionally-owned bank loans account for 31.18% and 13.08% respectively.

We test whether the size of the loan affect our results by augmenting Equation (4) with terms interacting the ratio of related loans, dummy variables for lending banks' type, and the dummy variable *DLargeLoans*. The results provided in Tables A5 and A6 show that the market reaction to loan announcements of state-owned and family-owned banks does not depend on the size of the loan. For institutionally-owned banks, we only observe a significant and positive market reaction for large loans.

7. Conclusion

This study investigates whether banks' minority shareholders anticipate being affected by government ownership when banks extend their activities. We use a unique hand collected dataset for Indonesia to analyze the impact of loan announcements on the bank stock returns of state-owned banks when expropriation is at stake, by taking family-owned banks as a benchmark. While minority shareholders of state-owned banks might expect a lower return from new loans because of expropriation (“grabbing hand” effect), they might also perceive them as less risky because of the higher probability of government bailout (“helping hand” effect). We also investigate whether the type of the borrowing firm (state-owned firm, privately-owned firm affiliated to a group or not) is a channel that make shareholders of state-owned banks react more or less to loan announcements. The negative market valuation of the “grabbing hand” effect could be outweighed by a twin “helping hand” effect coming from potential bailout of state-owned banks and of borrowing firms when they are state-owned. Similarly, borrowing firms that belong to a pyramidal business group might present lower default risk if intragroup resources are used to support member firms that experience financial adversity (the co-insurance effect).

Our findings show that announcement returns of state-owned banks are not significantly related to the extent of related lending in banks' balance sheets. Our empirical study provides therefore empirical evidence that even if a risk of expropriation exists in state-owned banks, it is offset by the “helping hand” effect. These results are in contrast to family-owned banks where minority shareholders anticipate being negatively affected by loan announcements when expropriation is at stake. State-owned banks do not therefore face the value discount observed in banks controlled by families where shareholders anticipate a high risk of expropriation with no counter effects.

Our results further show that market reactions to loan announcements of state-owned banks are not dependent on whether loans are given to state-owned firms or to privately-owned firms, and irrespective of whether or not borrowing firms are affiliated to a business group. These results confirm that the “grabbing hand” effect is counterweighted by the “helping hand” effect independently of the type of the borrowing firms. But such results do not provide evidence that the “grabbing hand” effect is outweighed by the twin “helping hand” effect when loans are extended to SOEs, or that the cumulative effect of the helping hand” and co-insurance effects operates when loans are extended to firms belonging to a group.

To conclude, our findings support the view that shareholders rationally anticipate the risk of expropriation when investing in state-owned banks in countries with weak shareholder protection, but are willing to accept this higher risk in exchange for a greater “helping hand” effect if governments are expected to bail out state-owned banks in case of distress. Shareholders do therefore not impose a value discount to state-owned banks as they expect specific support from taxpayers and to a larger extent than shareholders of privately-owned banks.

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Table 1. Distribution of the sample by year

<i>Years</i>	<i>Number of loan announcements</i>	<i>Number of borrowing firms</i>	<i>Number of lending banks</i>
2010	97	52	18
2011	69	51	15
2012	67	52	19
2013	71	39	22
2014	61	49	22
Total over the period	365	144	27

Table 2. Definitions, data sources and summary statistics for variables

Variables	Definition	Data sources	Mean	Standard Deviation	Min.	Max.
RPLTL	Related party loans to total loans	Annual Reports	3.5	06	0	29
RPLTA	Related party loans to total assets	Annual Reports	2.2	3.9	0	19.6
LoanSize	Loan size to total asset of borrowing firms	Bloomberg and Annual Reports	13.2	64.13	0.01	91.54
TenureYear	Year number of loan maturity	Annual Reports	3.05	2.35	0.5	10
Interest	Interest rate on loan	Annual Reports	11	2.31	4	22
BorrowerROA	Net Income to total assets	Bloomberg	4.92	8.14	-92.47	37.55
BorrowerLev	Total debt to total assets	Bloomberg	26.56	21.53	0	112.99
BorrowerSize	Logarithm of total assets	Bloomberg	14.66	1.67	10	18.53
BankROA	Net income to total assets	Bloomberg	1.96	0.84	-1.05	3.66
DSOB	Takes the value of one for loan contracts when the lending bank is state-owned (central government or Ministry of SOE), and zero otherwise	Annual Reports BvD Bankscope	0.42	0.49	0	1
DFamily	Takes the value of one for loan contracts when the lending bank is family-owned, and zero otherwise	Annual Reports BvD Bankscope	0.36	0.48	0	1
DInstit	Takes the value of one for loan contracts when the lending bank is controlled by an institutional investor, and zero otherwise	Annual Reports BvD Bankscope	0.22	0.41	0	1
D SOE	Takes the value of one for loan contracts when the borrower is state-owned, and zero otherwise	Ministry of SOEs	0.12	0.32	0	1
DPrivInGroup	Takes the value of one form loan contracts when the borrower is privately-owned and belongs to a pyramidal business group	IDX Annual Reports Websites	0.82	0.38	0	1

Note: All variables are expressed in percentage except BorrowerSize and dummy variables.

Table 3. Abnormal returns surrounding the loan announcement according to level of related loans (RPLTL)

Event windows (Days)	Mean (%)	Wilcoxon Test (z-probability)	t-Test (t-statistic)	Observations
<i>Panel A: All Sample</i>				
<i>Low RPLTL</i>				
[-1,+1]	-0,09	0.13	-0.41	177
[-2,+2]	-0,4	0.05*	-1.80*	177
[-3,+3]	-0,43	0.13	-1.36	177
<i>High RPLTL</i>				
[-1,+1]	-0,39	0.01**	-1.88*	188
[-2,+2]	-0,29	0.06*	-1.36	188
[-3,+3]	-0,54	0.00***	-2.19**	188
<i>Panel B: government-owned banks</i>				
<i>Low RPLTL</i>				
[-1,+1]	-0.37	0.51	-1.22	64
[-2,+2]	-0.41	0.47	-1.18	64
[-3,+3]	-0.31	0.61	-0.67	64
<i>High RPLTL</i>				
[-1,+1]	0.01	0.65	0.02	91
[-2,+2]	-0.06	0.57	-0.21	91
[-3,+3]	-0.32	0.15	-0.91	91
<i>Panel C: Family-owned banks</i>				
<i>Low RPLTL</i>				
[-1,+1]	0.67	0.91	1.24	56
[-2,+2]	0.19	0.98	0.45	56
[-3,+3]	-0.24	0.47	-0.36	56
<i>High RPLTL</i>				
[-1,+1]	-0.53	0.05*	-1.74*	75
[-2,+2]	-0.25	0.16	-0.72	75
[-3,+3]	-0.66	0.01**	-1.83*	75
<i>Panel D: Institutionally-owned banks</i>				
<i>Low RPLTL</i>				
[-1,+1]	-0.54	0.03**	-1.74*	57
[-2,+2]	-0.97	0.00***	-2.63**	57
[-3,+3]	-0.75	0.18	-1.45	57
<i>High RPLTL</i>				
[-1,+1]	-1.51	0.03**	-2.30**	22
[-2,+2]	-1.39	0.09*	-1.96**	22
[-3,+3]	-1.02	0.37	-1.13	22

We use the sample median value of the ratio related loans total loans (RPLTL) to distinguish banks with low and high levels of related loans. The asterisks (***), (**) and (*) denote significance at the 0.01, 0.05 and 0.1 levels, respectively.

Table 4. Impact of government ownership of banks on CARs

	CARs [-2,+2]	CARs [-2,+2]
RPLTL (β_1)	-0.187** (-2.38)	
RPLTA (β_1)		-0.283** (-2.56)
RPLTL x DSOB (β_2)	0.206** (2.41)	
RPLTA x DSOB (β_2)		0.303** (2.43)
RPLTL x DInstit (β_3)	0.163* (1.91)	
RPLTA x DInstit (β_3)		0.246** (2.01)
DSOB	-0.004 (-0.99)	-0.004 (-0.85)
DInstit	-0.007* (-1.70)	-0.007* (-1.66)
LoanSize	-0.0001 (-0.07)	-0.0001 (-0.06)
TenureYear	-0.001 (-1.57)	-0.001 (-1.56)
InterestRate	-0.0005 (-0.27)	-0.0004 (-0.26)
BorrowerROA	-0.0001 (-1.04)	-0.0001 (-1.03)
BorrowerLev	-0.0002** (-2.23)	-0.0002** (-2.22)
BorrowerSize	0.00131 (1.15)	0.001 (1.18)
BankROA	0.003** (2.05)	0.003** (2.03)
Constant	0.0137 (0.59)	0.0128 (0.56)
Wald Tests		
$\beta_1 + \beta_2 = 0$	0.019 (0.605)	0.019 (0.754)
$\beta_1 + \beta_3 = 0$	-0.023 (0.477)	-0.037 (0.449)
Nbr. of obs.	365	365
R-Squared	0.104	0.104

Variables are defined in Table 2. The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Table 5. Influence of borrowing firms' type: state-owned versus privately-owned

	CARs [-2,+2]	CARs [-2,+2]
RPLTL (α_1)	-0.183** (-2.34)	
RPLTA (α_1)		-0.277** (-2.51)
RPLTL x DSOE (α_2)	0.150 (0.08)	
RPLTA x DSOE (α_2)		0.388 (0.09)
RPLTL x DSOB (α_3)	0.164* (1.87)	
RPLTA x DSOB (α_3)		0.233* (1.80)
RPLTL x DSOB x DSOE (α_4)	-0.0124 (-0.01)	
RPLTA x DSOB x DSOE (α_4)		-0.169 (-0.04)
RPLTL x DInstit (α_5)	0.147* (1.73)	
RPLTA x DInstit (α_5)		0.221* (1.81)
RPLTL x DInstit x DSOE (α_6)	8.019** (2.06)	
RPLTA x DInstit x DSOE (α_6)		11.20* (1.70)
DSOB	-0.00192 (-0.36)	-0.00125 (-0.23)
DInstit	-0.00497 (-1.03)	-0.00478 (-0.99)
DSOE x DSOB	-0.0260** (-2.38)	-0.0259** (-2.34)
DSOE x INT	-0.0493*** (-3.67)	-0.0495*** (-3.66)
DSOE	0.0134* (1.72)	0.0134* (1.70)
Constant	0.00940 (0.39)	0.00832 (0.34)
Control variables	Yes	Yes
Nbr. of obs.	365	365
R-Squared	0.126	0.125

Variables are defined in Table 2. The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Table 6. Influence of borrowing firms type, state-owned versus privately-owned: Wald Tests (from Table 5)

	RPLTL	RPLTA
<i>The lender is state-owned, the borrower is state-owned</i>		
$\alpha_1 + \alpha_2 + \alpha_3 + \alpha_4 = 0$	0.1187 (0.087)	0.1747 (0.130)
<i>The lender is state-owned, the borrower is privately-owned</i>		
$\alpha_1 + \alpha_3 = 0$	-0.0189 (0.643)	-0.0440 (0.515)
<i>The lender is family-owned, the borrower is state-owned</i>		
$\alpha_1 + \alpha_2 = 0$	-0.0326 (0.986)	0.1108 (0.978)
<i>The lender is family-owned, the borrower is privately-owned</i>		
$\alpha_1 = 0$	-0.183** (-2.34)	-0.277** (-2.51)
<i>The lender is institutional-owned, the borrower is state-owned</i>		
$\alpha_1 + \alpha_2 + \alpha_5 + \alpha_6 = 0$	8.133*** (0.009)	11.531*** (0.008)
<i>The lender is institutional-owned, the borrower is privately-owned</i>		
$\alpha_1 + \alpha_5 = 0$	-0.0355 (0.281)	-0.0563 (0.261)

Variables are defined in Table 2. The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Table 7. Influence of borrowing firms' type: state-owned versus privately-owned affiliated to a pyramidal business group

	CAR [-2,+2]	CAR [-2,+2]
RPLTL (α_1)	-8.830** (-2.54)	
RPLTA (α_1)		-15.74*** (-2.69)
RPLTL x DSOE (α_2)	8.797** (2.48)	
RPLTA x DSOE (α_2)		15.74** (2.56)
RPLTL x DPrivInGroup (α_3)	8.644** (2.49)	
RPLTA x DPrivInGroup (α_3)		15.46*** (2.64)
RPLTL x DSOB (α_4)	8.661** (2.48)	
RPLTA x DSOB (α_4)		15.44*** (2.63)
RPLTL x DSOB x DSOE (α_5)	-8.518** (-2.39)	
RPLTA x DSOB x DSOE (α_5)		-15.27** (-2.47)
RPLTL x DSOB x DPrivInGroup (α_6)	-8.497** (-2.44)	
RPLTA x DSOB x DPrivInGroup (α_6)		-15.20** (-2.59)
RPLTL x DINSTIT (α_7)	8.824** (2.51)	
RPLTA x DINSTIT (α_7)		15.72*** (2.66)
RPLTL x DINSTIT x DSOE (α_8)	0.792 (0.18)	
RPLTA x DINSTIT x DSOE (α_8)		-2.350 (-0.32)
RPLTL x DINSTIT x DPrivInGroup (α_9)	-8.682** (-2.47)	
RPLTA x DINSTIT x DPrivInGroup (α_9)		-15.51*** (-2.63)
DSOB	-0.0185 (-0.98)	-0.0186 (-0.99)
DSOE	-0.0119 (-0.68)	-0.0127 (-0.73)
DPrivInGroup	-0.0226 (-1.25)	-0.0233 (-1.33)
DSOE x DINSTIT	-0.0393 (-1.23)	-0.0395 (-1.27)
DSOE x DSOB	-0.00673 (-0.34)	-0.00626 (-0.31)
DINSTIT	-0.0142 (-0.47)	-0.0140 (-0.48)
DPrivInGroup x DSOB	0.0162 (0.82)	0.0167 (0.86)
DPrivInGroup x DINSTIT	0.00777 (0.26)	0.00785 (0.27)
Constant	0.0163 (0.63)	0.0159 (0.64)
Nbr. of obs.	365	365
R-Squared	0.110	0.109

Variables are defined in Table 2. The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Table 8. Influence of borrowing firms type, state-owned versus privately-owned affiliated to a pyramidal business group: Wald Tests (from Table 7)

	RPLTL	RPLTA
<i>The lender is state-owned, the borrower is state-owned</i>	0.1190*	0.1697
$\alpha_1 + \alpha_2 + \alpha_4 + \alpha_5 = 0$	(1.71)	(1.65)
<i>The lender is state-owned, the borrower is privately-owned in a group</i>	-0.0162	-0.0428
$\alpha_1 + \alpha_3 + \alpha_4 + \alpha_6 = 0$	(-0.39)	(-0.66)
<i>The lender is state-owned, the borrower is privately-owned not in a group</i>	-0.1464	-0.3006
$\alpha_1 + \alpha_4 = 0$	(-0.61)	(-0.86)
<i>The lender is family-owned, the borrower is state-owned</i>	-0.1554	0.005
$\alpha_1 + \alpha_2 = 0$	(-0.09)	(0.00)
<i>The lender is family-owned, the borrower is privately-owned in a group</i>	-0.1730**	-0.2785***
$\alpha_1 + \alpha_3 = 0$	(-2.25)	(-3.23)
<i>The lender is family-owned, the borrower is privately-owned not in a group</i>	-8.845**	-15.738***
$\alpha_1 = 0$	(-2.59)	(-2.69)
<i>The lender is institution-owned, the borrower is state-owned</i>	8.220**	13.3737***
$\alpha_1 + \alpha_2 + \alpha_7 + \alpha_8 = 0$	(2.62)	(3.69)
<i>The lender is institution-owned, the borrower is privately-owned in a group</i>	-0.0473	-0.0711
$\alpha_1 + \alpha_3 + \alpha_7 + \alpha_9 = 0$	(-1.42)	(-1.43)
<i>The lender is institution-owned, the borrower is privately-owned not in a group</i>	-0.0319	-0.0199
$\alpha_1 + \alpha_7 = 0$	(-0.26)	(-0.10)

Variables are defined in Table 2. The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Appendix

Table A1: Correlation Matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	RPLTL	RPLTA	LSTA	TenureYear	Interest	BorrowerROA	BorrowerLev	BorrowerSize	BankROA	DSOB	DSOE	DFamily	DInstit
(1)	1												
(2)	0.997***	1											
(3)	-0.0361	-0.0377	1										
(4)	-0.0460	-0.0543	-0.0649	1									
(5)	-0.00857	0.00315	-0.0226	-0.0386	1								
(6)	0.0270	0.0245	-0.0907	0.0147	-0.160**	1							
(7)	-0.0411	-0.0462	-0.0878	0.0359	-0.0343	-0.249***	1						
(8)	0.127*	0.126*	-0.210***	0.0713	-0.290***	0.102	0.0352	1					
(9)	0.253***	0.255***	0.0135	-0.110*	-0.288***	0.149**	-0.0844	0.0953	1				
(10)	0.380***	0.369***	-0.0533	-0.149**	-0.163**	0.0178	-0.0789	0.181***	0.382***	1			
(11)	0.136**	0.136**	-0.0102	-0.130*	-0.157**	0.127*	-0.173***	0.483***	0.222***	0.307***	1		
(12)	-0.325***	-0.327***	0.0306	-0.0229	0.232***	0.00438	0.0398	-0.180***	-0.109*	-0.641***	-0.231***	1	
(13)	-0.0782	-0.0629	0.0284	0.206***	-0.0742	-0.0264	0.0485	-0.00759	-0.331***	-0.455***	-0.101	-0.392***	1

All variables are defined in Table 2. *, **, and *** denote significance at 10%, 5% and 1% levels respectively.

Table A2. CARs for alternative event-windows and tests for abnormal returns

Event windows (days)	Mean (%)	Wilcoxon Test (z-probability)	t-Test (t-statistic)	Patell Test (z-probability)	Boehmer Test (z-probability)	Observations
<i>All Sample</i>						
[-1.+1]	-0.24	0.006***	-1.59*	0.086*	0.161	365
[-2.+2]	-0.34	0.008***	-2.23**	0.101	0.167	365
[-3.+3]	-0.48	0.004***	-2.45**	0.071*	0.190	365
[0;1]	-0.29	0.0007***	-2.287**	0.006***	0.013**	365
[0;2]	-0.38	0.0039***	-2.843***	0.002***	0.008***	365
[-1;2]	-0.34	0.0056***	-2.209**	0.048**	0.101	365

Table A3. Impact of government ownership of banks on CARs for alternative event-windows

	CAR [0,+1]	CAR [0,+2]	CAR [-1,+2]
RPLTL (α_1)	-8.352*** (-2.83)	-7.157*** (-3.07)	-14.21** (-2.20)
RPLTL x DSOE (α_2)	-4.768 (-1.27)	-0.286 (-0.05)	10.96* (1.71)
RPLTL x DPrivInGroup (α_3)	8.229*** (2.79)	7.010*** (3.01)	14.03** (2.17)
RPLTL x DSOB (α_4)	8.388*** (2.83)	7.048*** (3.00)	14.00** (2.17)
RPLTL x DSOB x DSOE (α_5)	4.791 (1.27)	0.491 (0.09)	-10.63* (-1.65)
RPLTL x DSOB x DPrivInGroup (α_6)	-8.231*** (-2.78)	-6.868*** (-2.92)	-13.83** (-2.14)
RPLTL x DInstit (α_7)	8.428*** (2.84)	7.257*** (3.05)	14.22** (2.19)
RPLTL x DInstit x DSOE (α_8)	5.356 (1.28)	-1.327 (-0.23)	-2.804 (-0.39)
RPLTL x DInstit x DPrivInGroup (α_9)	-8.321*** (-2.80)	-7.134*** (-3.00)	-14.08** (-2.17)
DSOB	-0.0344** (-2.31)	-0.00213 (-0.09)	-0.0392 (-1.08)
DSOE	0.0387*** (3.00)	0.0148 (1.02)	-0.0392 (-1.20)
DPrivInGroup	-0.0263** (-2.00)	-0.0109 (-0.74)	-0.0598* (-1.79)
DSOE x DInstit	-0.0537*** (-2.68)	-0.0145 (-0.49)	-0.00307 (-0.07)
DSOE x DSOB	-0.0377** (-2.30)	-0.0384 (-1.58)	0.00689 (0.19)
DInstit	-0.0223 (-1.23)	-0.0236 (-0.84)	-0.0565 (-1.26)
DPrivInGroup x DSOB	0.0284* (1.80)	-0.00532 (-0.22)	0.0387 (1.05)
DPrivInGroup x DInstit	0.0179 (0.97)	0.0205 (0.72)	0.0533 (1.18)
Constant	0.0435* (1.92)	0.0179 (0.75)	0.0684* (1.94)
Control	Yes	Yes	Yes
Nbr. of obs.	365	365	365
R-Squared	0.0730	0.0646	0.133

Variables are defined in Table 2. The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Table A4. Wald tests based on Table A3

	[0,+1]	[-1,+2]	[0,+2]
<i>The lender is state-owned, the borrower is state-owned</i>	0,058	0,117**	0,095*
$\alpha_1 + \alpha_2 + \alpha_4 + \alpha_5 = 0$	(1.52)	(2.20)	(1.92)
<i>The lender is state-owned, the borrower is privately-owned in a group</i>	0,033	-0,013	0,032
$\alpha_1 + \alpha_3 + \alpha_4 + \alpha_6 = 0$	(1.04)	(-0.35)	(0.91)
<i>The lender is state-owned, the borrower is privately-owned not in a group</i>	0,035	-0,210	-0,109
$\alpha_1 + \alpha_4 = 0$	(0.23)	(-0.72)	(-0.43)
<i>The lender is family-owned, the borrower is state-owned</i>	-13,120***	-3,249***	-7,442
$\alpha_1 + \alpha_2 = 0$	(-5.83)	(-4.45)	(-1.56)
<i>The lender is family-owned, the borrower is privately-owned in a group</i>	-0,123	-0,174**	-0,147**
$\alpha_1 + \alpha_3 = 0$	(-1.37)	(-2.28)	(-2.53)
<i>The lender is family-owned, the borrower is privately-owned not in a group</i>	-8,352**	-14,206**	-7,157***
$\alpha_1 = 0$	(-2.83)	(-2.20)	(-3.07)
<i>The lender is institution-owned, the borrower is state-owned</i>	0,664	8,165**	-1,512
$\alpha_1 + \alpha_2 + \alpha_7 + \alpha_8 = 0$	(0.43)	(2.29)	(-0.78)
<i>The lender is institution-owned, the borrower is privately-owned in a group</i>	-0,015	-0,036	-0,024
$\alpha_1 + \alpha_3 + \alpha_7 + \alpha_9 = 0$	(-0.37)	(-0.88)	(-0.46)
<i>The lender is institution-owned, the borrower is privately-owned not in a group</i>	0,075	0,011	0,099
$\alpha_1 + \alpha_7 = 0$	(1.05)	(0.07)	(0.81)

The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Table A5. The effect of the Size of the Loan

	CAR [-2,+2]	CAR [-2,+2]
RPLTL	-0.199** (-2.45)	
RPLTA		-0.302** (-2.58)
RPLTL*DLargeLoans	0.0502 (0.53)	
RPLTAL* DLargeLoans		0.0823 (0.61)
RPLTL*DInstit* DLargeLoans	3.705** (2.27)	
RPLTA* DInstit * DLargeLoans		5.697* (1.96)
RPLTL*DSOB* DLargeLoans	0.00910 (0.08)	
RPLTA*DSOB* DLargeLoans		0.00987 (0.06)
RPLTL* DInstit	0.179** (2.04)	
RPLTA* DInstit		0.267** (2.08)
RPLTL*DSOB	0.191** (2.07)	
RPLTA*DSOB		0.284** (2.07)
DINSTIT* DLargeLoans	-0.0112 (-1.13)	-0.0116 (-1.14)
DSOB* DLargeLoans	-0.00723 (-0.77)	-0.00707 (-0.75)
DInstit	-0.00727 (-1.29)	-0.00691 (-1.23)
DSOB	-0.00319 (-0.60)	-0.00277 (-0.52)
DLargeLoans	0.00214 (0.38)	0.00226 (0.40)
Constant	-0.00336 (-0.20)	-0.00375 (-0.23)
Nbr. of obs.	365	365
R-Squared	0.0741	0.0732

Variables are defined in Table 2. The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.

Table A6. Wald tests based on Table A5

	RPLTL	RPLTA
<i>State-owned banks, large loans</i>	0,051 (0.91)	0,0744 (0.79)
<i>State-owned banks, smaller loans</i>	-0,008 (-0.19)	-0,0178 (0.25)
<i>Family-owned banks, large loans</i>	-0,149*** (-3.06)	-0,219*** (-3.35)
<i>Family-owned banks, smaller loans</i>	-0,199** (-2.45)	-0,302** (-2.58)
<i>Institutionally-owned banks, large loans</i>	3,736** (2.30)	5,745** (1.98)
<i>Institutionally-owned banks, smaller loans</i>	-0,02 (-0.57)	-0.343 (-0.65)

The t-statistics are in parentheses, with *, **, and *** denoting significance at 10%, 5% and 1% levels.