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Bank IPO and Lending Practices – An Empirical Study in China

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Abstract

Does an initial public offering (IPO) improve bank lending? Our paper aims to address this question using a sample of Chinese banks. We find that banks place a greater weight on borrower performance in determining lending terms following bank IPOs. We also find a significant increase in borrower accounting conservatism post lender IPO. The combined evidence suggests that going public improves banks' incentives for both screening and monitoring. In the cross section, these changes are more pronounced for banks with larger improvements in corporate governance and performance, for those with state ownership, and for periods after the split share reform. Our findings suggest that partial privatization through an IPO is a viable mechanism for state-owned banks in China to improve lending practices. These findings have important implications for policymakers from other developing economies.

1. Introduction

Prior research demonstrates that financial institutions are essential for the functioning of capital markets and economic growth (Levine, 2005). Tadesse (2002) shows that bank-based systems outperform market-based systems in countries with underdeveloped financial sectors and that firms from countries dominated by small companies grow faster in bank-based systems.

In developing economies, banks are commonly state owned and segmented by economic sectors. Their governance is generally weak, and their assets are often of poor quality.¹ As emerging markets move toward integration with the global financial market, a critical question is how to improve the efficiency of their banking systems.

We use data from China to examine whether partial privatization via IPO improves bank lending practices in terms of both the screening and monitoring borrowers. Chinese banks provide an ideal setting to examine this question for at least three reasons. First, the sector was historically dominated by large, inefficient state-owned banks. Two explanations have been offered for the poor performance of these banks (Gupta, 2005). First, governments frequently pursue goals besides profit maximization (political view). Second, state ownership dilutes monitoring incentives because no individual owners take responsibility for overseeing managers (managerial view). Consequently, state-owned banks have weak lending practices, resulting in more nonperforming loans. In this regard, Chinese banks represent banks from emerging markets, and our findings thus can apply other developing economies. Second, state-owned banks in China were partially privatized via IPO through the 1990s and 2000s, which allows us to use the difference-in-difference identification strategy to identify the effect of partial privatization. Third,

¹Wang (2015) shows that a large proportion of board members are politically connected.

state ownership varies significantly in the cross section, ranging from zero to 100 percent. Banks with zero state ownership serve as a benchmark to be compared with.

Why does partial privatization affect lending? First, among state owned banks in China, privatization via IPO transfers a fraction of ownership from the government to the public, which may alleviate bureaucratic interference with bank operations. Banks may then focus on profit maximization. Second, the stock market may play a monitoring role because shareholders can vote with their feet (Edman, 2010), even though the government maintains overall control.

We document five key findings. First, bank-lending terms, consisting of loan maturity, collateral requirement, and interest rate, become more sensitive to borrower performance, a key factor of borrower credit risk, after a bank IPO. This implies an improvement in bank screening standards after bank IPOs. Second, accounting conservatism increases post lender IPO for firms that borrow from the IPO banks, suggesting that IPOs enhance banks' monitoring incentives. Third, banks improve financial performance, as both ROA and profit margin increase while nonperforming loans decline significantly post IPO. The increase in performance measured by ROA and profit margin is associated with the improved lending practices following an IPO. Fourth, banks improve corporate governance in terms of board industry expertise and board political connections following an IPO. This improvement in governance is positively associated with the better lending practices manifested in both screening and monitoring. This evidence is reinforced by our findings from our split-share reform analysis. Chen et al. (2015) argue that China's split-share reform improved shareholders' incentives to monitor. They demonstrate a significant decline in cash holdings of Chinese-listed firms after the reform and show that the reduction is greater for firms with weaker governance beforehand. Therefore our findings that the improvement in bank lending is more pronounced after the reform support the argument that

shareholder monitoring contributes to the improved bank lending practices post IPO. Fifth, we find some evidence that improved lending practices are largely driven by state-owned banks, which highlights the importance of partial privatization via IPOs for state-owned banks. Our results are robust to additional control variables to mitigate confounding events. Overall, our findings suggest that partial privatization through IPOs improves bank lending in China and that the changes are attributable to better corporate governance.

Our study contributes to the banking and finance literature by demonstrating that partial privatization via IPO is one way that banks from emerging markets can improve their lending practices and operational efficiency, even when the government retains control. Our findings may show policymakers a market-based solution for reforming financial institutions. Our study also highlights the importance of improved corporate governance following IPOs.

Our work relates to that of Allen, Qian, Zhang and Zhao (2012), who focus on the IPO of Industrial and Commercial Bank (ICBC) and demonstrate that this IPO improved corporate governance and bank performance. Our study focuses on a specific channel—lending—through which banks improved their financial performance and operational efficiency. More importantly, our sample period covers numerous bank IPOs. This enables us to use a difference-in-difference research design to draw causal inferences. Admittedly, an IPO is not a random event. Pre-IPO unobservable factors might drive both the IPO decision and the change in bank lending practices. The split-share reform analysis addresses this concern to some extent since we have no reason to believe that the *pre-IPO* unobservable firm-specific factors change after the reform.

Our study also relates to recent research by Qian, Strahan and Yang (2015). They study the effect of decentralization that shifts the responsibility for lending decisions from committees to

individual loan officers. They find that internal risk ratings assigned to borrowers become more sensitive to loan interest rates and ex post loan default following the reform. While the authors demonstrate an important mechanism—that is, improvement of information communication within banks—our study highlights the critical role of a change in ownership structure and corporate governance in improving bank lending. In addition, we link lending practices directly to operating performance. Therefore we can speak to the efficiency implications of bank IPOs.

Gupta (2005), using data from Indian state-owned firms, finds that partial privatization boosts profitability, productivity, and investment. Our study differs from his in at least two ways. First, he focuses on nonfinancial firms. Second, the firms that are partially privatized in his sample have 100 percent state ownership before privatization, while our sample banks consist of both state-owned and nonstate-owned enterprises before their IPOs. Hence we can compare the IPO effect between these two types of firms. Moreover, nonstate-owned banks serve as a good control to rule out any trend effect.

Our study contributes to accounting research in documenting the effect of lender monitoring incentives on borrowers' accounting conservatism. Chen, Chen, Lobo, and Wang (2010) examine the association between borrower and lender state ownership and accounting conservatism for a sample of Chinese firms. They find that state-owned firms are less conservative than nonstate-owned ones. They show that borrower conservatism declines with the fraction of total loans provided by state-owned banks. Our study complements theirs by showing that borrower conservatism improves when lenders go public and that this increase is more concentrated among state-owned banks. Our study also relates to that of Gormley, Kim, and Martin (2012), who demonstrate that Indian firms improve their accounting conservatism following the entry of foreign lenders into the credit market. Their study suggests that accounting

conservatism reduces information asymmetry between foreign lenders and local borrowers. Our study suggests that lender monitoring incentives have an impact on borrowers' levels of conservatism.

Finally, our results contribute to the debate about whether IPOs are merely window dressing or can have real, fundamental effects on bank lending. Some commentators argue that China's central government injected billions of dollars of cash into its large banks before they went public, enabling them to write off nonperforming loans (NPLs) and improve capital adequacy. That may have created a perverse incentive, encouraging banks to free ride on taxpayers and the rest of the economy: according to this line of argument, banks may not take actions to improve governance and lending practices because they assume they will be bailed out by the government in times of trouble. Our results suggest that banks *do* improve lending practices after their IPOs. Their lending contracts become more sensitive to borrower credit risk, and their borrowers become more conservative in their financial reporting. The improved lending practices contribute directly to their better financial performance and their reduction in NPLs.

2. Institutional background and testable hypotheses

2.1. Banking in China

The banking sector in China has changed significantly in the past several decades. Between 1949 and 1979, China's entire financial system consisted of one bank—the People's Bank of China (PBOC). It took deposits, made loans and managed the payment system. After 1979, four state-owned banks emerged: Agricultural Bank of China (ABC), China Construction Bank (CCB), Industrial and Commercial Bank of China (ICBC), and Bank of China (BOC) (hereafter the Big Four). They assumed functions previously performed by the PBOC. In 1993 and 1994, to help commercialize the major state-owned banks, three policy banks (the State Development

Bank of China, the Export-Import Bank of China, and the Agricultural Development Bank of China) were established to share the burdens of providing “policy loans.”

Banks dominate China’s financial system (Chen et al., 2010). The Big Four have controlled more than half of the total banking assets over much of the past three decades. The most important issue for China’s banking sector is confronting the amount of non-performing loans (NPLs) on their books particularly among state-owned banks. Since late 1990s, the central government has tried to improve the banking industry’s asset quality to hasten the transformation of state-owned into modern corporations, listed in global capital markets and complying with international reporting standards.² To this end, a series of reforms have been undertaken to improve bank governance. For example, starting Jan. 1, 1998, the PBOC abandoned its credit quota plan and allowed state-owned commercial banks to make their own lending decisions. In addition, it consolidated its 30 provincial branches into nine regional centers to reduce provincial governments’ interference in bank lending (Zeng et al., 1999; Standard Chartered, 2001). The Chinese government also injected foreign currency reserves, mostly in the form of US dollars and T-bills as well as euros and yen, into the Big Four to improve their balance sheets before they went public.

China joined World Trade Organization (WTO) on Dec. 11, 2001, subjecting Chinese banks to their first real foreign competition. The Chinese banking industry had previously been protected from foreign competition by the government. This forced the banks to improve their business efficiency significantly to compete with foreign banks.

2.2. Regulations

² In 1998, the Ministry of Finance issued RMB270 billion in bonds to enhance the capital adequacy of the Big Four banks. In 1999, four asset management corporations (AMCs: Huarong, Great Wall, Xinda, and Oriental) were established to assume RMB1.4 trillion worth of NPLs from the Big Four. Despite of these efforts, the total amount of NPLs within the Big Four was estimated to be at the level of around RMB1.7 trillion at the end of 2001 (Allen et al., 2011).

Chinese banks are jointly regulated by the central bank, PBOC, and the China Banking Regulatory Commission (CBRC). Publicly listed banks also face supervision from the China Securities Regulatory Commission (CSRC), while the Ministry of Finance (MOF) determines tax and local accounting rules. Historically the government controlled the setting of interest rates on loans and deposits. China has liberalized loan rates but not deposit rates, unless a depositor has a dollar-deposit account with a balance above \$3 million. (RMB deposits have fixed rates regardless of the amount.) Since the Asian financial crisis in 1997, one of the CBRC's top priorities has been monitoring the health of the banking system through the capital adequacy ratio of commercial banks. That ratio must be no lower than 8 percent, in line with the Basel I Accord.

The CBRC also provided guidelines for the corporate governance reform and supervision of state-owned commercial banks. Publicly listed banks, along with other listed companies, follow a mixture of U.S. and European standards and have both a board of directors and a supervisory board. The government has pushed banks to go public, out of the belief that this will accelerate the transformation of the banking system. Its aim has been to create a more efficient intermediation of funds and provide banks with greater flexibility to raise capital. However, government ownership is still common.

2.4. Hypothesis development

Going public may affect bank lending for at least three reasons. First, public investors have incentives to collect information and impound that information into stock price. This information can improve managerial incentives in several ways. Holmström and Tirole (1993) and Tirole (2001) show that the stock price can be used to design better incentive compensation because it contains information unavailable from the financial statements. In addition, stock price may

signal managerial ability, which creates an incentive for bank managers to improve lending and performance to increase their labor market value (Fama, 1980). Stock price can also facilitate the market for corporate control, which motivates managers to maximize shareholder value (Martin and Shalev, 2015). Second, the presence of public investors may improve corporate governance, even in cases where government retains majority control. Edman (2010) argues that shareholders can vote with their feet and this threat encourages corporate insiders to focus on shareholder value. Last, the transfer of ownership partially from the government to public investors may reduce government interference. This, too, may induce banks to focus on profit maximization, resulting in better lending. This line of reasoning leads to our first hypothesis (H1).

Hypothesis 1 (H1): Bank lending practices improve following a bank IPO.

Going public can also dilute ownership, which may increase agency cost and hurt bank lending practices and performance. This dilution might be particularly pronounced for privately owned banks. Ultimately, it is an open empirical question whether or not a bank IPO improves lending.

3. Data collection and research design

3.1. Data collection

Our sample period starts from 2001 because a new set of rules took effect in 2001 associated with China's entry into the WTO (Chen et al., 2010). It ends in 2013. The initial loan origination sample consists of all bank loans compiled by the China Securities Markets and Accounting Research Database (CSMAR)'s China Listed Companies Bank Loan Research Database. CSMAR collects information from borrowers' public filings regarding loan terms at origination, such as loan size, loan maturity, loan type, collateral requirement, and interest rates. A number of

loans in the original CSMAR database have missing values on certain loan terms. We thus manually collect related information from firms' board of director announcements. We further acquire information on corporate governance and performance change surrounding bank IPOs from the banks' IPO prospectus and financial statements.

We construct two separate samples to examine changes in bank lending surrounding IPOs that consist of screening and monitoring. With respect to screening, we retain only A-share listed nonfinancial borrowers with available bank loan information.³ We exclude borrowers lacking necessary financial information from the CSMAR's China Stock Market Financial Statements Database. The final loan sample used in the screening analysis contains 24,182 loans originated during the period from 2001 to 2013 for 1,566 unique firms. These loans are made by 280 unique banks, 19 of which went public during the sample period.

Our sample used to test bank monitoring changes brought about by IPOs consists of all Chinese nonfinancial listed A-share firms, which may or may not borrow from banks during the sample period. By including firms without bank loans, we can control for time-trend effect. We further eliminate cross-listing firms to avoid any confounding effect on firms' accounting conservatism (e.g., Huijgen and Lubbrink, 2005). Our monitoring sample contains 17,255 firm-years with 2,303 unique firms. Table 1 presents the list of 19 banks that went public before 2013 and their corresponding IPO dates.

[Insert Table 1 here]

3.2. Research design

³ We exclude companies issuing only B shares (e.g., Chen, Sun, and Wu, 2010; Firth, Mo, and Wong, 2012), given the B-share market differs from that of A-share in many ways, including pricing, liquidity, foreign currency regulations, and accounting and auditor requirements.

To test the screening hypothesis, we follow Qian et al. (2015) and use the sensitivity of lending terms to borrower performance to measure the quality of screening. The underlying assumption of this measure is that lack of sensitivity indicates a low screening standard, while higher sensitivity implies a stricter standard. Specifically, we estimate the regression model below to examine the bank-screening standard.

$$\text{Lending terms}_{i,b,t} = \beta_0 + \beta_1 \text{ROA}_{i,t-1} + \beta_k \text{Borrower Characteristics}_{i,t-1,k} + \text{Year Fixed Effect} + \text{Industry Fixed Effect} + \varepsilon_{i,t}, \quad (1)$$

where i , b , t represent index borrower, bank lender, and loan initiation year, respectively. Lending terms are measured alternatively by the natural logarithm of loan maturity in years (*Loan Maturity*), whether collateral is required (*Collateral Requirement*), and a relative interest rate that equals the ratio of actual loan interest over the China central banks' base rate for loans (*Interest Rate*). We use OLS to estimate *Loan Maturity* and *Interest Rate* regressions and Logit model to estimate *Collateral Requirement* regression.

Given that large firms and those with higher *ROA* and *Asset Tangibility* have greater ability to repay a loan, we expect positive signs on *ROA*, *SIZE*, and *Asset Tangibility* when *Loan Maturity* serves as the dependent variable and a negative sign when *Collateral Requirement* or *Relative Interest Rate* serves as the dependent variable. Higher leverage indicates greater financial risk, and we thus expect a negative sign on *Leverage* for the loan maturity regression and a positive sign for the collateral and relative interest rate regression. Coefficient, β_1 , is a proxy for the bank screening standard, with a higher value indicating a stricter standard. See variable definition in Appendix A.

To gauge the intensity of bank monitoring, we analyze borrower accounting conservatism. Prior research provides evidence that bank monitoring affects borrowers' accounting

conservatism (Martin and Roychowdhury, 2015; Chen et al., 2010). We follow Ball and Shivakumar (2005, 2006) to estimate accounting conservatism using the piecewise linear relation between accruals and cash flows and run the following regression model.

$$\begin{aligned}
 \text{Accrual}_{i,t} = & \quad (2) \\
 & \gamma_0 + \gamma_1 \text{CFO}_{i,t} + \gamma_2 \text{DCFO}_{i,t} + \gamma_3 \text{CFO}_{i,t} \times \text{DCFO}_{i,t} + \gamma_4 \text{IPOBANK}_{i,t} + \gamma_5 \text{IPOBANK}_{i,t} \times \text{CFO}_{i,t} + \\
 & \gamma_6 \text{IPOBANK}_{i,t} \times \text{DCFO}_{i,t} + \gamma_7 \text{IPOBANK}_{i,t} \times \text{CFO}_{i,t} \times \text{DCFO}_{i,t} + \gamma_8 \text{BANK}_{i,t} + \gamma_9 \text{BANK}_{i,t} \times \text{CFO}_{i,t} + \\
 & \gamma_{10} \text{BANK}_{i,t} \times \text{DCFO}_{i,t} + \gamma_{11} \text{BANK}_{i,t} \times \text{CFO}_{i,t} \times \text{DCFO}_{i,t} + \gamma_{12} \text{SIZE}_{i,t} + \gamma_{13} \text{SIZE}_{i,t} \times \text{CFO}_{i,t} + \\
 & \gamma_{14} \text{SIZE}_{i,t} \times \text{DCFO}_{i,t} + \gamma_{15} \text{SIZE}_{i,t} \times \text{CFO}_{i,t} \times \text{DCFO}_{i,t} + \gamma_{16} \text{LEV}_{i,t} + \gamma_{17} \text{LEV}_{i,t} \times \text{CFO}_{i,t} + \gamma_{18} \text{LEV}_{i,t} \times \\
 & \text{DCFO}_{i,t} + \gamma_{19} \text{LEV}_{i,t} \times \text{CFO}_{i,t} \times \text{DCFO}_{i,t} + \gamma_{20} \text{MB}_{i,t} + \gamma_{21} \text{MB}_{i,t} \times \text{CFO}_{i,t} + \gamma_{22} \text{MB}_{i,t} \times \\
 & \text{DCFO}_{i,t} + \gamma_{23} \text{MB}_{i,t} \times \text{CFO}_{i,t} \times \text{DCFO}_{i,t} + \gamma_{24} \text{SOE}_{i,t} + \gamma_{25} \text{SOE}_{i,t} \times \text{CFO}_{i,t} + \gamma_{26} \text{SOE}_{i,t} \times \\
 & \text{DCFO}_{i,t} + \gamma_{27} \text{SOE}_{i,t} \times \text{CFO}_{i,t} \times \text{DCFO}_{i,t} + \text{Year Fixed Effect} + \text{Firm Fixed Effect} + \varepsilon_{i,t},
 \end{aligned}$$

where *Accrual* is calculated as earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets. *CFO* is cash flows from operations, scaled by beginning total assets. *DCFO* equals one if *CFO* is negative and zero otherwise. *IPOBANK* is an indicator variable that equals one if the borrower has an outstanding loan from a publicly traded bank at the year-end, and *BANK* is an indicator variable that equals one if the borrower has an outstanding loan from any bank. If going public motivates banks to improve monitoring, we expect the coefficient, γ_7 , on *IPOBANK*DCFO*CFO* to be positive. We further control for borrower firm size (*SIZE*), measured as the natural logarithm of total asset at year-end, leverage ratio (*Leverage*), market-to-book ratio (*MB*), and whether the borrower is a state-owned enterprise (*SOE*), and their interactions with *DCFO*, *CFO*, and *DCFO*CFO*. We expect a positive coefficient for *LEV*CFO*DCFO* and a negative coefficient for *SIZE*CFO*DCFO*, *MB*CFO*DCFO*, and *SOE*CFO*DCFO* because research argues and shows that lenders demand conservatism and that large, state-owned firms and firms with high unconditional conservatism exhibit lower conditional conservatism (Ryan and Zarowin, 2001; LaFond and Roychowdhury, 2008; Chen et al., 2010; Goh and Li, 2011; Martin and Roychowdhury, 2015).

We further control for firm and year fixed effects. The regression variables used in Model (2) are defined in Appendix A.

All continuous variables are winsorized at top and bottom one percent to avoid extreme values. Table 2 reports summary statistics of the key regression variables, with Panels A and B focusing on variables used in examining screening and monitoring (Models (1) and (2)) incentives, respectively.

[Insert Table 2 here]

4. Empirical results

4.1. Results of the baseline model of the bank screening standard

Before proceeding, we lay out the baseline model that examines the bank screening standard. Specifically, we test the relation between borrower performance and lending terms, with the key terms being *Loan Maturity*, *Collateral Requirement*, and *Interest Rate*. These three terms have been extensively studied, and they reflect lenders' assessment of borrower credit risk (Billett, Mauer and King, 2007; Brockman, Martin and Unlu, 2010). Our selection of explanatory variables follows Qian et al. (2015) and consists of *ROA*, *SIZE*, *Leverage*, *Tobin's Q*, and *Asset Tangibility*. Table 3 presents the results of the baseline model, with the unit of observation at the loan level. In Column (1), natural log of loan maturity (*Loan Maturity*) serves as the dependent variable. *ROA* is significantly, positively associated with *Loan Maturity*, suggesting that borrowers with better performance can borrow for longer terms. A one standard deviation increase in *ROA* is associated with an increase of 0.048 in natural log of loan maturity, amounting to 1.05 years. Given the average loan maturity of 2.7 years, 1.05 years represents 39 percent of mean loan maturity, which is economically significant. Moreover, larger borrowers,

and borrowers with higher growth opportunities (*Tobin's Q*) and more tangible assets (*Asset Tangibility*) tend to have loans with longer maturities. We also find a positive correlation between *Loan Amount* (loan size) and *Loan Maturity*. These results are consistent with prior studies (Johnson, 2002; Billett et al., 2007; Brockman et al., 2010). The dependent variable in Column (2) is an indicator of *Collateral Requirement*. We find that *ROA* is significantly negatively associated with the likelihood of *Collateral Requirement*. The marginal effect of *ROA* on *Collateral Requirement* is -0.218 , with all other variables held at sample mean. Firm size (*SIZE*) and leverage (*Leverage*) are negatively associated with *Collateral Requirement*, while debt maturity (*Loan Maturity*) is positively associated with *Collateral Requirement*. This may reflect borrowers' tradeoff between loan maturity and collateral provision. In other words, borrowers are more likely to be required to provide collateral if they borrow at a longer term. These results are consistent with prior research (Sengupta, 1998).

For the loan interest rate (*Interest Rate*) regression reported in Column (3), we fail to find any correlation between borrower accounting performance and *Interest Rate*.⁴ This result suggests that a bank's lending rate is insensitive to borrowers' financial performance. However, *SIZE* (*Leverage*) is negatively (positively) related with *Interest Rate*, suggesting that larger firms and those with lower financial risk can borrow at a lower rate. We also find that loans with longer maturity are charged a higher interest rate. These results are largely consistent with prior studies based on U.S. firms and Chinese firms (Ashcraft and Santos, 2009; Qian et al., 2015).

[Insert Table 3 here]

4.2. Results of the baseline model of bank monitoring

⁴ The sample size drops significantly from 13,388 to 1,209 due to fewer firms reporting loan interest rate.

Table 4 reports the baseline model for accounting conservatism based on A-share listing firms in China, without *IPOBANK*, *BANK*, or their interactions with *CFO*, *DCFO*, and *CFO*DCFO*. The dependent variable in Table 4 is *Accrual*, which is earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets. As expected, the coefficients for *SIZE*CFO*DCFO*, *MB*CFO*DCFO*, and *SOE*CFO*DCFO* are all significantly negative, and the coefficient for *LEV*CFO*DCFO* is significantly positive.

[Insert Table 4 here]

4.3. Results of testing the change in bank screening standard following bank IPO

To test whether banks' IPOs affect their screening standards, we estimate equation (1) by expanding the baseline model including the main effect and the interaction term of *Post Bank IPO* dummy (one if the loan was originated after the lending bank went public) with borrower *ROA*. Table 5 reports these results. We observe a positive and significant coefficient on the interaction term between borrower *ROA* and *Post Bank IPO* for the loan maturity regression (Column (1)). The evidence suggests that the loan maturity decision becomes more sensitive to borrower financial performance after a lender went public. We also observe a negative and significant coefficient on *Post Bank IPO*, implying that lenders shortened loan maturity on average after going public. Economically, loan maturity is 0.087 shorter on average in lenders' post-IPO period, and loan maturity becomes more than twice as sensitive to borrower financial performance in the post-IPO period.

Column (2) reports results from the collateral regression. The coefficient on the interaction term (*ROA*Post Bank IPO*) is negative and statistically significant, implying that banks place a larger weight on borrower performance when deciding on the collateral requirement. In Column (3), we report the results focusing on loan interest rates. Though the main effect of borrower

ROA is insignificant, the interaction between borrower *ROA* and *Post Bank IPO* is negative and statistically significant even after controlling for loan maturity. These results demonstrate that banks rely more on borrower *ROA* in evaluating borrower credit risk post-IPO. A one standard deviation decrease in *ROA* is associated with an increase in relative interest rate of 0.026 in the post lender-IPO period. Other control variables load similarly to those reported in Table 3. Taken together, we find evidence that banks emphasize borrower credit risk following IPOs, consistent with the argument that going public enhances their lending practices and risk management.

[Insert Table 5 here]

4.4. Results of testing the change in bank monitoring of borrowers following bank IPO

Table 6 reports the results testing the change in banks' monitoring of borrowers following bank IPOs. The variable of interest is *IPOBANK*CFO*DCFO*, which captures the change in borrowers' conservatism after their lenders did IPOs. The coefficient for this term is significant and positive (coefficient = 0.089, $p = 0.042$), suggesting that going public significantly improves banks' monitoring, as implied by the greater conservatism of their borrowers. The increase in borrower conservatism is economically large, which accounts for about 20 percent of the level before lenders' IPOs. We find an insignificant coefficient on *BANK*CFO*DCFO*, implying that lenders, in general, do not demand for conservatism in China. The coefficients on control variables are largely consistent with that in Table 4.

[Insert Table 6 here]

4.5. Change in bank performance post-IPO

In this section, we test whether bank profitability increases post-IPO, and we further examine whether any increase in profit can be tied to enhanced lending practices. The evidence from these analyses allows us to assess the efficiency implications of bank IPOs.

We conduct this set of analyses at bank level. We hand-collect performance information for 19 banks that eventually did IPOs from their prospectuses and annual reports and compare their performance change in pre-IPO years [2001, t] (t represents bank IPO year) to post-IPO years [t+1, 2013]. Table 7, Panel A, presents univariate results comparing bank performance in the pre- and post-IPO period based on two performance measures. The first measure is defined as bank profit deflated by total assets (*Bank ROA*), and the second measure is defined as bank profit deflated by interest income (*Profit Margin*). The first row shows an increase in *Bank ROA* from 0.7% (0.7%) in the pre-IPO period to 0.9% (1.0%) in the post-IPO period at the mean and median, respectively. Both are statistically significant. We find similar results for *Profit Margin*. In row 3, we focus on nonperforming loans, which is defined as total nonperforming loans deflated by total assets. The percentage of nonperforming loans (*%Nonperforming Loan*) decreased from 5.2% (3.5%) in the pre-IPO period to 1.9% (1.4%) in the post-IPO period at the mean and median, respectively. This decrease is both statistically and economically significant. The results for both nonperforming loans and bank profit might be driven by government injection of funds to remove bad loans from bank books before IPOs. As discussed in Section 2, the Chinese government did inject funds into state-owned banks to swap out nonperforming loans and improve their capital adequacy. However, this subsidy cannot explain the improved profit margin.

Figure 1, Panels A–C, visually show bank performance measured by ROA, profit margin, and nonperforming loans, alternatively, in the three years before and three years after bank IPOs.

ROA stays at the same level before the IPO but increases significantly in the IPO year and reaches its peak in the following year. Profit margin declines slightly before the IPO but increases in the IPO year and trends upward till three years after. Nonperforming loans decline sharply in the years before the IPO and continues to decrease till $t+3$. The sharp decline in nonperforming loans before the IPO is consistent with anecdotal evidence of the government's subsidy.

Next, we examine whether the univariate results are robust to additional controls in a multivariate regression. In particular, we control for *Bank SIZE* (natural logarithm of bank assets), year fixed effects, and bank fixed effects, where year fixed effects capture macroeconomic shocks and bank fixed effects control for the effect of time-invariant bank characteristics on bank performance. Moreover, we control for *%Nonperforming Loan* in both *Profit Margin* and *Bank ROA* regression. The rationale is twofold. First, we would like to isolate bank IPO effect on bank efficiency from the effect of the government subsidy associated with the IPOs. Second, going public might affect both efficiency and risk seeking. To isolate the efficiency change from the change in risk profile, we control for nonperforming loans, which likely capture risk taking in lending ex post. We also check whether borrower risk profile changes surrounding a lender's IPO in a subsequent analysis in Section 5.

Table 7, Panel B, reports the results of multivariate analysis. *Bank ROA* serves as the dependent variable in Column (1). The coefficient on *Post Bank IPO* is positive and statistically significant, implying that banks improve *Bank ROA* in the magnitude of 0.2 percent post IPO after controlling for the potential government subsidy and risk changes (captured by nonperforming loans). Given that the mean of *Bank ROA* is 0.7 percent in the pre-IPO period, an increase of 0.2 percent is economically significant. We observe a negative coefficient on the

percentage of nonperforming loans (i.e., *%Nonperforming Loan*), suggesting that poorly performing assets reduce bank profit margin. Furthermore, bank size (*Bank SIZE*) is negatively associated with bank profit margin, consistent with prior research (Berger, Hasan, and Zhou, 2009). We find qualitatively similar results in Column (2), where *Profit Margin* serves as the dependent variable. *Profit Margin* increases by 5 percent, which amounts to roughly one-fourth of the mean *Profit Margin* in the pre-IPO period. In Column (3), we find a negative coefficient on *Post Bank IPO*, and this is statistically significant at the 10 percent level. The evidence suggests that banks might have improved screening and loaned to less risky borrowers, increased monitoring of risky borrowers, or both. Our subsequent analysis attempts to illuminate this mechanism. We find a positive coefficient on bank size, implying that larger banks have more poorly performing assets. These results, taken together, suggest that banks improve efficiency after going public, consistent with the previous findings that banks improved lending practices in terms of screening ex ante and monitoring ex post.

[Insert Table 7 here]

4.6. *Linking the change in lending practices to bank efficiency*

We would like to link the change in bank efficiency to their lending practices, to test whether the improvement in lending practices contributes directly to improved efficiency. Table 8, Panel A, presents the results of this analysis. We partition our loan sample into the high and low group based on the median of change in bank *ROA*, measured as the difference between the average three-year *ROA* in the post-IPO period and the three-year average in the pre-IPO period.⁵ In the first two columns, the results indicate that the increased weight on borrower profit in *Loan*

⁵ We find similar results for bank profit margin.

Maturity decision after a bank IPO is concentrated in the high group. We find no significant change for the low group. The difference in the coefficient estimate on *ROA*Post Bank IPO* between the two groups is statistically significant at 10 percent level (two-tailed test). Results are similar when we move to the *Collateral Requirement* regression (Columns (3) and (4)) and the loan *Interest Rate* regression (Columns (5) and (6)). Therefore our evidence suggests that the increase in bank lending standard post-IPO contributes to the enhanced bank efficiency.

In Panel B of Table 8, we further report the partitioning results on bank monitoring based on the median value of change in IPO bank *ROA*. Columns (1) and (2) report the results when change in *ROA* is high and low, respectively. The coefficient for *IPOBANK8CFO*DCFO* is significantly positive in Column (1) and insignificant in Column (2). The test of the difference in this coefficient estimate between the two groups is statistically significant ($\chi^2 = 1.63$). These results suggest that the improved monitoring effectiveness post bank IPO partially contributes to the enhanced bank efficiency, which corroborates our findings from Panel A, Table 8.

[Insert Table 8 here]

5. Exploring the underlying mechanisms

5.1. Change in bank corporate governance post-IPO

We hand-collect information for 19 banks from [2001, t] to [t+1, 2013], with year t representing banks' IPO year, to measure bank governance, including board industry expertise (*Board Industry Expertise*) and political connections (*Board Political Connections*) from the IPO prospectus and annual reports. Specifically, *Board Industry Expertise* is calculated as the proportion of board members who are experts in financial industry (i.e., is or was employed by a financial institution such as venture capital firm, consumer lending company, mutual fund, hedge

fund, other bank, or a banking regulator). *Board Political Connection* equals one if the director serving as a current or former government bureaucrat and zero otherwise.

Table 9 presents the descriptive results. We find that *Board Industry Expertise* increases significantly from 40 percent in the pre-IPO period to 55 percent at the mean in the post-IPO period. We also find similar results at the median. In addition, *Board Political Connections* declines significantly by 11 percent post-IPO.

[Insert Table 9 here]

5.2. Linking the changes of corporate governance to lending practices

In this section, we focus on whether the banks' improved governance contributes to better lending practices. The results are reported in Table 10. We split the IPO banks into two groups based on the median change in corporate governance from the pre- to post-IPO period and run the same model as that in Table 4. In Panel A, we examine banks' screening standard. We split our sample based on the median change in bank board industry expertise in the first two columns. We find that the interaction effect of borrower ROA with *Post Bank IPO* is statistically significant only for loans made by the IPO banks that experienced a significant increase in board industry expertise (above the sample median). The interaction effect is muted for the other group (below the sample median). The difference in the interaction term across the two groups is statistically significant at the 5 percent level. These results hold across the three regressions: loan maturity, collateral requirement, and loan interest rate.

In Panel B, we split the subset of loans made by IPO banks based on the median change in bank board political connections. We find that the interaction effect of borrower ROA with *Post Bank IPO* is statistically significant only for loans made by banks with a significant decrease in

board political connections. The difference in the interaction effect between the high and low group is statistically significant at the 10 percent level. This result holds for all three specifications. Taken together, results from Table 10, Panels A and B provide evidence suggesting that corporate governance improvement might contribute to enhanced screening following bank IPOs.

In Panel C, we focus on bank monitoring. Columns (1) and (2) report the results when the change in board industry expertise is high and low, respectively. The coefficient for $IPOBANK*CF0*DCFO$ is significantly positive in Column (1) and insignificantly in Column (2), suggesting that the monitoring effect changes brought about by bank IPO is more pronounced for banks who improve corporate governance to a greater extent. Columns (3) and (4) report the partitioning results based on high versus low change in bank political connection. The coefficient for $IPOBANK*CF0*DCFO$ is only significantly positive when changes in political connection are low. However, the difference in the interaction effect between the high and low group is statistically significant (untabulated). This finding further suggests that bank monitoring effectiveness changes more significantly when its governance improves. These results corroborate our findings in Panels A and B of Table 10 regarding bank lending decisions.

[Insert Table 10 here]

5.3. Split-share reform

State-owned enterprises in China have had a split-share structure for a long time. This was a legacy of China's initial privatization, where the company issues minority tradable shares to private investors, while the Chinese government maintains the control by owning the majority of nontradable shares. The split-share structure restricted the tradability of SOE firms' shares in the secondary market, so the split-share reform took place in 2005 to eliminate the dual structure

by converting the nontradable shares into tradable ones. As argued by Chen et al. (2010), the reform constituted an exogenous shock to firms' corporate governance and made large shareholders to care more about share prices and improved their incentives of monitoring. This is because gains can be materialized through trading in a way that was impossible before the reform. Chen et al. show that the average cash holdings of Chinese-listed firms decreased significantly after the reform and the reduction was greater for firms with weaker governance before the reform.

If the split-share reform improved corporate governance, we expect the effect of bank IPO on lending practices to be stronger afterward. This analysis complements our tests of the link between the change in corporate governance and bank lending practices. In addition, if the reform constitutes an exogenous shock to corporate governance, this analysis may be superior in addressing endogeneity concerns that arise because correlated omitted factors may cause a simultaneous change in governance and lending practices. However, we also acknowledge that most banks did IPOs after 2005. Thus our analysis of comparing lending practices before the reform with that afterward might be plagued by the low test power in the pre-reform period.

Table 11 presents results of this analysis with Panels A and B, focusing on screening and monitoring, respectively. Panel A shows that the increase in the sensitivity of loan maturity and interest rate to borrower profit, post bank IPO, mainly concentrates in the period following the split-share reform. The coefficient on $ROA * Post\ Bank\ IPO$ is twice as large after the reform. The difference in this coefficient estimate between the two periods is statistically significant at the 10 percent level or better. Interestingly, the change in the sensitivity of collateral requirement to borrower profit, post bank IPO, declines slightly in the post-reform period. However, the economic magnitude of decline is rather small. In Panel B, we find that the

increase in borrower accounting conservatism, post bank IPO, is significant in the post-reform period as evidenced by the statistically significant coefficient on $IPOBANK*CF0*DCFO$, while the increase is statistically indistinguishable from zero in the pre-reform period. However, the difference in this coefficient between the two periods is statistically insignificant. Thus we find some evidence that the improvement in bank lending practices, post bank IPO, is stronger after split-share reform.

[Insert Table 11 here]

6. Additional analysis

6.1. Results of change in bank lending practices post-IPO in the cross section

An IPO may not affect every bank in the same way. Anecdotally, the prominent issue in China's financial industry is poorly performing assets at big state-owned banks. In contrast, at privately owned banks, due to the lower agency costs between owners and managers, corporate governance is believed to be better, and operations are relatively efficient. If going public pushes banks to institute better corporate governance and hence improves efficiency, we would expect to see a more pronounced effect in state-owned banks. We conduct cross-sectional analysis to test this prediction. Specifically, we partition our loan sample into a state-owned bank group and a privately owned bank group, where bank ownership is determined based on the last fiscal year before a bank's IPO. Bank ownership information is collected from the IPO prospectus.

Table 12, Panel A, presents results of this analysis. For the state-owned bank group (SOE Bank = 1), the coefficient of ROA is insignificant for loan maturity and loan rates regression. In contrast, this coefficient is significant for all three regressions for the privately owned bank subsample (SOE Bank = 0). The evidence indicates that, before their IPOs, state-owned banks rely less on borrower financial performance to determine loan contract terms, suggesting that

they have lower screening standards. Their private counterparts contract with borrowers based on borrowers' financial performance. Therefore privately owned banks have higher screening standards. The coefficient on the interaction between borrower *ROA* and *Post Bank IPO* is positive (negative) and statistically significant for *Loan Maturity* (*Collateral Requirement* and loan *Interest Rate*) regression only for state-owned banks. This coefficient is insignificant across all three regressions for the privately owned bank subsample. The difference in the coefficient estimate is statistically significant at the 10 percent level or better across the three specifications. Therefore our evidence suggests that going public improves the screening standards of state-owned banks.

Consistent with our findings in Panel A, Table 12 of Panel B shows that the increase in borrower accounting conservatism is statistically significant only for SOE banks, as evidenced by the significant coefficient for *IPOBANK*CFO*DCFO* in Column (1) and the insignificant coefficient in Column (2). The difference in the coefficient estimate on *IPOBANK*CFO*DCFO* is statistically insignificant, however.

[Insert Table 12 here]

6.2. Change in borrower risk profile

To improve their screening standards and risk management, banks can either adjust their lending terms to be more compatible with borrowers' underlying risk profile, drop riskier borrowers, or both. Our earlier evidence supports the former. In this section, we test whether borrowers' risk profile changes surrounding a bank IPO. Table 13, Panel A, shows univariate results. We find that borrower ROA, market-to-book ratio, and size increase significantly, while leverage and asset tangibility decline significantly from the pre-IPO to the post-IPO period. In Panel B, we conduct multivariate tests controlling for bank fixed effects and year fixed effects,

and the results largely remain the same. Therefore we find some evidence that banks improve screening standard by switching to more profitable, less levered borrowers and to borrowers with higher growth opportunities following bank IPOs.

[Insert Table 13 here]

6.3. Other analysis

Qian et al. (2015) note that many Chinese banks implemented reforms in 2002 and 2003 that delegated authority to individual loan officers. They find that this improved bank lending practices. To check whether our results are driven by these reforms, we code a dummy variable (*REFORM*) capturing the years after 2002 and interact it with *ROA* in model (1) and with *CFO*DCFO* in model (2). Untabulated results show an insignificant coefficient on *REFORM*ROA* (0.598, $t=1.428$) and an insignificant coefficient on *REFORM*CFO*DCFO* (0.024, $t = 0.98$). More importantly, our results continue to hold after controlling for the reform effect.

Given that a large fraction of banks went public in 2007, we also conduct a robustness test to check whether our results merely reflect the 2007 effect by excluding that year in the bank screening and monitoring analyses. Our results (untabulated) remain qualitatively the same.

7. Conclusion

We examine whether bank IPOs affect the lending practices. We find a significant improvement in both screening standards and monitoring, as evidenced by the fact that loan terms become more sensitive to borrower financial performance at loan initiation and that borrowers' financial reporting becomes more conservative after loan initiation in the post lender-IPO regime. We find that the change in lending practices concentrates among state-owned banks.

We also find that banks operate more efficiently and this change is associated with their improved lending practices. Probing the underlying mechanisms, we show that the change in corporate governance surrounding a bank's IPO likely contributes to the improved lending. Our study is the first to document the economic consequences of partial privatization on financial institutions in developing economies. Given the central role of financial intermediaries as capital providers in developing economies and these economies' urgent need to beef up their capital markets, our findings are informative to both their policymakers and researchers.

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Appendix A Variable Definitions

Variable	Definition
<i>Accruals</i>	Earnings before extraordinary items minus cash flow from operations and scaled by total assets at the beginning of the year;
<i>Asset Tangibility</i>	Ratio of property, plant, and equipment to total assets;
<i>BANK</i>	1 if the borrower firm has any outstanding bank loan by the end of the year, 0 otherwise;
<i>Bank ROA</i>	Ratio of banks' net income to total assets;
<i>Bank SIZE</i>	Natural logarithm of banks' total assets in RMB million;
<i>Board Industry Expertise</i>	The proportion of industry experts relative to the number of board members. A board director is classified as an industry expert if he is/was employed by a financial institution (e.g., venture capital firm; consumer lending company; mutual fund; hedge fund; other bank) or a banking regulator (e.g., the CBRC; PBC);
<i>Board Political Connection</i>	1 if the director serving as a current or former government bureaucrat - that is, a current or former officer of the central or local governments or the military, 0 otherwise;
<i>CFO</i>	Cash flows from operations scaled by total assets at the beginning of the year;
<i>Collateral Requirement</i>	1 if there is any collateral requirement imposed on the loan, 0 otherwise;
<i>DCFO</i>	1 if <i>CFO</i> is negative, 0 otherwise;
<i>Interest Rate</i>	actual loan interest rate – the China central bank's base rate for loans;
<i>IPOBANK</i>	1 if the borrower firm has any outstanding loan from an IPO bank by the end of the year, 0 otherwise;
<i>Leverage</i>	Leverage ratio;
<i>Loan Maturity</i>	Natural logarithm of loan maturity in years specified in loan terms;
<i>Loan Amount</i>	Natural logarithm of loan amount (Unit: 1 million RMB);
<i>MB</i>	Market to book ratio;
<i>%Nonperforming Loans</i>	Total amount of nonperforming loans deflated by total assets;
<i>ROA</i>	Ratio of firms' net income to total assets;
<i>Post Bank IPO</i>	1 for banks' post-IPO regime, 0 otherwise;
<i>Profit Margin</i>	Ratio of bank net income over bank total interest income;
<i>SIZE</i>	Natural logarithm of firms' total assets;
<i>SOE</i>	1 if the borrower firm is a SOE, 0 otherwise;
<i>Stock Compensation</i>	1 if IPO bank adopts stock-based compensation (either in format of stock holding or option plan) prior to its IPO year, 0 otherwise;
<i>Tobin's Q</i>	Ratio of the firm's market value to total assets.

Table 1. List of Chinese banks that went public before 2013

This table reports the bank name, stock code, and IPO date for the 19 Chinese banks that went public by the end of 2013. The two letters in the stock code are the abbreviations of the stock exchanges where the stock is traded. “HK” stands for Hong Kong Stock Exchange; “SH” stands for “Shanghai Stock exchange”; and “SZ” stands for Shenzhen stock exchange. Pingan Bank, a private bank before 2012, was acquired by Shenzhen Development Bank, a publically listed bank then, and the merger was completed on June 14, 2012.

Bank Name	Stock code	IPO date
Shenzhen Development Bank	000001.SZ	April 3, 1991
Pudong Development Bank	600000.SH	November 10, 1999
China Minsheng Bank	600016.SH	December 19, 2000
China Merchants Bank	600036.SH	April 9, 2002
Huaxia Bank	600015.SH	September 12, 2003
Bank of China	601988.SH	July 5, 2006
ICBC	601398.SH	October 27, 2006
Xingye Bank	601166.SH	February 5, 2007
Citic Bank	601998.SH	April 27, 2007
Bank of Communication	601328.SH	May 15, 2007
Bank of Ningbo	002142.SZ	July 19, 2007
Bank of Nanjing	601009.SH	July 19, 2007
Bank of Beijing	601169.SH	September 19, 2007
China Construction Bank	601939.SH	September 25, 2007
Agricultural Bank of China	601288.SH	July 15, 2010
China Everbright Bank	601818.SH	August 18, 2010
Chongqing Rural Commercial Bank	3618.HK	December 16, 2010
Pingan Bank	000001.SZ	June 14, 2012
Bank of Chongqing	1963.HK	November 6, 2013
Huishang Bank	3698.HK	November 12, 2013

Table 2. Summary statistics

Panels A and B of this table report summary statistics of the variables used in the main tests of bank screening and monitoring, respectively. See Appendix A for variable definitions.

Panel A: variables used in the test of screening

Variable	Obs.	Mean	STD	25th	Median	75th
<i>Loan Maturity (years)</i>	13,722	2.710	0.578	2.485	2.485	2.485
<i>Loan Amount (million RMB)</i>	13,412	4.071	1.277	3.219	3.912	4.868
<i>Collateral Requirement</i>	13,722	0.078	0.269	0.000	0.000	0.000
<i>Interest Rate (%)</i>	1,233	1.060	0.282	0.950	1.000	1.100
<i>Post Bank IPO</i>	13,722	0.647	0.478	0.000	1.000	1.000
<i>ROA</i>	13,722	0.027	0.048	0.010	0.027	0.050
<i>SIZE</i>	13,722	7.623	1.312	6.745	7.608	8.481
<i>Leverage</i>	13,698	0.195	0.126	0.100	0.178	0.274

Panel B: variables used in the test of monitoring

<i>Accrual</i>	17,255	-0.003	0.093	-0.054	-0.010	0.038
<i>CFO</i>	17,255	0.051	0.097	0.004	0.050	0.101
<i>DCFO</i>	17,255	0.231	0.421	0.000	0.000	0.000
<i>IPOBANK</i>	17,255	0.204	0.403	0.000	0.000	0.000
<i>BANK</i>	17,255	0.294	0.456	0.000	0.000	1.000
<i>SIZE</i>	17,255	21.64	1.255	20.79	21.44	22.25
<i>Leverage</i>	17,255	0.480	0.205	0.328	0.490	0.631
<i>MB</i>	17,255	2.279	2.263	0.970	1.626	2.749
<i>SOE</i>	17,255	0.645	0.478	0.000	1.000	1.000

Table 3. Baseline regressions of bank screening— the relation between borrower performance and bank loan terms

This table presents the results from the baseline regressions testing the relation between borrower performance and bank loan terms. The dependent variables in Columns 1-3 are *Loan Maturity* (natural logarithm of loan maturity), *Collateral Requirement* (an indicator variable that equals 1 if the loan is collateralized), and *Interest Rate* (actual loan interest rate – the China central bank’s base rate for loans), respectively. See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors adjusted for borrower-level clustering (Peterson (2007)). The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)
Model Specification	OLS	Logit	OLS
Dependent Variable	<i>Loan Maturity</i>	<i>Collateral Requirement</i>	<i>Interest Rate</i>
<i>ROA</i>	1.004*** (0.000)	-4.189*** (0.000)	-0.010 (0.673)
<i>SIZE</i>	0.032*** (0.003)	-0.452*** (0.000)	-0.022* (0.099)
<i>Leverage</i>	0.140 (0.132)	-1.153** (0.019)	0.265*** (0.003)
<i>Tobin’s Q</i>	0.029** (0.037)	-0.120 (0.101)	0.004 (0.730)
<i>Asset Tangibility</i>	0.228*** (0.000)	0.137 (0.568)	-0.067 (0.266)
<i>Loan Amount</i>	0.095*** (0.000)	-0.001 (0.977)	-0.016 (0.160)
<i>Loan Maturity</i>		0.708*** (0.000)	-0.047*** (0.006)
Year Fixed Effects	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
# of observation (Loans)	13,388	13,388	1,209
Adjusted/Pseudo R ²	10.1%	10.4%	23.3%

Table 4. Baseline regressions of bank monitoring

This table presents the baseline regression results of bank monitoring. Borrowers' accounting conservatism serves as the measure of monitoring intensity. The dependent variable is *Accruals* (earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets). See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors. The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Model Specification	OLS
Dependent Variable	<i>Accruals</i>
<i>CFO</i>	-1.882*** (0.000)
<i>DCFO</i>	-0.153*** (0.000)
<i>CFO*DCFO</i>	0.369 (0.111)
<i>SIZE</i>	0.012*** (0.000)
<i>SIZE*CFO</i>	0.068*** (0.000)
<i>SIZE*DCFO</i>	0.008*** (0.000)
<i>SIZE*CFO*DCFO</i>	-0.045*** (0.000)
<i>Leverage</i>	-0.086*** (0.000)
<i>Leverage *CFO</i>	-0.749*** (0.000)
<i>Leverage *DCFO</i>	-0.054*** (0.000)
<i>Leverage *CFO*DCFO</i>	0.461*** (0.000)
<i>MB</i>	-0.001*** (0.004)
<i>MB*CFO</i>	0.031*** (0.000)
<i>MB*DCFO</i>	0.000 (0.500)
<i>MB*CFO*DCFO</i>	-0.024*** (0.500)
<i>SOE</i>	-0.012*** (0.500)
<i>SOE*CFO</i>	0.033** (0.047)
<i>SOE*DCFO</i>	-0.005** (0.041)
<i>SOE*CFO*DCFO</i>	-0.050* (0.065)
Constant	-0.170*** (0.000)
Year Fixed Effects	Yes
Firm Fixed Effects	Yes
# of observations	17,255
Adjusted/Pseudo R ²	83.59%

Table 5. The effect of going public on bank screening standard

This table presents the results from the analysis of the effect of bank IPOs on the relation between borrower performance and bank loan terms. The dependent variables in Columns 1-3 are *Loan Maturity* (natural logarithm of loan maturity), *Collateral Requirement* (an indicator variable that equals 1 if the loan is collateralized), and *Interest Rate* (actual loan interest rate – the China central bank’s base rate for loans), respectively. For brevity control variables are omitted from reporting. See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors adjusted for borrower-level clustering (Peterson (2007)). The symbols ^{***}, ^{**}, and ^{*} stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)
Model Specification	OLS	Logit	OLS
Dependent Variable	<i>Loan Maturity</i>	<i>Collateral Requirement</i>	<i>Interest Rate</i>
<i>ROA</i>	0.541** (0.048)	-3.022*** (0.000)	0.017 (0.263)
<i>ROA*Post Bank IPO</i>	0.797** (0.016)	-2.222** (0.019)	-0.541** (0.024)
<i>Post Bank IPO</i>	-0.085*** (0.000)	0.080 (0.624)	-0.049* (0.076)
<i>Controls</i>	Included	Included	Included
Year fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
# of observations	13,388	13,388	1,209
Adjusted/Pseudo R ²	10.1%	10.4%	24.4%

Table 6. The effect of going public on bank monitoring

This table presents the regression results testing the effect of bank IPO on bank monitoring. The dependent variable is *Accruals* (earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets). See Appendix A for variable definitions. In parentheses are *p*-values based on robust standard errors. The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Model Specification	OLS
Dependent Variable	<i>Accruals</i>
<i>CFO</i>	-1.891*** (0.000)
<i>DCFO</i>	-0.151*** (0.000)
<i>CFO*DCFO</i>	0.448* (0.058)
<i>IPOBANK</i>	0.000 (0.872)
<i>IPOBANK*CFO</i>	-0.028 (0.322)
<i>IPOBANK*DCFO</i>	0.001 (0.862)
<i>IPOBANK*CFO*DCFO</i>	0.089** (0.042)
<i>BANK</i>	0.000 (0.883)
<i>BANK*CFO</i>	0.011 (0.645)
<i>BANK*DCFO</i>	0.001 (0.898)
<i>BANK*CFO*DCFO</i>	-0.056 (0.145)
<i>Controls, Controls*CFO, Controls*DCFO, Controls*CFO*DCFO</i>	Included
Constant	-0.169*** (0.000)
Year Fixed Effects	Yes
Firm Fixed Effects	Yes
# of observation	17,255
Adjusted/Pseudo R ²	83.60%

Table 7. Bank performance changes surrounding IPOs

This table presents the results of bank performance changes from the pre-IPO to the post-IPO period, where pre-IPO period starts from either 2001 or the first year that banks' financial information is available, whichever comes later, and ends in the year immediately before IPO; post-IPO period starts from the IPO year and ends in 2013. Panel A presents the univariate comparison results, while Panel B presents multivariate regression results controlling for bank-fixed effects. Bank performance is measured by ROA, profit margin and nonperforming loans, alternatively. *Bank ROA* is the ratio of bank net income over the book value of total assets. *Profit Margin* is the ratio of bank net income over bank total interest income. *%Nonperforming Loan* is the ratio of overdue loans to bank total assets. *Bank SIZE* is the natural logarithm of bank' total assets; See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors adjusted for bank-level clustering (Peterson (2007)). The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel A: Univariate comparison of bank performance from the pre-IPO period to the post-IPO period (N =220)

Variables		Pre-IPO (N = 76)	Post-IPO (N = 144)	Diff (Pre-IPO – Post-IPO)
<i>Bank ROA</i>	Mean	0.007	0.009	-0.002*
	Median	0.007	0.010	-0.003*
<i>Profit Margin</i>	Mean	0.205	0.235	-0.030*
	Median	0.197	0.259	-0.062*
<i>%Nonperforming Loans</i>	Mean	0.052	0.019	0.034**
	Median	0.035	0.014	0.021**

Panel B: Multivariate regressions of bank performance

	(1)	(2)	(3)
Model Specification	OLS	OLS	OLS
Dependent Variable	<i>ROA</i>	<i>Profit Margin</i>	<i>%Nonperforming Loans</i>
<i>Post Bank IPO</i>	0.004** (0.046)	0.027** (0.042)	-0.031** (0.039)
<i>%Nonperforming Loans</i>	-0.022** (0.058)	-0.253*** (0.014)	
<i>Bank SIZE</i>	-0.003** (0.029)	-0.036*** (0.006)	0.022** (0.000)
Year fixed effects	Yes	Yes	Yes
Bank fixed effects	Yes	Yes	Yes
# of observations (Bank)	220	220	220

Table 8. The effect of bank IPO on bank lending behavior: Split-sample analysis based on bank performance change

This table presents the results from the split-sample analysis of the effect of bank IPOs on the relation between borrower performance and bank loan terms, where the sample is partitioned based on the median change in bank ROA (ΔROA) from the pre- to the post-IPO regime. Columns 1, 3, and 5 (2, 4, and 6) report the regression results for the subsamples with High (Low) ΔROA . The dependent variables in Columns 1 and 2, 3 and 4, and 5 and 6 are, respectively, *Loan Maturity* (natural logarithm of loan maturity), *Collateral Requirement* (an indicator variable that equals 1 if the loan is collateralized), and *Interest Rate* (actual loan interest rate – the China central bank’s base rate for loans). See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors adjusted for borrower-level clustering (Peterson (2007)). The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel A: Screening incentive: Split-sample analysis based on change in bank ROA

	(1)	(2)	(3)	(4)	(5)	(6)
	High ΔROA	Low ΔROA	High ΔROA	Low ΔROA	High ΔROA	Low ΔROA
Model Specification	OLS	OLS	Logit	Logit	OLS	OLS
Dependent Variable	<i>Loan Maturity</i>		<i>Collateral Requirement</i>		<i>Interest Rate</i>	
<i>ROA</i>	0.066 (0.861)	1.111*** (0.000)	-1.258 (0.493)	-6.314*** (0.000)	0.014 (0.644)	-0.454* (0.091)
<i>ROA*Post Bank IPO</i>	1.402*** (0.005)	0.062 (0.107)	-3.640*** (0.000)	0.243 (0.504)	-0.758** (0.016)	0.085 (0.857)
<i>Post Bank IPO</i>	0.211** (0.034)	-0.049 (0.210)	0.254 (0.712)	-0.291 (0.259)	0.155 (0.121)	-0.065* (0.052)
<i>Controls</i>	Included	Included	Included	Included	Included	Included
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
# of observations (Loan)	4,950	4,363	4,950	4,363	453	434
Adjusted/Pseudo R2	9.9%	11.5%	13.3%	11.5%	18.5%	26.4%
Diff. in coefficient on <i>ROA*POST Bank IPO</i> (χ^2 stat)	3.12** (one-tailed at 5%, two-tailed at 10%)		3.01** (one-tailed at 5%, two-tailed at 10%)		2.92** (one-tailed at 5%, two-tailed at 10%)	
Prob > χ^2	0.072		0.082		0.088	

Table 8 (Cont'd)

This table presents the split-sample regression results of bank monitoring effect associated with bank IPO based on the median change in bank ROA (ΔROA). Column 1 (2) reports the regression results for the subsamples with High (Low) ΔROA . The dependent variable is *Accruals* (earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets). See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors. The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel B: Screening incentive: Split-sample analysis based on change in bank ROA

	(1)	(2)
	High ΔROA	Low ΔROA
Model Specification	OLS	OLS
Dependent Variable	<i>Accruals</i>	
<i>CFO</i>	-1.912*** (0.000)	-1.845*** (0.000)
<i>DCFO</i>	-0.155*** (0.000)	-0.144*** (0.000)
<i>CFO*DCFO</i>	0.580** (0.018)	0.460* (0.065)
<i>IPOBANK</i>	0.002 (0.627)	-0.002 (0.535)
<i>IPOBANK*CFO</i>	-0.046 (0.178)	-0.011 (0.723)
<i>IPOBANK*DCFO</i>	-0.004 (0.488)	0.005 (0.318)
<i>IPOBANK*CFO*DCFO</i>	0.111** (0.044)	0.070 (0.157)
<i>BANK</i>	0.000 (0.923)	0.000 (0.874)
<i>BANK*CFO</i>	0.017 (0.493)	0.014 (0.578)
<i>BANK*DCFO</i>	0.001 (0.904)	0.001 (0.856)
<i>BANK*CFO*DCFO</i>	-0.068* (0.081)	-0.058 (-0.141)
<i>Controls, Controls*CFO, Controls*DCFO, Controls*CFO*DCFO</i>	Included	Included
Constant	-0.174*** (0.000)	-0.166*** (0.000)
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
# of observation	15,359	15,626
Adjusted/Pseudo R ²	83.45%	83.73%

Table 9. Bank corporate governance changes surrounding IPOs

This table presents the univariate results of bank corporate governance changes from pre-IPO to the post-IPO period, where pre-IPO period starts from either 2001 or the first year that banks' financial information is available, whichever comes later, and ends in the year immediately before IPO; post-IPO period starts from the IPO year and ends in 2013. We measure banks' corporate governance using banks' board industry expertise (*Board Industry Expertise*) and board political connections (*Board Political Connections*). *Board Industry Expertise* is defined as the proportion of board members that are experts in financial industry (i.e., is or was employed by a financial institution such as venture capital firms, consumer lending companies, mutual funds, hedge funds, other banks, or a banking regulator). *Board Political Connection* equals 1 if the director serves as a current or former government bureaucrat and 0 otherwise. See Appendix for variable definitions. The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variables		Pre-IPO (N = 44)	Post-IPO (N = 144)	Diff (Pre-IPO – Post-IPO)
<i>Board Industry Expertise</i>	Mean	0.401	0.553	-0.152***
	Median	0.363	0.571	-0.109***
<i>Board Political Connection</i>	Mean	0.333	0.221	0.112***
	Median	0.267	0.200	0.067**

Table 10. The effect of bank IPO on bank lending behavior: Split-sample analysis based on bank corporate governance change

This table presents the results from the split-sample analysis of the effect of bank IPOs on the relation between borrower performance and bank loan terms using the subsample of loans made by the IPO banks only, where the subsample is further partitioned based on the sample median of $\Delta Board Industry Expertise$ (change in banks' board industry expertise) from the pre- to the post-IPO regime. *Board Industry Expertise* is measured by the proportion of industry experts relative to the number of board members. Columns 1, 3, and 5 (2, 4, and 6) report the regression results for subsamples with High (Low) $\Delta Board Industry Expertise$. The dependent variables in Columns 1 and 2, 3 and 4, and 5 and 6 are, respectively, *Loan Maturity* (natural logarithm of loan maturity), *Collateral Requirement* (an indicator variable that equals 1 if the loan is collateralized), and *Interest Rate* (actual loan interest rate – the China central bank's base rate for loans). See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors adjusted for borrower-level clustering (Peterson (2007)). The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel A: Screening incentive: Split-sample analysis based on change in bank board industry expertise

	(1)	(2)	(3)	(4)	(5)	(6)
Model Specification	OLS	OLS	Logit	Logit	OLS	OLS
Dependent Variable	<i>Loan Maturity</i>		<i>Collateral Requirement</i>		<i>Interest Rate</i>	
	High $\Delta Board$ <i>Industry</i> <i>Expertise</i>	Low $\Delta Board$ <i>Industry</i> <i>Expertise</i>	High $\Delta Board$ <i>Industry</i> <i>Expertise</i>	Low $\Delta Board$ <i>Industry</i> <i>Expertise</i>	High $\Delta Board$ <i>Industry</i> <i>Expertise</i>	Low $\Delta Board$ <i>Industry</i> <i>Expertise</i>
<i>ROA</i>	-0.094 (0.777)	0.455 (0.465)	-2.285 (0.221)	-5.616 (0.168)	-0.003 (0.919)	-1.447 (0.246)
<i>ROA*Post Bank IPO</i>	1.669*** (0.000)	0.404 (0.592)	-4.782** (0.028)	-0.140 (0.969)	-0.509** (0.041)	0.793 (0.553)
<i>Post Bank IPO</i>	0.001 (0.971)	-0.056 (0.462)	-0.413 (0.121)	0.078 (0.825)	-0.024 (0.376)	-0.072 (0.328)
<i>Controls</i>	Included	Included	Included	Included	Included	Included
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
# of observations (Loan)	7,967	1,346	7,938	1,311	742	145
Adjusted/Pseudo R ²	11.0%	16.5%	12.5%	12.4%	24.6%	48.4%
Diff. in coefficient on <i>ROA*POST Bank IPO</i> (χ^2 stat)	3.93** (one-tailed at 5%, two-tailed at 5%)		7.85***(one-tailed at 1%, two-tailed at 1%)		5.62***(one-tailed at 1%, two-tailed at 5%)	
Prob > χ^2	0.047		0.005		0.015	

Table 10 (Cont'd)

This table presents the results from subsample analysis of the effect of bank IPOs on the relation between borrower performance and loan terms, where the sample is partitioned based on the sample median of $\Delta Board Political Connection$ (change in banks' board political connection) from the pre- to the post-IPO regime. $Board Political Connection$ equals 1 if the director serving as a current or former government bureaucrat and 0 otherwise. Columns 1, 3, and 5 (2, 4, and 6) report the regression results for subsamples with High (Low) $\Delta Board Political Connections$. The dependent variables in Columns 1 and 2, 3 and 4, and 5 and 6 are, respectively, $Loan Maturity$ (natural logarithm of loan maturity), $Collateral Requirement$ (an indicator variable that equals 1 if the loan is collateralized), and $Interest Rate$ (actual loan interest rate – the China central bank's base rate for loans). See Appendix for variable definitions. In parentheses are p -values based on robust errors adjusted for borrower-level clustering (Peterson (2007)). The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel B: Screening incentive: Split-sample analysis based on change in bank board political connections

	(1)	(2)	(3)	(4)	(5)	(6)
	High $\Delta Board$ <i>Political</i> <i>Connections</i>	Low $\Delta Board$ <i>Political</i> <i>Connections</i>	High $\Delta Board$ <i>Political</i> <i>Connections</i>	Low $\Delta Board$ <i>Political</i> <i>Connections</i>	High $\Delta Board$ <i>Political</i> <i>Connections</i>	Low $\Delta Board$ <i>Political</i> <i>Connections</i>
Model Specification	OLS	OLS	Logit	Logit	OLS	OLS
Dependent Variable	<i>Loan Maturity</i>		<i>Collateral Requirement</i>		<i>Interest Rate</i>	
<i>ROA</i>	0.193 (0.555)	0.018 (0.973)	-3.566* (0.069)	0.142 (0.969)	-0.000 (0.998)	-1.672** (0.021)
<i>ROA*Post Bank IPO</i>	1.377*** (0.001)	1.079 (0.131)	-3.747* (0.079)	-4.836 (0.181)	-0.462* (0.066)	-0.417 (0.553)
<i>Post Bank IPO</i>	0.011 (0.738)	-0.054 (0.543)	-0.376 (0.123)	0.206 (0.702)	-0.027 (0.242)	-0.067 (0.646)
<i>Controls</i>	Included	Included	Included	Included	Included	Included
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
# of observations (Loan)	8,058	1,255	8,028	1,233	740	147
Adjusted/Pseudo R ²	10.7%	17.3%	11.9%	12.4%	25.5%	42.5%
Diff. in coefficient on <i>ROA*POST Bank IPO</i> ($\chi^2 stat$)	3.68** (one-tailed at 5%, two-tailed at 10%)		5.94*** (one-tailed at 1%, two-tailed at 5%)		7.75*** (one-tailed at 1%, two-tailed at 1%)	
Prob > χ^2	0.055		0.014		0.005	

Table 10 (Cont'd)

This table presents the split-sample regression results of bank monitoring effect associated with bank IPO based on the median value of $\Delta Board Industry Expertise$ (Columns 1 and 2) and the median $\Delta Board Political Connections$ (Columns 3 and 4). Specifically, Columns 1 (3) and 2 (4) report results when change in board industry (change in board political connection) is high and low, respectively. The dependent variable is *Accruals* (earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets). See Appendix for variable definitions. In parentheses are *p*-values based on robust errors. The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel C: Monitoring incentive: Split-sample analysis based on change in bank board industry expertise and political connections

	(1)	(2)	(3)	(4)
	High	Low	High	Low
	$\Delta Board$	$\Delta Board$	$\Delta Board$	$\Delta Board$
	<i>Industry</i>	<i>Industry</i>	<i>Political</i>	<i>Political</i>
	<i>Expertise</i>	<i>Expertise</i>	<i>Connections</i>	<i>Connections</i>
Model Specification	OLS	OLS	OLS	OLS
Dependent Variable	Accruals			
<i>CFO</i>	-1.907*** (0.000)	-1.847*** (0.000)	-1.838*** (0.000)	-1.914*** (0.000)
<i>DCFO</i>	-0.156*** (0.000)	-0.143*** (0.000)	-0.147*** (0.000)	-0.153*** (0.000)
<i>CFO*DCFO</i>	0.602** (0.014)	0.467* (0.060)	0.419* (0.090)	0.634** (0.010)
<i>IPOBANK</i>	0.001 (0.663)	-0.001 (0.674)	-0.000 (0.950)	0.000 (0.908)
<i>IPOBANK*CFO</i>	-0.036 (0.307)	-0.026 (0.395)	-0.029 (0.340)	-0.029 (0.417)
<i>IPOBANK*DCFO</i>	-0.001 (0.846)	0.002 (0.672)	0.001 (0.821)	-0.001 (0.853)
<i>IPOBANK*CFO*DCFO</i>	0.125** (0.022)	0.069 (0.166)	0.078 (0.110)	0.102* (0.070)
<i>BANK</i>	0.000 (0.895)	0.000 (0.915)	0.000 (0.967)	0.000 (0.856)
<i>BANK*CFO</i>	0.018 (0.456)	0.013 (0.590)	0.013 (0.603)	0.019 (0.450)
<i>BANK*DCFO</i>	0.001 (0.897)	0.001 (0.863)	0.001 (0.832)	0.000 (0.909)
<i>BANK*CFO*DCFO</i>	-0.066* (0.092)	-0.060 (0.127)	-0.058 (0.138)	-0.068* (0.082)
<i>Controls, Controls*CFO, Controls*DCFO, Controls*CFO*DCFO</i>	Included	Included	Included	Included
Constant	-0.171*** (0.000)	-0.169*** (0.000)	-0.167*** (0.000)	-0.176*** (0.000)
Year Fixed Effects	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
# of observation	15,360	15,625	15,747	15,238
Adjusted/Pseudo R ²	83.41%	83.76%	83.71%	83.45%

Table 11. The effect of bank IPO on bank lending practices: Split-sample analysis based on Split-Share Reform

This table presents the results from subperiod analysis of the effect of bank IPOs on the relation between borrower performance and bank loan terms, where the sample is partitioned based on pre- and post-Split-Share Reform (i.e., year < 2005 and year > 2005). Columns 1, 3, and 5 (2, 4, and 6) report the regression results for subsamples in pre- and post-Split-Share Reform periods. The dependent variables in Columns 1 and 2, 3 and 4, and 5 and 6 are, respectively, *Loan Maturity* (natural logarithm of loan maturity), *Collateral Requirement* (an indicator variable that equals 1 if the loan is collateralized), and *Interest Rate* (actual loan interest rate – the China central bank’s base rate for loans). See Appendix A for variable definitions. In parentheses are *p*-values based on robust errors adjusted for borrower-level clustering (Peterson (2007)). The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel A: Screening incentive: Split-sample analysis based on stock-split regime

	(1)	(2)	(3)	(4)	(5)	(6)
	Pre- Reform	Post-Reform	Pre- Reform	Post-Reform	Pre- Reform	Post-Reform
Model Specification	OLS	OLS	Logit	Logit	OLS	OLS
Dependent variable	<i>Loan Maturity</i>		<i>Collateral Requirement</i>		<i>Interest Rate</i>	
<i>ROA</i>	0.028 (0.771)	0.111*** (0.000)	0.023 (0.966)	0.367** (0.035)	0.022 (0.369)	0.048** (0.021)
<i>ROA*Post Bank IPO</i>	0.464 (0.411)	1.131*** (0.000)	-6.400** (0.041)	-6.055*** (0.000)	-0.290 (0.418)	-0.626** (0.024)
<i>Post Bank IPO</i>	-0.104*** (0.004)	-0.088*** (0.000)	-0.454 (0.116)	0.251 (0.193)	-0.023 (0.278)	-0.047 (0.182)
<i>Controls</i>	Included	Included	Included	Included	Included	Included
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
# of observations (Loans)	1,884	11,504	1,884	11,504	441	768
Adjusted/Pseudo R ²	9.8%	10.8%	11.0%	11.1%	25.0%	29.7%
Diff. in coefficient on <i>ROA*POST Bank IPO</i> (χ^2 stat)	5.06** (one-tailed at 5%, two-tailed at 5%)		3.18***(one-tailed at 5%, two- tailed at 10%)		3.01***(one-tailed at 5%, two- tailed at 10%)	
Prob > χ^2	0.025		0.079		0.082	

Table 11 (Cont'd)

This table presents the results from subperiod analysis of the monitoring effect of bank IPOs, where the sample is partitioned based on pre- and post-Split-Share Reform (i.e., year < 2005 and year > 2005). Column 1 (2) reports the regression results for subsamples in pre- and post-Split-Share Reform periods. The dependent variable is *Accruals* (earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets). See Appendix for variable definitions. In parentheses are *p*-values based on robust errors. The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel B: Monitoring incentive: Split-sample analysis based on stock-split regime

Model Specification	(1)	(2)
	Pre-Reform	Post-Reform
Dependent Variable	<i>Accruals</i>	
	OLS	OLS
<i>CFO</i>	-1.711*** (0.000)	-1.925*** (0.000)
<i>DCFO</i>	-0.202*** (0.006)	-0.062** (0.023)
<i>CFO*DCFO</i>	0.683 (0.366)	0.515* (0.072)
<i>IPOBANK</i>	0.000 (0.952)	0.005 (0.203)
<i>IPOBANK*CFO</i>	0.001 (0.981)	-0.071* (0.073)
<i>IPOBANK*DCFO</i>	-0.007 (0.477)	-0.011* (0.071)
<i>IPOBANK*CFO*DCFO</i>	0.081 (0.412)	0.102* (0.076)
<i>BANK</i>	0.001 (0.780)	-0.004 (0.306)
<i>BANK*CFO</i>	0.000 (0.997)	0.052 (0.174)
<i>BANK*DCFO</i>	-0.005 (0.384)	0.010* (0.084)
<i>BANK*CFO*DCFO</i>	-0.140** (0.015)	-0.041 (0.450)
<i>Controls, Controls*CFO, Controls*DCFO, Controls*CFO*DCFO</i>	Included	Included
Constant	-0.664*** (0.000)	-0.274*** (0.000)
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
# of observation	3,900	12,245
Adjusted/Pseudo R ²	87.63%	85.93%

Table 12. The effect of bank IPO on bank lending behavior: Split-sample analysis based on bank SOE status

This table presents the results from subsample analysis of the effect of bank IPOs on loan terms, where the sample is partitioned based on whether a bank is state-owned bank. Columns 1, 3, and 5 (2, 4, and 6) report the regression results for loans from SOE (non-SOE) bank. The dependent variables in Columns 1 and 2, 3) and 4, and 5 and 6 are, respectively, *Loan Maturity* (natural logarithm of loan maturity), *Collateral Requirement* (an indicator variable that equals 1 if the loan is collateralized), and *Interest Rate* (actual loan interest rate – the China central bank’s base rate for loans). See Appendix for variable definitions. In parentheses are *p*-values based on robust errors adjusted for borrower-level clustering (Peterson (2007)). The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel A: Screening incentive: Split-sample analysis based on whether or not a bank is state-owned.

	(1)	(2)	(3)	(4)	(5)	(6)
	SOE Bank=1	SOE Bank=0	SOE Bank=1	SOE Bank=0	SOE Bank=1	SOE Bank=0
Model Specification	OLS	OLS	Logit	Logit	OLS	OLS
Dependent variable	<i>Loan Maturity</i>		<i>Collateral Requirement</i>		<i>Interest Rate</i>	
<i>ROA</i>	0.272 (0.348)	1.622*** (0.004)	-2.952*** (0.001)	-5.549* (0.099)	-0.039 (0.386)	0.042** (0.048)
<i>ROA*Post Bank IPO</i>	1.075*** (0.007)	-0.377 (0.542)	-2.365** (0.019)	0.181 (0.968)	-0.671** (0.014)	-0.025 (0.964)
<i>Post Bank IPO</i>	-0.087*** (0.001)	-0.090*** (0.008)	0.196 (0.259)	-0.377 (0.276)	-0.059* (0.098)	0.030 (0.622)
<i>Controls</i>	Included	Included	Included	Included	Included	Included
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
# of observations (Loans)	10,371	2,793	10,371	2,793	961	222
Adjusted/Pseudo R ²	11.2%	10.4%	10.1%	16.8%	20.3%	36.5%
Diff. in coefficient on <i>ROA*POST Bank IPO</i> (χ^2 stat)	8.51** (one-tailed at 1%, two-tailed at 1%)		3.56*** (one-tailed at 5%, two-tailed at 10%)		3.66*** (one-tailed at 5%, two-tailed at 5%)	
Prob > χ^2	0.004		0.064		0.052	

Table 12 (Cont'd)

This table presents the split-sample regression results of bank monitoring effect associated with bank IPO based on whether the bank is state-owned. Column 1 (2) reports the regression results for loans from SOE (non-SOE) banks. The dependent variable is *Accruals* (earnings before extraordinary items minus cash flow from operations and scaled by beginning total assets). See Appendix for variable definitions. The symbols ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel B: Bank monitoring: Split-sample analysis based on whether or not a bank is state-owned.

	(1)	(2)
	SOE Banks	Non-SOE Banks
Model Specification	OLS	OLS
Dependent Variable	<i>Accruals</i>	
<i>CFO</i>	-1.877*** (0.000)	-1.777*** (0.000)
<i>DCFO</i>	-0.151*** (0.000)	-0.132*** (0.000)
<i>CFO*DCFO</i>	0.471* (0.051)	0.589** (0.035)
<i>IPOBANK</i>	-0.000 (0.872)	0.005 (0.589)
<i>IPOBANK*CFO</i>	-0.027 (0.349)	0.024 (0.826)
<i>IPOBANK*DCFO</i>	0.002 (0.646)	-0.002 (0.887)
<i>IPOBANK*CFO*DCFO</i>	0.101** (0.029)	0.018 (0.920)
<i>BANK</i>	0.001 (0.692)	-0.006 (0.489)
<i>BANK*CFO</i>	0.013 (0.601)	-0.050 (0.586)
<i>BANK*DCFO</i>	-0.001 (0.824)	0.015 (0.254)
<i>BANK*CFO*DCFO</i>	-0.071* (0.079)	0.181 (0.133)
<i>Controls, Controls*CFO, Controls*DCFO, Controls*CFO*DCFO</i>	Included	Included
Constant	-0.169*** (0.000)	-0.200*** (0.000)
Year Fixed Effects	Yes	Yes
Firm Fixed Effects	Yes	Yes
# of observation	16,902	12,537
Adjusted/Pseudo R ²	83.57%	83.59%

Table 13. Borrower risk profile changes surrounding bank IPOs

This table presents analyses of borrowers' risk changes from the pre- to the post-IPO regime. Panel A presents the univariate comparison results, while Panel B presents results of multivariate regressions controlling for bank and year fixed effects. Post IPO is a dummy variable that is equal to 1 if the loan was originated after the lending bank went public and 0 otherwise. See Appendix for variable definitions. In parentheses are p -values based on robust errors adjusted for firm-level clustering (Peterson (2007)). The symbols ^{***}, ^{**}, and ^{*} stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel A: Univariate comparison of borrower risk profile changes from before the IPO to after the IPO

Variables		Pre-IPO	Post-IPO	Diff (Pre – Post)
<i>ROA</i>	Mean	0.024	0.028	-0.004***
<i>MB</i>	Mean	1.534	1.622	-0.088***
<i>Leverage</i>	Mean	0.215	0.184	0.031***
<i>SIZE</i>	Mean	7.389	7.839	-0.449***
<i>Asset Tangibility</i>	Mean	0.287	0.257	0.030***

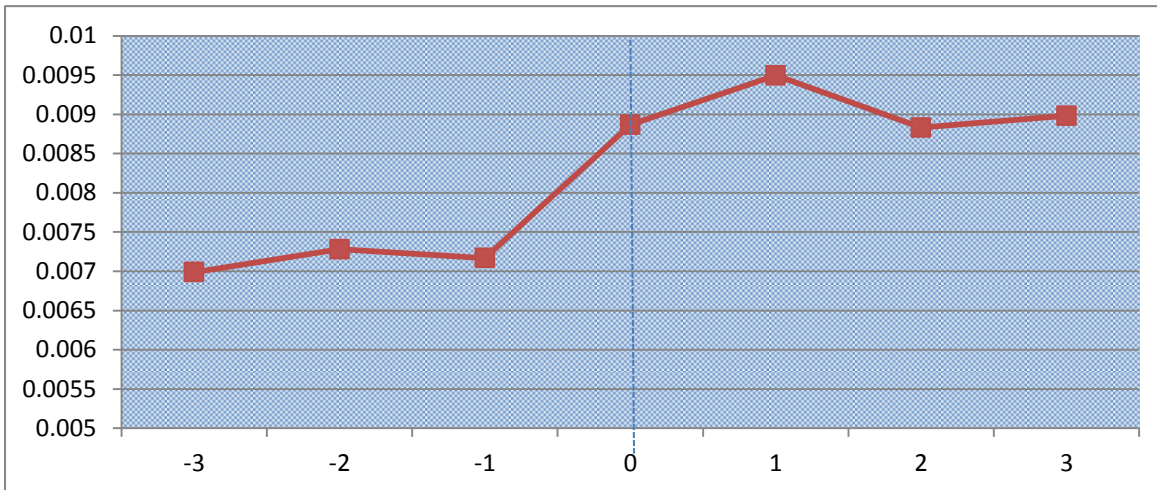
Panel B: Bank and year-fixed effects regressions of borrower risk profile

	(1)	(2)	(3)	(4)	(5)
Model Specification	OLS	OLS	OLS	OLS	OLS
Dependent Variable	<i>ROA</i>	<i>Leverage</i>	<i>MB</i>	<i>SIZE</i>	<i>Asset Tangibility</i>
<i>Post IPO</i>	0.001* (0.072)	-0.005*** (0.032)	0.010* (0.089)	0.045 (0.123)	-0.018*** (0.000)
<i>Asset Tangibility</i>	-0.010*** (0.001)	0.166*** (0.000)			
<i>MB</i>	0.005*** (0.000)	-0.053*** (0.000)			
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Bank fixed effects	Yes	Yes	Yes	Yes	Yes
# of observations (firm)	13064	13064	13064	13064	13064

Figure 1: Bank performance changes from before the IPO to after the IPO

This figure depicts bank performance from t-3 to t+3, where t represents bank IPO year. Panels A, B and C shows time-series distribution of *Bank ROA* (the ratio of bank net income over the book value of total assets), bank *Profit Margin* (the ratio of bank net income over bank total interest income), and *%Nonperforming Loan* (the ratio of overdue loans to bank total assets), respectively.

Panel A: Bank ROA



Panel B: Bank profit margin

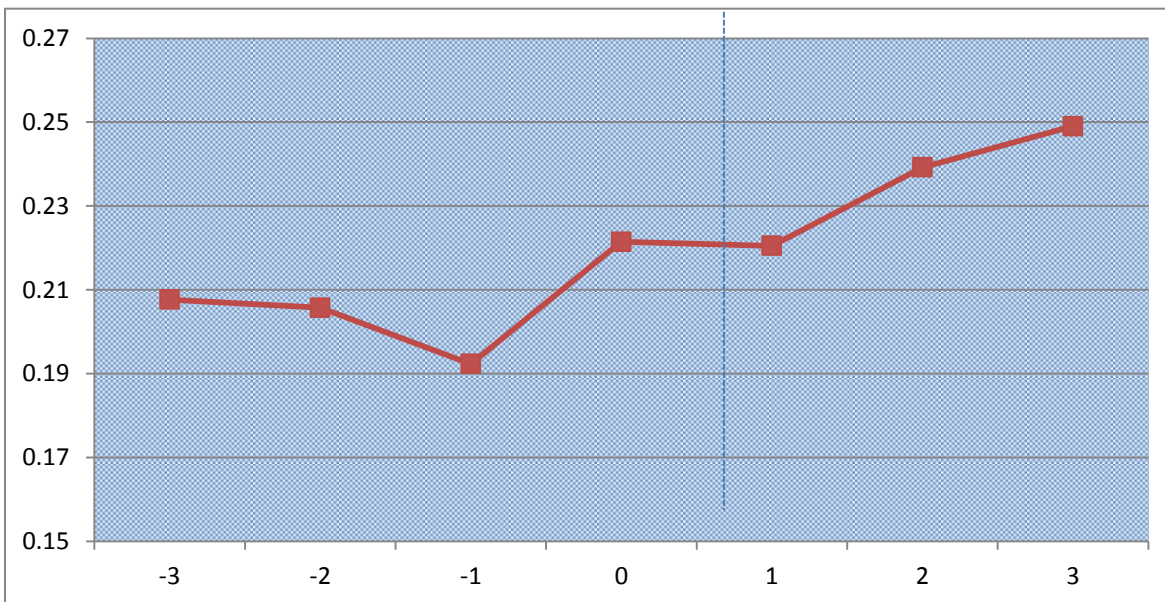


Figure 1 (Cont'd)

Panel C: Percentage of non-performing loans

