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Abstract

This paper shows that politicians' pressure to climb the career ladder increases bank risk exposure in their region. Chinese local politicians are set growth targets in their region that are relative to each other. Growth is stimulated by debt-financed programs which are mainly financed via bank loans. The stronger the performance pressure the riskier the respective local bank exposure becomes. This effect holds for local banks which are under some control of local politicians, it has increased with the release of stimulus packages requiring local co-financing and it is stronger if politicians hold chairmen positions in bank boards.

JEL-Classification: G21; G23; H74

Keywords: Bank Lending; Bank Risk Exposure; Local Politicians; Promotion Pressure

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1. Introduction

Government involvement in the banking sector is often met with skepticism (see, e.g., Krueger, 1974; Shleifer and Vishny, 1994). Typically, empirical studies identify politically driven “distortions” in bank decision making by comparing banks under political influence to banks that are run fully privately (Iannotta et al., 2012; Illueca et al., 2014). However, as banks under public supervision often pursue different objectives than private banks, the two groups of banks may be not fully comparable to each other. Therefore, we follow a different approach by exploiting the fact that the political promotion system in China is fully centralized (Jin et al., 2005) and mainly considers the economic growth realized by local politicians relative to others (Li and Zhou, 2005; Xu, 2011).

This promotion system generates strong incentives. A politician realizes increased promotion pressure, the larger his underperformance relative to others at the same hierarchical level, say the head of a prefecture in competition with the heads of prefectures in the same province. As performance indicators are positively related to economic growth, performance can be improved by more generous bank lending in the respective area. Thus, politicians have strong incentives to use their influence on bank lending and their incentive will be higher the worse is their past performance. Politically driven lending, however, will almost inevitably increase riskiness of bank exposure. Thus, we examine our main hypothesis that an increase in promotion incentives will lead to an increase in bank risk.

Our approach rests on detailed balance sheet data of banks in China, allowing us to calculate indicators of risk taking, including necessary control variables. Banks' risk taking is explained by a set of standard variables that are complemented by our variable of interest, i.e. an index of political promotion pressure. Based on data for the period 2005 to 2012, we find that such a pressure index is likely to contribute to explain risk taking of banks in the respective region. This finding provides a novel type of identification of political influence on the banking system, which is of interest for researchers but also adds to the applied policy discussion in China.

As it is possible that the relation between promotion pressure and bank risk may be plagued by reverse causality in that risky lending hampers growth and, thus, creates promotion pressure, we do not just use lagged explanatory variables, we also apply an IV approach. We instrument promotion pressure by “fiscal decentralization.” The argument is that a higher degree of fiscal decentralization (which varies across political entities in China) gives the respective politicians more rights to make resource allocation decisions in their own region. This will support growth, improve the relative economic ranking, and, finally, lower promotion pressure, without any plausible direct link from fiscal decentralization on bank risk taking. While this role of fiscal decentralization is well established in the literature (e.g., Maskin et al., 2000; Xu, 2011), a strict fulfillment of the exclusion restriction may be debated as, for example, unknown institutional issues may determine the decentralization decision and also banks’ risk. Moreover, decentralization may impact growth beyond the promotion incentives channel. Overall, due to interdependencies in the growth process, the fiscal decentralization instrument cannot be perfect; still, the instrument satisfies the standard econometric tests.

This main result is corroborated by four more findings: (i) The impact from political pressure is only relevant for banks that operate regionally, possibly because they cannot avoid the pressure. Accordingly, our result is about “local” politicians’ promotion pressure, where “local” means the four hierarchical layers below the central government, i.e. provinces, prefectures, counties, and townships (e.g., Xu, 2011); (ii) The relation between political pressure and risk taking became stronger after the release of stimulus packages in 2008. These large-scale macroeconomic stimuli (in response to the financial crisis) are themselves like a shock, amplifying the relation from promotion pressure to bank behavior because they require local politicians to co-finance projects. Politicians can “use” local banks to ensure this co-financing, however, at the price – in particular for politicians under higher pressure – that these banks’ riskiness increases; (iii) The impact from promotion pressure is transferred into bank decisions by politicians holding leading positions in banks. We show that the stronger the role of politicians, such as being chairman of the bank’s board of directors or board of supervisors, the stronger is the effect of promotion pressure; and (iv) We reveal channels through which risk taking takes place, i.e. by reducing liquidity, increasing loan volume and

reducing loan quality. While identification is clearly not perfect, we apply an established empirical approach here.

Our paper is close in spirit to the “political view” of government involvement in the banking system, which emphasizes the inefficient outcomes resulting from politicians’ deliberate policy of maximizing their own personal objectives (Krueger, 1974; Shleifer and Vishny, 1994). As argued by Hainz and Hakenes (2012), a selfish politician often uses subsidized banks inefficiently from a welfare perspective. However, we focus on bank risk and not on overall bank performance (La Porta et al., 2002; Qian et al., 2011), general bank lending behavior (Sapienza, 2004; Becker, 2007), insufficient incentives of bank loan officers (Qian et al., 2015), or government (bailout) guarantees (Gropp et al., 2014; Hakenes and Schnabel, 2014). Moreover, we explicitly show the impact of politicians’ promotion incentives, thus specifying more general political considerations that are long claimed as the main cause of distorted allocation of financial resources (e.g., Imai, 2012). Furthermore, this paper stresses the role of subnational government officials, i.e. local politicians, in bank risk exposure. Unlike the traditional “political view” that relies on the election system of federal states (Sapienza, 2004; Dinc, 2005; Micco et al., 2007; Carvalho, 2014; Englmaier and Stowasser, 2017), we explore a more specific Chinese style risk-channeling mechanism.

Different from those studies emphasizing the positive role of Chinese politicians’ promotion incentives in pushing forward economic development and reducing inequality between regions (Jin et al., 2005; Li and Zhou, 2005), our paper highlights the potential cost brought about by this promotion policy, i.e. increasing bank risk. Another consequence is the sheer amount of local debt, which has led to major concerns. Owing to inadequate repayment capabilities, some local governments are left with only two alternatives:¹ either repaying old debts by raising new ones or not paying off overdue debts. The latter is observed in some localities. Worse still, 78.1% of the debt comes from banks, showing that local governments are closely related to the banking system. It seems that the role of local banks is a key factor in fully understanding the risk of Chinese banks.

The remainder of the paper is organized as follows. Section 2 provides some stylized facts

¹ Source: The Audit Report by National Audit Office of the People’s Republic of China (No.24 of 2013, <http://www.audit.gov.cn/n1992130/n1992150/n1992500/3291665.html>).

about China's political promotion system, followed by a detailed analysis of the risk channeling mechanisms and the development of the hypotheses. Section 3 describes our data, sample and econometric methodology. Section 4 presents the main results of our empirical analysis. In Section 5, the hypotheses on direct personal linkages between politics and banks' boards and their influence on banks' risk-taking are tested. Section 6 analyzes the economic channels by which bank risk is affected and Section 7 shortly informs about results of robustness checks. Section 8 concludes.

2. Stylized Facts and Mechanism in China: Local Politicians and Bank Risk Exposure

2.1 Institutional Background

Different from other transitional and developing countries, both the high degree of political centralization and fiscal decentralization in China make political promotion an important incentive for yardstick competition among local government officials (Jin et al., 2005). The central government, under the tight control of the Chinese Communist Party (CCP), has the ultimate authority to decide on the appointment and removal of all the lower-tier government officials (i.e. local politicians) through a nested personnel-control network (Xu, 2011; Persson and Zhuravskaya, 2016). Meanwhile, local governments are empowered to allocate economic resources in their regions (devolution of government authority) and are responsible for their economic performance. This "centrally controlled decentralization" not only links the political promotion of local officials to the economic development goals of the central government, but also enables local governments to independently make resource allocation arrangements in their own regions. The specific institutional background finally leads to an economic performance-based promotion system (Qiao et al., 2008; Wang, 2013). Relative performance evaluations are widespread in China: provinces, cities, counties, townships and villages are continually ranked by their performance in growth, output and foreign investment (Maskin et al., 2000). Anyone who has been ranked towards the top in these evaluations is more likely to be promoted as a "political bonus" (Xu, 2011).

Though this economic performance-based promotion system has motivated local politicians to lend a “helping hand” in pushing forward local economic growth and reducing inequality between regions (Jin et al., 2005; Li and Zhou, 2005), it also brings about many problems due to the fierce competition in public investment and financial resource grabbing of local governments (i.e. acquiring financial resources through the intervention in financial institutions such as banks, financing platforms etc.). Quantity-based performance indicators, such as GDP growth, building of infrastructure and foreign investment attraction, not only encourage “image projects”, “achievement projects” and “redundant projects”, but also place a large burden on local financing. Sichuan Province, for example, one of the commonly-seen localities being particularly ambitious regarding infrastructure projects, had announced its plans of spending 4.3 trillion yuan only on the construction of three highways, five railroads and one airport for the years 2014 and 2015. The figure would double Sichuan’s GDP of the entire year 2012 and is 10 times as high as its fiscal revenue during the same period.² How can local governments raise all the money they need for their ambitious investments? Ever since 1994, Chinese local governments are not allowed to borrow money directly or run a budget deficit. Large funding gaps resulting from yardstick competition of local government officials stimulated the innovation of less-regulated and riskier debt-financing vehicles. Table A1 in Appendix A gives a timetable of major events related to Chinese local debts since 2008.

Financing platforms, one of the vehicles which have evolved in China, provide local governments with a corporate structure to borrow from the market (85% are bank loans) and to quickly develop infrastructure (see World Bank, 2009). They are treated as municipal corporations under the Company Law of the Peoples’ Republic of China (PRC). However, the law does not clarify the relationship between financing platforms and the local government, including the limits of the financial liability of the local governments. The platforms act as financing units, public sector investor, land development agent and project sponsor (or owner). An estimated 70% of financing platforms are under the direct control of the municipal governments, while in other cases they may report to the department of construction, the local asset management department, or the local department of reform and development (World

² Source: China’s Local Government Debt Crisis: Though Heavily Leveraged and Linked to Shadow Banks, Provincial Infrastructure Spending Will Come Just Short of A Hard Landing (International Business Times, 2013).

Bank, 2009).

Columns (1) and (2) in Table 1 describe the debt raising units of local governments by the end of 2012. Financing platform-companies account for 45.7% of the total audited local government debts. The proportion of bank loans extended to financing platforms also shows their significant role in bank risk channeling. For example, around 20% of the loans extended by Industrial Bank and Minsheng Bank went to financing platforms by mid-2010. This figure is much higher for local banks. For example, all the six largest borrowing customers of Huishang Bank were financing platforms by the end of 2010, accounting for 53.2% of the total loan volume. By the end of 2012 even the eight largest borrowing customers of this bank were financing platforms.

[Table 1 about here]

2.2 Mechanisms and Hypotheses

Though the concept of a “promotion-motivated competition model” and its impact on local public investment and economic growth have gained much academic consent nowadays in China, there are only few researchers who consider the impact this model may have on the stability of China’s financial system. Qian et al. (2011) show that stronger promotion incentives of local politicians are usually associated with more medium and long term credit. However, the risk of banks has been under-researched in this context. As shown in Table 1, almost 80% of government debt comes from bank loans, indicating that the usage of bank money and its financing models will inevitably impact bank risk. The following summarizes three mechanisms how political promotion incentives may affect bank risk, while for politicians it seems to be more difficult and less effective to mandate firms directly to invest (Shi and Huang, 2014).

First, since 92.1% of local government debts are spent on public infrastructure projects whose recovery of funds takes a fairly long time (in particular with low-yield projects), banks are likely to suffer a higher credit and default risk due to the longer loan term and lower bank liquidity (see Campbell and Taksler, 2003, for the relationship between term and risk). According to an audit report announced by the National Audit Office of China in 2011, a total

of 1,734 platforms (i.e. 26.4%) were loss-making companies by the end of 2010.³ Massive debts used for building expressways, universities and hospitals have put some localities under heavy pressure to repay debts because of the low fee collections.

Second, the quality of bank loans can deteriorate as a result of financing platforms experiencing severe problems such as “land finance” (Tudi caizheng), bad asset quality, and imperfect guarantee mechanisms. The repayment of debts depends heavily on the revenue of land sales, which may account for more than half of the total promised debt repayment in some localities. However, with the implementation of a series of stringent real estate policies and a slowdown of the Chinese economy in recent years, land revenue can no longer meet the promised volume target as easily as before. Moreover, some financing platform companies strive to obtain debt funds by using fake or illegal quality-based mortgages or overestimate the values of quality-based mortgages. Finally, a reciprocal guarantee model of platforms – i.e., that they guarantee for each other – makes it more likely for a platform to be affected by contagion effects.

Third, due to a shorter average tenure of local politicians caused by promotion competition and career mobility strengthens the tendency for local governments to over-issue debt and to be more careless about investing and debt-financing (e.g., Persson and Svensson, 1989). Given the above discussed sources of bank risk, this paper hypothesizes that:

Hypothesis 1. Promotion incentives of local politicians may affect bank risk, and an increase in promotion incentives will lead to an increase in bank risk.

One may argue that the effect of promotion incentives on bank risk can differ among different banks. According to an official report, platforms of prefecture-level and county-level account for 70% of the total number of platforms in China⁴, implying that city commercial banks and rural cooperative financial institutions are more vulnerable to the default of platforms. Besides, direct bank control or personnel appointment rights in some prefectures and counties facilitate yardstick competition. Some city commercial banks are even regarded as the “second finance level” of local governments (Qian et al., 2011). Thus, it is more likely

³ Source: The Audit Report by National Audit Office of the People’s Republic of China (No.35 of 2011, <http://www.audit.gov.cn/n1992130/n1992150/n1992500/2752208.html>).

⁴ Source: The Audit Report by National Audit Office of the People’s Republic of China (No.35 of 2011, <http://www.audit.gov.cn/n1992130/n1992150/n1992500/2752208.html>).

for banks on prefecture-level and county-level to be affected by local politicians' promotion incentives. We therefore propose that:

Hypothesis 2. The effect of promotion incentives on bank risk is significant for city commercial banks, rural commercial banks and rural cooperative financial institutions.

We consider the possibility that the effect of promotion incentives on bank risk may differ over time. To mitigate the shocks brought about by the global financial crisis of 2008, the Chinese central government announced the implementation of a 4 trillion yuan stimulus package mainly aimed at infrastructure projects. This policy imposed a heavy financial burden on local governments as it was required that 70% of the funds needed by the package were to be reallocated from the budget of local governments. According to the Chinese Regional Financial Operation Report (2010)⁵ released by the central bank, the total number of platform companies which played a significant role in grabbing financial resources from banks for local governments exceeded 10,000 by the end of 2010, while there were only around 3,000 at the first half of 2008. This rapid increase may indicate a closer relationship between promotion incentives and bank risk. Therefore we expect that:

Hypothesis 3. The effect of promotion incentives on bank risk is particularly strong after the release of stimulus packages in 2008.

Then, we discuss the role of the China Development Bank (CDB), the only policy bank which is highly involved in local financing platforms. Politicians aim for projects being financed by the CDB, whose final decision in this respect is made by CDB's headquarter, especially for large projects and infrastructure-related projects, based on the guarantee capacity of local governments. Politicians with higher promotion pressure usually have lower probability to get these cooperating projects because of their relatively poor economic rankings, which implies poor guarantee capacity. Consequently, these politicians need to turn to local banks for loans, leading to an increase of local bank risk. We therefore propose that:

Hypothesis 4. The effect of promotion pressure on bank risk is stronger for the regions where the CDB is less involved.

⁵ Source: The Chinese Regional Financial Operation Report (2010, http://www.pbc.gov.cn/publish/goutongjiaoliu/524/2011/20110601212610189374552/20110601212610189374552_.html).

If there is political pressure, there must be a mechanism by which this pressure is transformed into banks' decisions. A natural candidate for such a mechanism is representation of politicians in bank's boards. As politicians are board members in most banks in some way, we derive more concrete implications from this general idea. We expect more impact from politicians if they have more influence on decision making. The main impact in this respect should be their position as chairman of a board at the bank:

Hypothesis 5. The effect of promotion incentives on bank risk is stronger, if politicians are chairing a board of the bank vs. being an ordinary member.

However, further effects may be of interest in order to sharpen the general idea. As next hypothesis we will test whether the impact of politicians is stronger if they are active at the board of directors compared to the board of supervisors. This would make sense as the board of directors is clearly the more important body for making loan decisions and running the bank business in general.

Hypothesis 6. The effect of promotion incentives on bank risk is stronger, if politicians are chairing the board of directors vs. the board of supervisors.

It is relevant to note that not only active politicians are members of bank boards in China but also former politicians, i.e. here individuals who were active in political positions of local governments. One would expect that active politicians take stronger efforts in order to impact bank behavior and – of interest here – to push towards a policy leading to higher risk taking of the respective banks.

Hypothesis 7. The effect of promotion incentives on bank risk is stronger, if politicians are still active in politics vs. being former politicians.

3. Data and Empirical Strategy

3.1 Data

Since a balanced panel would reduce our sample considerably, we test the hypothesis using an unbalanced panel of 147 Chinese banks for the period 2005-2012. All the banks in the sample have observations for at least 4 years and we cover nearly 80% of the total of Chinese banks with publicly-released data that existed before 2010. Our results are robust to

including banks with less than four years of observations or using a balanced panel (results are available on request). Accounting data on banks stem from the annual bank reports, and data on the macro-economy are all from the “China City Statistical Yearbook”, the “China Statistical Yearbook” or the website of the People’s Bank of China.

Regarding bank types, we distinguish four types of Chinese banks of which the first two types operate on a national level while the remaining two types operate on a local level: large commercial banks, joint-stock commercial banks, city commercial banks and rural banks (i.e. rural commercial banks or rural cooperative financial institutions). As shown in Panel A of Table 2, all the existing five large commercial banks (i.e. Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank and Bank of Communications) and all 12 joint-stock commercial banks (i.e. China Citic Bank, China Everbright Bank, Huaxia Bank, China Guangfa Bank, Ping An Bank, China Merchants Bank etc.) are included in our data set. Local banks, i.e. city commercial banks and rural banks, constitute by far the largest part of our sample concerning the number of banks. By contrast, in terms of total assets the five large commercial banks and the joint-stock commercial banks represent 87.5% of the total assets represented in our sample. Although there are many smaller rural banks missing in the sample, the rural banks included represent still 79.3 % of the total assets of this group of banks. Overall, our sample contains 97.9% of all banks’ assets in China for the year 2009 and 92.2% for 2012.

[Table 2 about here.]

Regarding regional distribution, branches of national banks, such as the Bank of China, cover all the 31 provinces and 283 prefecture-level cities. Regarding the city commercial banks included in our sample, they cover 87.1% of all provinces. There are four remote provinces which are not covered and which altogether host only three city commercial banks (Hainan, Jilin, Qinghai, and Tibet). Figure 1 shows the distribution of city commercial banks which are covered or not covered in the sample. Provinces in the figure are shaded to indicate their relative GDP. As shown in Figure 1, the higher the GDP level of a province is, the more city commercial banks the province has, and the more banks are covered by our study. Overall, the sample covers 70.5% of all the cities which have city commercial banks.

[Figure 1 about here.]

3.2 Empirical Strategy

3.2.1 Empirical Model

Our first and main hypothesis is that promotion incentives of local politicians can affect bank risk taking, and an increase in promotion incentives will lead to an increase in bank risk. The basic empirical specification to test the hypothesis is given as follows,

$$Z_{b,t} = \alpha_0 + \alpha_1 P_{b,t-1} + \alpha_2 X_{b,t-1} + \alpha_3 Y_{t-1} + \alpha_4 M_{t-1} + \eta_b + \mu_{b,t} \quad (1)$$

where $Z_{b,t}$ is a measure of the risk of bank b for period t . $P_{b,t-1}$ are the promotion incentives of local politicians corresponding to bank b . $X_{b,t-1}$ is a matrix of bank-level control variables, Y_{t-1} represents macro-level control variables, M_{t-1} controls for the impact of the concentration in the banking sector. η_b is the unobserved individual effect. $\mu_{b,t}$ is the error term and $\alpha_1, \alpha_2, \alpha_3, \alpha_4$ are slope coefficients or vectors of coefficient estimates. According to Hypothesis 1, $P_{b,t-1}$ is the key variable in the regression, and we expect the corresponding coefficient α_1 to be negative when $Z_{b,t}$ is measured by the z-score (as higher z-score implies less riskiness). The construction and measure of all variables is described in detail in Section 3.2.3.

It is possible that our results are affected by endogeneity of political promotion: The risky behavior of banks may impact a series of macro-economic variables, leading to a change in the promotion incentive of local politicians. To alleviate this problem, all the explanatory variables are lagged by one period (see Marques et al., 2013). In addition to that procedure, an instrumental variable approach will be used.

3.2.2 Instrumental Variable Approach

We propose fiscal decentralization as an instrumental variable for the political promotion index (an alternative instrument is discussed in Section 7 “Robustness tests”). The argument runs as follows: a higher degree of fiscal decentralization gives local politicians more rights to make resource allocation decisions in their own regions, which more likely leads to a better economic ranking and lower promotion pressure. At the same time, there seems to be no

obvious direct relationship between the degree of fiscal decentralization and bank risk taking.

For the former aspect, a large number of studies has provided evidence that fiscal decentralization can lead to better economic performance (e.g., Akai and Sakata, 2002; Thornton, 2007). Decentralization gives local governments more power to allocate economic resources in their regions and local governments are better positioned than the national government to deliver public services that match local preferences and needs, and this will lead to faster local growth. These effects have been found for China by Maskin et al. (2000), Chen et al. (2005), Li and Zhou (2005), or Xu (2011).

For the latter aspect, the change in the risk taking of one bank is hardly influenced by fiscal decentralization directly. Fiscal decentralization itself can be affected by many factors, especially the changes in institutional and policy factors, such as preference dispersion between the central and local governments (Ding and Deng, 2008). Actually, fiscal decentralization is a devolution of fiscal authority and decision-making authority for local governments. The ultimate goal for the implementation of fiscal decentralization is to provide incentives for local politicians by giving them more power for resource allocation but there is no relation to bank governance or bank behavior. However, fiscal decentralization strengthens politician's incentives as shown by Jin et al. (2005), Li and Zhou (2005), Xu (2011), or Wang (2013). These sharpened incentives impact economic activity and thus finally bank risk.

As a measure of fiscal decentralization, we primarily use the ratio of local government's own revenue to its total expenditure (Akai and Sakata, 2002). Compared with two other commonly used proxies for fiscal decentralization, the share of local government's spending in total government spending (Qiao et al., 2008) and the share of local government's overall revenue in total government revenue (Wang, 2013), our measure can well reflect how public spending at lower-level government is maintained on the basis of its own revenue.

In order to show that fiscal decentralization is convincing as an instrument for political promotion in an econometric sense, we proceed as follows: the Hausman specification test indicates that there exists an endogeneity problem in an econometric sense. The first-stage regression results show that fiscal decentralization is significant and negatively related to promotion pressure. Besides, the F-test is always above 10 and the Stock-Yogo test is way above 10% maximal IV size (except national banks), which further support the

appropriateness of the IV for the whole sample and the sample of local banks. Results related to first-stage regressions are shown in [Table A2](#) in the Appendix.

Despite these econometric reasons in favor of fiscal decentralization as a useful instrument, there remain concerns from an economic perspective. In principle, we cannot prove that an instrument works well. In our case, there is such a high degree of interdependencies in the line of argument from promotion pressure to bank risk taking, that (i) unknown determinants may influence both, fiscal decentralization and bank risk at the same time, (ii) fiscal decentralization may have a direct influence on bank risk (beyond the one through promotion pressure) and (iii) risky banks may create promotion pressure to some extent. Despite these remaining concerns, we believe – as argued above – that fiscal decentralization is useful as an instrumental variable for political promotion pressure.

3.2.3 Construction of the Variables

In this section we explain the construction of variables which we use in the above introduced regressions. The LHS variable is (a) bank risk Z , the RHS variables are (b) promotion pressure P (representing promotion incentives), (c) bank-level controls X , (d) macro-level controls Y and (e) bank concentration M .

(a) Bank risk variable $Z_{b,t}$: The literature has proposed a variety of measures for bank risk, such as expected default frequency (Altunbas et al., 2010), risk asset ratio (Gropp et al., 2011) or volatility of equity returns (Laeven and Levine, 2009). However, expected default frequency and volatility of equity returns are no appropriate measures to capture the risk of local banks in China because there are no data for unlisted ones (Zhang and He, 2012). Moreover, some banks don't directly report risk asset volume or risk asset ratio. Thus, in this paper, we primarily use the z-score (Laeven and Levine, 2009; Beck et al., 2013), which equals the return on assets plus the capital asset ratio of each bank divided by the standard deviation of asset returns, to measure bank risk. As a broad measure of insolvency risk, it encompasses both credit risk and market risk (Marques et al., 2013).

The z-score is by construction an ex post-measure of bank risk but cannot capture whether the bank is indeed willing to take risk ex ante. However, for our purpose this is not a crucial limitation as we are primarily interested in the pressure from outside. Still, the z-score has

obvious limitations but better data are not available and thus it is widely used in empirical research on the Chinese banking sector (e.g., Xu and Chen, 2012). A higher z-score indicates a less risky bank. We compute the standard deviation of asset returns using 4-year rolling windows and take the natural logarithm of it because of the high skewness (Laeven and Levine, 2009).

(b) Promotion incentives $P_{b,t}$: In the Chinese system local politicians are ranked among each other and only the better ones will climb the political career ladder. This ranking is mainly determined by economic performance of the respective region and, indeed, studies by Maskin et al. (2000), Li and Zhou (2005), and Xu (2011) show the significant effect of economic performance on promotion. While recent studies also show influences from personal connections (Jia et al., 2015) and regional origin (Persson and Zhuravskaya, 2016), they confirm the relevance of economic performance for promotion. Due to this clear linkage, we measure promotion pressure by the gap of the region's performance under a politician's responsibility to competing regions. The larger this gap, the stronger is promotion pressure and then politicians may pressure stronger for aggressive bank lending.

The construction of the promotion pressure index $P_{b,t}$ follows the concept of earlier studies and requires two decisions being made. First, we need to choose evaluation indicators that are essential for politicians' promotion. It seems obvious to include GDP growth rate as the most important evaluation indicator for our index construction (Xu, 2011). In addition, fiscal surplus (revenues minus expenditures divided by GDP) and unemployment have also shown to be significant in the evaluation of local development in recent years (Qian et al., 2011), and thus will be considered too. These three performance indicators are equally weighted.

Second, we have to make a decision which regions are seen to be competing. For the 283 prefecture-level cities, a comparison will be made among the cities in the same province rather than among all cities all over the country, since province-level leaders have the power to hire and fire staff in prefecture-level cities (Xu, 2011). For the 31 province-level regions, the comparison refers to all provinces in the country.

Based on the above two decisions, we construct the promotion pressure index as follows.

Let $e_{i,t}^k$ ($k=1,2,\dots,n$) be the k -th evaluation indicator of local politicians' performance in region i and $S_{i,t}^k \in \{0,1,2,3\}$ be the pressure score assigned to region i based on the k -th evaluation indicator. For indicators $e_{i,t}^k$ satisfying the condition that a higher value implies better economic performance, if the value of it falls into the interval $[V_{\min}, (\bar{V} + V_{\min}) / 2)$, where V_{\min} and \bar{V} are the minimum value and average value of the corresponding comparable sample respectively, assign 3 to $S_{i,t}^k$. If the value of $e_{i,t}^k$ falls into the interval $[(\bar{V} + V_{\min}) / 2, \bar{V})$, assign 2 to $S_{i,t}^k$. If the value of $e_{i,t}^k$ falls into the interval $[\bar{V}, (V_{\max} + \bar{V}) / 2)$ where V_{\max} is the maximum value of corresponding comparable sample, assign 1 to $S_{i,t}^k$. If the value of $e_{i,t}^k$ falls into the interval $[(V_{\max} + \bar{V}) / 2, V_{\max}]$, assign 0 to $S_{i,t}^k$. Namely,

$$S_{i,t}^k = \begin{cases} 0 & , \text{ if } e_{i,t}^k \in [(V_{\max} + \bar{V}) / 2, V_{\max}] \\ 1 & , \text{ if } e_{i,t}^k \in [\bar{V}, (V_{\max} + \bar{V}) / 2) \\ 2 & , \text{ if } e_{i,t}^k \in [(\bar{V} + V_{\min}) / 2, \bar{V}) \\ 3 & , \text{ if } e_{i,t}^k \in [V_{\min}, (\bar{V} + V_{\min}) / 2) \end{cases} ;$$

Similarly, we can assign a value among 0, 1, 2, 3 to $S_{i,t}^k$ as follows when $e_{i,t}^k$ satisfies the opposite condition that a higher value implies worse economic performance. Namely,

$$S_{i,t}^k = \begin{cases} 0 & , \text{ if } e_{i,t}^k \in [V_{\min}, (\bar{V} + V_{\min}) / 2] \\ 1 & , \text{ if } e_{i,t}^k \in ((\bar{V} + V_{\min}) / 2, \bar{V}] \\ 2 & , \text{ if } e_{i,t}^k \in (\bar{V}, (V_{\max} + \bar{V}) / 2] \\ 3 & , \text{ if } e_{i,t}^k \in ((V_{\max} + \bar{V}) / 2, V_{\max}] \end{cases} .$$

Our promotion pressure index $P_{i,t}$ for local politicians in region i is constructed as

$$P_{i,t} = \sum_{k=1}^n S_{i,t}^k, \text{ where } P_{i,t} \in [0, 3n]. \text{ A higher value of } P_{i,t} \text{ indicates higher promotion pressure}$$

for local politicians in region i . As $P_{i,t}$ here is not a fully metric measure, we will check if there are non-linear effects or range-specific effects on our dependent variable. In the case that a linear relationship exists, promotion incentives of local politicians corresponding to bank b , P

$P_{b,t}$, equals to $P_{i,t}$. In the case that a non-linear relationship exists, $P_{b,t}$ is defined as a dummy variable which takes a value of 1 if $P_{i,t}$ reaches or gets greater than one certain threshold, and otherwise takes a value of 0.

For national banks, the promotion pressure index corresponds to the weighted average level of the regional promotion pressure indices, which is constructed as follows:

$$P_{b,t} = \sum_{j=1}^{31} \frac{N_{j,b}}{N_b} P_{j,t} \quad (5)$$

where j represents the j -th province, $P_{j,t}$ is the promotion pressure index for province j , N_b is the number of the subsidiaries of bank b all over the country, $N_{j,b}$ is the number of the subsidiaries of bank b in province j .

Therefore, $P_{b,t}$ reflects the pressure that results from the relative ranking of three economic indicators. A higher value of $P_{b,t}$ indicates a lower economic ranking and thus higher political promotion pressure. Moreover, in Section 7 we show that results are quite robust to variations in the measure of promotion pressure.

(c) Bank-level control variables $X_{b,t-1}$: Based on the work of Laeven and Levine (2009) and Altunbas et al. (2010), we include bank size and ownership structure as bank-specific control variables. Bank size is measured as the log of banks' total assets. The ownership structure is measured by two dummy variables which take the value of one or zero respectively if the bank is state-owned in any form. Theory suggests that large banks are better placed to buffer their lending activity against shocks affecting the availability of external finance (Gambacorta and Mistrulli, 2004; Altunbas et al., 2010). However, as often pointed out (e.g., Boyd and Runkle, 1993), "too big to fail" perceptions may encourage large banks to take more risks. Thus, there is no consistently expected relationship between bank size and bank risk. We also include banks' ownership structure to capture the impact of explicit government support on bank risk (De Nicoló and Loukoianova, 2012). The charter value hypothesis indicates that state-owned banks take fewer risks to protect future rents (Keeley, 1990), while the market discipline hypothesis supports the view that state-owned banks may be more risk-taking since government support decreases the incentive of outside

investors to monitor bank risk-taking (Marques et al., 2013).

(d) Macro-level control variables Y_{t-1} : Following Altunbas et al. (2010) and Marques et al. (2013), we include a series of macro-level control variables, such as GDP growth rate, aggregate inflation, housing price growth rate and fiscal surplus to GDP ratio. According to theory, the impact of these variables on bank risk may vary. On the one hand, better macroeconomic conditions can increase banks' risk taking by causing a change of their risk perceptions. When GDP growth rate is higher, banks become more optimistic and tolerant to risks, which makes it more likely for them to soften lending standards or to allocate riskier assets in their portfolios (Maddaloni and Peydró, 2011). Similarly, higher inflation (or housing prices) can also lead to higher bank risk through the distortion of banks' risk preference.

On the other hand, better macroeconomic conditions help to reduce the overall risk of banks by increasing the profit of projects in terms of expected net present value. A boost in inflation and housing prices will increase the collateral value and reduce overall credit risk (Altunbas et al., 2010). The fiscal surplus to GDP ratio is introduced here to reflect the implicit guarantee of governments. Just like in the case of explicit support of governments, both the charter value hypothesis and the market discipline hypothesis show an uncertain influence of fiscal surplus to GDP ratio on bank risk. As monetary policy is also identified to be an important determinant of bank risk in China (Zhang and He, 2012), we include the deposit reserve rate which reflects well the stance of Chinese monetary policy, capturing the "risk taking channel" of monetary policy (see Borio and Zhu, 2012, and Ioannidou et al., 2015). A negative relationship between deposit reserve rate and bank risk is predicted here.

To distinguish between national banks and local banks, we control for national macro-level variables and local macro-level variables respectively. To be noted, though GDP growth rate and fiscal surplus to GDP ratio are also used for the construction of the promotion pressure index $P_{b,t}$, correlation coefficients between the promotion index and these two macro-level control variables are not very high, i.e. -0.12 and -0.39 respectively.

(e) Concentration of banking sector M_{t-1} : The impact of market concentration on bank risk is ambiguous. Some argue that increasing bank charter values arising from increased market power create incentives for bank managers to act prudently, thereby contributing to

lower bank risk (Schaeck et al., 2009; Jiménez et al., 2013). Others such as Boyd and De Nicoló (2005) diverge from this “concentration-stability” view and stress a positive relationship between market concentration and bank risk. They argue that increased market power and higher loan rates may intensify firm’s inclination towards riskier investments and thus makes it more likely for banks to experience loan defaults.

Empirical work uses various measures capturing concentration, such as a concentration ratio, the Herfindahl-Hirschman index (HHI), the Lerner index or the Boone index. Different from concentration ratios and the HHI which can only measure competition at the industry level, the Lerner index and the Boone index can measure competition for each bank and are thus regarded as better proxies for the “true” degree of competition (Schaeck and Cihak, 2014). However, the calculation of these two indices relies on information on banks’ costs which is not available for many local banks in our sample. Also, the necessary input for the concentration ratio would only be available for the biggest bank. Considering these data limitations, we use the HHI, which is the sum of squared market shares according to bank loans, to measure market concentration of the banking sector. As the HHI is less appropriate as a measure of banking competition compared to the other indexes mentioned above, and as we are only able to measure the HHI at the national level due to data restrictions, the results on banking competition should be interpreted with caution. Since banking sector concentration is highly correlated with the deposit reserve rate, we do not include these two variables in the same regression.

3.3 Descriptive Statistics

Table 3 shows descriptive statistics of all regression variables, based on annual data for the period 2005-2012. For two key variables, bank risk and promotion, the averages are 3.38 and 3.59, respectively. The promotion index shows a higher standard variation (around 1.77) than bank risk (around 0.80). However, to identify whether promotion pressure is one of the significant determinants of bank risk, we need further information. Since most Chinese local commercial banks report indicators such as net interest margin, liquidity etc. only after 2006 or 2007, the number of observations for channel-specific variables is lower than for other indicators. Especially the long-term loan ratio has only 294 observations, thus it is important

to pay attention to the possible bias related to the lack of observations.

[Table 3 about here.]

Loans constitute the most important part of bank assets in China, with an average loan to deposit ratio of 63.2% and an annual growth rate of 25.3%. The high average proportion of outstanding loans of the largest single borrower (23.5%, greater than the regulatory standard 10%) indicates a high loan concentration in the Chinese banking sector. State ownership or state-legal-person ownership are the two most common bank ownership structures accounting for 39% and 26%, respectively. Moreover, the table also shows ample variation in most channel-specific variables and bank-specific control variables. For example, the minimum liquidity ratio of the sample is only 9.7%, less than half the regulatory standard (25%), while the maximum liquidity ratio reaches 129.4%. The great variation may be an indication of relatively high volatility or heterogeneity of the Chinese banking sector during this period. For macro-specific control variables, both GDP and housing prices have an average annual growth rate of nearly 13%. In these years we observe a negative value for the average fiscal surplus to GDP ratio of -4.0%.

4. Empirical Results: The Effect of Political Promotion on Bank Risk

In this section, we present results on the effect of political promotion pressure on risk-taking of banks in six steps: (a) we establish a threshold effect in the impact of promotion pressure on risk taking and thus use a simple dummy variable in the following. (b) We present results for all banks with lagged RHS-variables and (c) for all banks in an IV-approach. Thereafter we use variations (d) across bank types, (e) over time (by considering the stimulus packages) and also consider (f) the impact of CDB to better identify and understand the effect.

Economic activity might affect bank balance sheets through many channels, of which bank risk taking is one important channel. These channels could in general represent both supply and demand effects. We use appropriate control variables and extensive robustness tests in order to show that our interpretation is likely valid and robust.

(a) Threshold effect. The index of promotion pressure can take values between 0 and 9. This raises the question whether the impact of promotion pressure on bank risk taking is a

linear or rather a non-linear function. We find that basically only values of the index of 6 and larger significantly impact bank behavior. Thus we use in the following a transformation of the promotion pressure index, where the dummy is 1 for stronger pressure (i.e. values larger than 5) and 0 otherwise (a further alternative is shown in Appendix B6).

This transformation decision is derived from using a threshold model and a dummy-approach to check the non-linear effect between the promotion pressure index and bank risk. Some regression results are presented in the Appendix, in [Table B12](#) and [Table B13](#). Table B12 reports results of our preferred threshold model for different samples, indicating a non-linear relationship for the whole sample and the sample of local banks. Table B13 reports results of a dummy-approach for the case where the promotion index is constructed based on the most important indicator, i.e. GDP performance. Results show that a significant impact from promotion pressure exists only for the two less performing categories.

(b) All banks. The regression results of our basic specification using both national and local data are presented in Table 4. Columns (1)-(5) report fixed-effect estimation results of the one-period lagged model.

Robust and clustered standard errors are provided in parentheses. As shown above, promotion is a dummy variable here. The z-score-measure decreases by 25 percent *ceteris paribus* when the promotion pressure index reaches or gets greater than 6 (column 5). More intuitively, bank risk tends to increase considerably when promotion pressure increases. This result is robust across regressions (columns 1-4) and thus supports Hypothesis 1.

[Table 4 about here.]

Reassuringly, the coefficients of control variables in Table 4 are largely consistent with expectations. Higher market concentration is associated with higher bank risk, indicating that higher market power and loan rates resulting from higher concentration may intensify a firm's inclination for riskier investments and thus lead to higher bank risk (Chong et al., 2013). Larger banks show lower risk, which may indicate better risk management by these banks. GDP growth is positively related to bank risk, indicating that banks tend to soften lending standards or allocate riskier assets in portfolios due to the distortion of their risk preference in better macroeconomic conditions (Xu and Chen, 2012, and Zhang and He, 2012). Higher inflation is associated with an increased bank risk, which may be due to a change of their risk

perception and tolerance as well. The significantly positive coefficient on the deposit reserve rate shows the existence of a risk taking channel of monetary policy in China.

(c) All banks with IV. We repeat the above approach but replace the one-period lagged model by an IV-approach as motivated and introduced in Section 3.2.2. Column (6) of Table 4 reports regression results using fiscal decentralization as the instrumental variable for political promotion (additional IV-regression results can be found in [Table A3](#) in Appendix A). Specifically, the estimated coefficient of the IV-approach is even larger in absolute value terms than that of the one-period lagged approach: The z-score ceteris paribus decreases by 32.6 percent when the promotion pressure index reaches or gets greater than 6.

(d) Bank type. If promotion pressure impacts bank risk, this should become only visible where promotion is organized via competition between local politicians (Hypothesis 2). By contrast, at the national level, any effect from promotion pressure should become small or nonexistent. Thus, we extend our analysis by examining national vs. local banks. Table 5 gives regression results using the instrumental variable approach. Columns (3)-(10) of [Table A3](#) provide more IV-regression results with different control variables and [Tables A4-A7](#) give results using the one-period lagged approach. As shown in Table 5, for national banks (column 1), no significant relationship is found between promotion pressure and bank risk, while for local banks (column 2), higher promotion pressure leads to higher bank risk.⁶ This result is robust to different estimation approaches and different control variables.

[Table 5 about here.]

(e) Stimulus package. If promotion pressure impacts bank risk this should become stronger through the incentives of the stimulus packages from 2008 onwards (Hypothesis 3). Columns (3) and (4) of Table 5 show how the relationship between promotion pressure and bank risk differs for two periods: 2005-2007 and 2008-2012. No significant relationship is found before the release of these stimulus packages, while the relationship becomes much more pronounced after that. Thus, the general picture is consistent with expectations, however, the coefficient sign is never significant for the first sub-period. This is also evident when we

⁶ We further compared the impact of promotion pressure on two different kinds of local banks. We find that the difference between city and rural banks is not statistically significant. However, there are only 36 rural banks in our sample, as many rural commercial banks and rural cooperative financial institutions do not publish any data. Thus, the comparison between city commercial banks and the rural banks is limited.

use balanced panel data ([Table B7](#)). One explanation may be the asymmetric split in terms of years, causing much less observations for the pre-period (305 obs. for pre-period and 675 obs. for post period).

Interestingly, the growth rate of housing prices is negatively related to bank risk after the stimulus packages while this relationship is insignificant before the stimulus packages, indicating that a higher housing price growth rate tends to lead to an increase in the collateral value and thus reduces overall credit risk after the stimulus packages. The impact of GDP growth rate on bank risk also differs in the periods 2005-2007 and 2008-2012. For the latter period, higher GDP growth rate is associated with higher bank risk, which may be attributed to a softening of bank lending standards and increasingly holding riskier assets when banks became optimistic and more tolerant to risks. Before the release of the stimulus packages, however, the impact of the GDP growth rate is insignificant.

(f) Impact of China Development Bank (CDB). For checking the role of CDB on the relationship between promotion pressure and bank risk (Hypothesis 4), we include a cross-term between CBD involvement and promotion pressure into our basic regression model. CDB involvement is measured by the share of loans the CDB makes per region. As CDB only reports loans per province after 2008, the test of hypothesis 7 is based on the data between 2009 and 2012, and CDB involvement is measured at the provincial level. Data related to CDB stem from CDB's headquarter.

Columns (1) to (5) in Table 6 report regression results concerning the impact of CDB with different controls. As shown in the table, except for column 3, the coefficients of the cross-term take positive values and are significant at 10 percent significant level. To give numbers, the overall effect of promotion pressure on bank risk will decrease by 29.6 percent if the share of CDB loans increases by 1 percent (column 5 in Table 6). This indicates that the effect of promotion pressure on bank risk is stronger for the regions where CDB is less involved. Politicians with poor economic rankings and high promotion pressure have lower probability to get cooperating projects with CDB, which encourages them to turn to local banks for loans, causing an increase of local bank risk in the end.

[Table 6 about here.]

5. Positional Indicators of Politicians' Influence on Bank Risk Taking

For testing Hypotheses 5 to 7 we collected data on the linkages between politics and bank management. More concretely we look whether the chairman of the board (of directors, of supervisors) is or was member of a local government institution. The same is done for the ordinary members of these boards. Information about politicians and board composition is mainly taken from the annual bank reports.⁷

We use dummy variables, labeling politicians in bank boards, to construct interaction variables. Table 3 gives an overview of the main characteristics of the dummy variables. Altogether the number of observations for local banks that have concrete board composition information is 745. For these observations we identify all the politicians who were connected to the boards of the local banks in the sample, either as former or present chairman or board member. Also for this reduced sample, the link between promotion pressure and bank risk holds (see column 5 of Table 5).

Panel B of Table 2 informs about the ownership and board structures of banks in the sample for the year 2009. 143 banks have observations for 2009. As shown in the first block of Panel B, 39.1% of banks in the sample are privately owned. The second block of Panel B shows politicians' representation in the boards of banks. For 119 banks this information is available. The high representation of politicians is evident almost for all types of banks. Overall, 78.6% of local banks in the sample have politicians as chairman of the board of directors and 71.8% as chairman of the board of supervisors. Even for private local banks, politicians take an important role in their boards. For example, 76.2% of private city commercial banks have politicians as chairman of a board. These numbers indicate that politicians are basically always involved in bank boards so that we prefer to use variations in the degree of involvement in order to learn about politicians' impact.

Columns (1) and (2) of Table 7 show the results for the interconnections between politics and the board of directors for local banks. Since banking sector concentration can only be measured at the national level and is highly correlated with the deposit reserve rate, we report regression results without banking sector concentration here. The results are best compared to

⁷ Other sources include Database for Local Party and Government Leaders and a series of official websites, such as websites of banks and local governments, websites of the Communist Party of China, Xinhua net etc.

column (2) of Table 5 or column (5) of Table A5. When the chairman of the bank is also a politician the overall effect of promotion pressure on bank risk is clearly increased. However, there seems to be no direct effect from non-chairman members of the directors' board who acted or act as politicians. Interestingly, the coefficient of the general promotion pressure variable is larger in column (2) than in column (1), which reduces the difference. To give numbers: the overall coefficient for promotion pressure in local banks (see Table 5, column 2) is about -0.452 (and -0.284 for the one-period lagged approach, see Table A5), while the sum of effects for active politicians as chairman of board of directors is -0.519 or -0.533 (adding the non-significant promotion term) and for non-chairmen the coefficient is -0.333 or -0.217 (adding the non-significant interaction term).

[Table 7 about here.]

Conducting the same analysis for the board of supervisors provides qualitatively unchanged results as columns (3) and (4) of Table 7 show. Again, politicians as active chairmen increase the average impact from promotion pressure, while non-chairman board members do not exert directly identifiable influence on banks' risk. These results tend to support Hypothesis 5 that chairmen have more impact than ordinary board members.

Hypothesis 6 states that the influence of politicians is stronger when they chair the board of directors compared to the board of supervisors. This effect is only partially supported by results in Tables 7 as the interaction coefficient for chairmen of board of directors is indeed a little higher, but the overall effect of promotion pressure (adding the non-significant promotion term) is about the same for both groups.

Finally, concerning Hypothesis 7, coefficients are always larger if politicians are currently active compared to those who are former politicians. Besides, the coefficients for active politicians are significant at 5%, while the coefficients for former politicians are insignificant. Thus, Hypothesis 6 holds as expected.

6. Channels by which Bank Risk Is Affected

While we show in Section 4 that promotion pressure increases bank risk and that the presence of politicians in bank boards is a transfer mechanism from political pressure to bank risk (Section 5), we are still mute about the channels by which banks' risk is affected. In this section we (a) motivate possible channels, (b) define empirical variables, (c) describe the empirical approach, and (d) discuss results.

(a) Channels. Stronger promotion pressure of local politicians may increase bank risk through the following four channels. The first one is the "liquidity channel". 92.1% of local government debts are spent on public infrastructure projects which indicates that most of the funds borrowed from banks are long-term loans. Besides, the fairly long fund recovery time for these infrastructure projects and problems with debt overdue may also make it more likely for banks to suffer from lower liquidity and thus higher bank risk when promotion incentives are higher. The second channel is the "profitability channel". Similar to the first channel, this channel is also closely associated with local governments' decision how borrowed funds are invested. Low profit or even losses of financing platforms result from low fee collections of infrastructure projects; the frequent occurrence of so called "white elephant projects" in China may exert a negative effect on banks' profitability and bank risks. The third channel is related to the bank risk brought about by increasing loan volumes under higher promotion incentives, i.e. the "volume channel". Beside the infrastructure construction boom, the shorter average tenure of local politicians caused by higher political promotion incentives is another factor that leads to the increase in loan volume. Politicians expect that the debt burden from today will be transferred to their successors after a successful political promotion. The fourth channel is the "quality channel". Higher political promotion incentives may stimulate the fast development of financing platforms. Serious problems such as "land finance", bad asset quality, poor debt solvency and imperfect withdrawal mechanism of these unsoundly regulated vehicles are all posing threats to the quality of bank loans, which may result in higher bank risk.

(b) Channel-specific variables. To measure "bank liquidity", we use a liquidity ratio, defined as liquid assets over short-term liabilities, to identify the role of bank liquidity in linking promotion and bank risk. Medium and long term loan ratios will also be applied to

capture changes in the term structure of bank loans in this process. Regarding “bank profitability” we use return on assets (ROA), since ROA also captures the risk related to higher leverage when compared with return on equity (ROE), and it has been regarded as the key ratio for the evaluation of bank profitability (Athanasoglou et al., 2008). Besides, as net interest income constitutes the most important part of Chinese banks, we also proxy for bank profitability using an alternative measure: net interest margin. To measure “volume of loans” we use the loan to deposit ratio and the growth rate of loans to explore the impact of loan volume in the mechanism (see Qian et al, 2011). Finally, “loan quality” is proxied by the non-performing loans ratio and the loan-concentration ratio, which is measured by the loan proportion of the largest individual customer relative to the net capital.

(c) Empirical approach. To identify the significant channels through which promotion incentives of local politicians affect banks’ risk, we carry out a two-step analysis according to MacKinnon (2008)’s method: In the first step, we analyze how promotion incentives impact variables like banks’ profitability and lending characteristics and how bank risk responds to these variables by estimating the following models:

$$B_{b,t} = \beta_0 + \beta_1 P_{b,t-1} + \beta_2 X_{b,t-1} + \beta_3 Y_{t-1} + \beta_4 M_{t-1} + \nu_b + \varepsilon_{b,t} \quad (2)$$

$$Z_{b,t} = \gamma_0 + \gamma_1 B_{b,t-1} + \gamma_2 X_{b,t-1} + \gamma_3 Y_{t-1} + \gamma_4 M_{t-1} + \theta_b + \mathcal{G}_{b,t} \quad (3)$$

where $B_{b,t}$ represents channel-specific variables, including bank profitability, bank liquidity, volume of loans, and quality of loans, for bank b in period t , while other variables were explained for equation (1) above. ν_b and θ_b are the unobserved individual effects. $\varepsilon_{b,t}$ and $\mathcal{G}_{b,t}$ are the error terms.

In the second step, we regress the bank risk variable on both the promotion variable $P_{b,t}$ and the channel-specific variable $B_{b,t}$, i.e.

$$Z_{b,t} = \delta_0 + \delta_1 P_{b,t-1} + \delta_2 B_{b,t-1} + \delta_3 X_{b,t-1} + \delta_4 Y_{t-1} + \delta_5 M_{t-1} + \zeta_b + \xi_{b,t} \quad (4)$$

ζ_b and $\xi_{b,t}$ are the unobserved individual effect and the error term respectively. A certain channel exists when the following two conditions are satisfied: (a) Both β_1 and γ_1 are

significant; (b) the inclusion of $B_{b,t}$ in the basic regression (1) will decrease the significance of the impact of promotion on bank risk, namely δ_1 is less significant than α_1 . This means that the significant relationship between promotion and channel-specific variables decreases the significance of promotion incentives.

(d) Results. Regressions are based on local banks only because there is no significant effect from promotion pressure at the national level. Table 8 shows how promotion incentives impact channel-specific variables like banks' liquidity etc. Columns (1)-(5) report fixed-effect estimation results of the one-period lagged method after controlling for a series of variables. We find significant promotion pressure effects on four channel-specific variables which all have the expected coefficient signs. Higher political promotion pressure leads to lower bank liquidity and asset quality. Profitability does not depend on promotion incentives, as reflected in the insignificant coefficients. This may be due to the development of the Chinese shadow banking system and the increasing diversification of bank income in recent years⁸ so that the low profitability of infrastructure projects does hardly exert significant impact on the overall profitability of banks.⁹

[Table 8 about here.]

The second leg of the intermediation model is the possible impact of channel-specific variables on bank risk. Results in Table 9 largely confirm results from Table 7. The liquidity ratio is, in line with the literature, negatively related to bank risk (e.g., Laeven and Levine, 2009; Marques et al., 2013). Higher return on assets is associated with higher bank risk, consistent with the work of Xu and Chen (2012). Loan volume, measured by loan to deposit ratio and growth rate of loans, displays a positive relationship with bank risk. This is consistent with the work of Foos et al. (2010) who show that loan growth represents an important driver of bank risk. Higher non-performing loans and loan concentration ratios are also identified to be significant determinants of higher bank risk. Based on Tables 8 and 9, we find that profitability is not a significant variable linking promotion incentives and bank risk;

⁸ See the report by Mingkang Liu, the former chairman of the China Banking Regulatory Commission in Lujiazui Forum of 2011 (<http://finance.qq.com/a/20110520/002070.htm>).

⁹ One may argue that it may take more time until profitability deteriorates. To investigate whether this is the reason, we use a 2 to 5 year lagged promotion index as an explanatory variable of banks' profitability, showing that the coefficients are still insignificant. Thus, if this argument held, it would take more than 5 years for political promotion to have an impact on banks' profitability, rendering this argument unlikely.

also the indicator of a “long-term loan ratio” and “growth rate of loans” is not considered in further analyses.

[Table 9 about here.]

In order to confirm whether a certain channel exists, channel-specific variables are included in the baseline regressions. The significance of the coefficients on promotion pressure in Table A8 is compared with those without channel-specific variables (Column (5) in Table A5). The effects of promotion incentives on bank risk become less significant or even insignificant after the inclusion of those channel-specific variables. This indicates and confirms that bank liquidity, loan volume and quality are important variables linking promotion incentives and bank risk.

Based on the analysis above, we conclude that in regions with higher political promotion pressure, local banks are faced with higher risk as they tend to lend more loans with longer term to a single customer and thus more non-performing loans as a result of the imperfect operating and regulatory system of financing vehicles.

7. Robustness Tests

The robustness checks conducted go into four directions: (a) We modify the data underlying the main analyses in various ways, (b) we employ a different empirical approach, (c) we analyze the characteristics of politicians, (d) we examine whether promotion pressure is basically the same as local growth, (e) we test whether promotion pressure has rather a direct or only an indirect influence – via local economic conditions – on bank risk, (f) we use a series of non-linear models, such as threshold models etc. to check the non-linearity of the relationship between promotion pressure and bank risk, and (g) we apply an alternative instrumental variable.

(a) Modifying data. We change various elements of our main analysis without getting qualitatively different results. (i) Data changes refer to other measures of bank risk (such as non-performing loan ratio and different rolling windows of the z-score). (ii) We also modify the definition of the political promotion index which is based on three variables by either including more sensible performance indicators or by reducing it to the GDP growth rate

variable. (iii) Next, the measure of fiscal decentralization is varied. (iv) We eliminate those few banks from the analysis which had been restructured. (v) Finally, a balanced panel data is used to test our hypotheses.

(b) Another empirical approach. We change the empirical approach away from the panel to a direct analysis of differences regarding promotion pressure and bank risk. The motivation to do so is addressing concerns that we might capture spurious regressions which are difficult to detect in short panels, while taking differences ensures stationarity. Results remain qualitatively unchanged.

(c) Characteristics of politicians. Next we consider personal characteristics of politicians in order to see whether we miss important influences in the main analysis. We see that characteristics such as nationality, gender and working experience do matter. Higher promotion pressure of politicians who have worked in enterprises causes less bank risk, when compared with those who never worked in enterprises. Moreover, female or minority politicians tend to cause less risk under higher promotion pressure.

(d) Promotion pressure vs. local economic conditions. Promotion pressure is based on local economic performance, however, only in relative terms. Thus a certain local growth rate is assessed differently, depending on the growth rates within the peer group. Accordingly, the correlation between local growth and promotion pressure is of limited size only.

(e) Local economic conditions and bank risk. Then we challenge the view that promotion pressure has a direct impact on bank risk but examine the hypothesis that an influence of local economic conditions dominates bank risk. An intermediation approach, however, does not support this hypothesis, indicating that it is indeed promotion pressure that influences bank risk.

(f) Nonlinearity of the relationship. To check the nonlinearity of the impact of promotion index on bank risk, we (i) allow for non-linear effects using a quadratic form in the regression model, (ii) use a threshold model, and (iii) a dummy-approach. We find – as mentioned in Section 4 – that a quadratic form does not enhance the fit of our model. However, results of the threshold model and a dummy-approach show the existence of a certain threshold below which the impact of promotion pressure on bank risk is not significant. These results justify why we re-define our promotion variable based on the threshold.

(g) Alternative instrumental variable. We propose the relative economic performance of competing regions as an alternative instrumental variable. The argument runs as follows: a higher average real GDP growth rate of a region's competing regions gives local politicians more pressure in promotion in the context of "an economic performance-based promotion system". At the same time, real GDP performance of a region's competing regions, which is mainly affected by resource allocation decision of local politicians in their own regions, cannot directly impact GDP and credit of this region.

8. Conclusions

This paper examines whether political promotion incentives of local politicians provide an explanation for observed bank risk in China today. Some stylized facts highlight the possibility that political promotion pressure of local government officials may affect bank risk in the process of financial resource grabbing. To this end, we construct an economic performance-based promotion pressure index. Empirical results show that higher promotion pressure significantly increases bank risk and this relationship is remarkably stronger for local commercial banks and the years after the release of the stimulus packages. These results also seem to hold in IV-regressions and are quite robust to a number of modifications, including the change of samples and the way we measure risk or promotion incentives. We also show that the effect of promotion pressure is stronger if the China Development Bank is less involved or if active politicians hold important positions in banks' boards.

Moreover, we test the mechanisms through which political promotion mechanisms can significantly affect bank risk. Among the four possible mechanisms derived from the literature, we do not find evidence for a profitability channel, which may be due to the increasing diversification of bank income in recent years. In contrast, higher political promotion pressure tends to increase bank risk significantly by causing lower bank liquidity, larger volume and lower quality of bank loans.

The results of our analysis have several potential implications for policy makers: First, controlling bank risk may no longer be limited to financial regulation organizations. Policy makers may also pay attention to root causes of increased bank risks that are to be found in

the area of politics. Second, diversifying the way local governments' finance investments can also be one possible risk controlling method. Nowadays local governments which are not legally vested with the right to raise debt, fill large funding gaps in disguised forms through financing platforms, making it more likely to increase bank risks in the process of financial resource grabbing. Thus, suggesting other financing alternatives such as allowing local governments to issue debt securities may help – but does not ensure – to control bank risk by introducing stricter market discipline into government financing. Third, paying close attention to the changes in some bank risk indicators, such as in the bank liquidity ratio, non-performing loan ratio and loan concentration ratio etc. can also help to control the risks caused by political promotion pressure.

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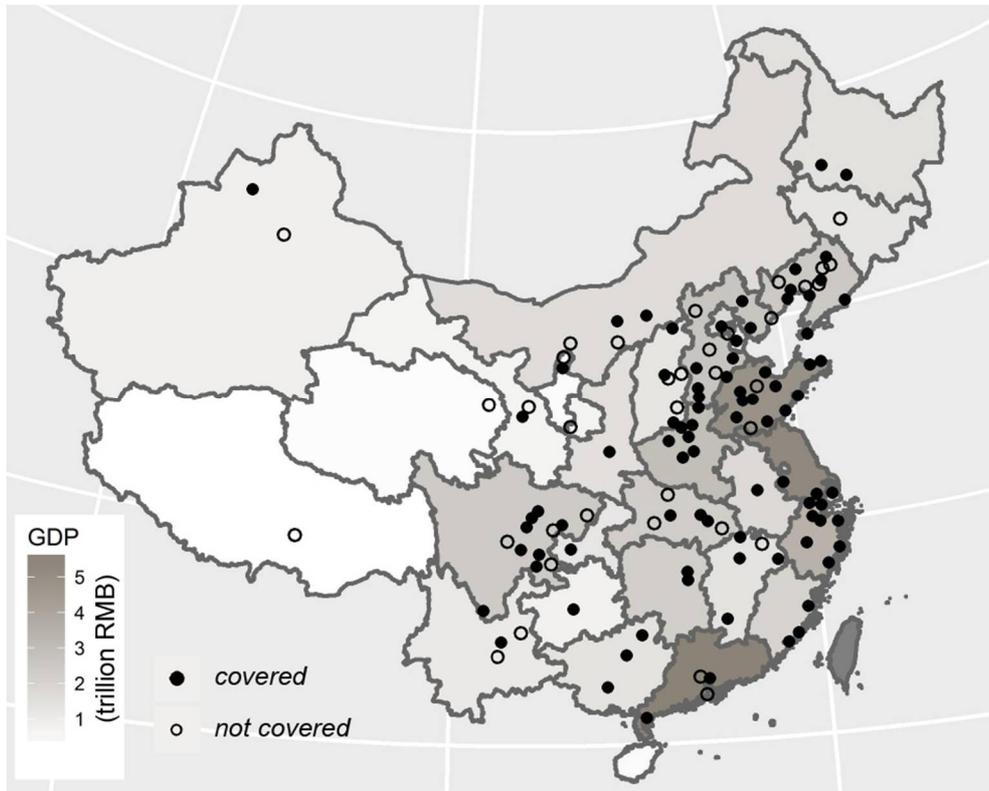


Figure 1 Regional Distribution of City Commercial Banks in the Sample

Note: Dots in the figure show locations of the headquarters of city commercial banks in the sample for 2012. Black solid dots indicate city commercial banks covered by our sample, and empty dots indicate banks that are not covered. Provinces are marked with different colors, to show their relative GDP level. Darker colors indicate a higher GDP level. Name of all the city commercial banks in the figure can be found in <http://baike.baidu.com/link?url=htZ0y92qVAKzy7ZaoSujlmUj6nrhqYX9s5b12unLtWjvf9HhNdlGIXoRqCvXoXacbGyyQ3HUg8O90ds3q5qjMK>.

Table 1 Debt Raising Units and Debt Sources of Local Government Debts by the End of 2012

Debt raising units of local government debts		Debt sources of local government debts	
Debt raising units	Ratio	Debt sources	Ratio
Financing platform companies	45.67%	Bank loans	78.07%
Local governmental departments and institutions	25.37%	Bond issuing	12.06%
Other units	28.96%	Other sources	9.87%
Total	100%	Total	100%

Note: Other units include institutions with government subsidies, public organs and government-affiliated institutions; Other sources include finances from higher authorities, borrowings from other units and individuals. Source: The Audit Report by National Audit Office of the People's Republic of China (No.24 of 2013, <http://www.audit.gov.cn/n1992130/n1992150/n1992500/3291665.html>).

Table 2 Characteristics of the Sample

Panel A: Distribution and Coverage of the Sample								
Type of bank	Number of banks in our sample	Number of banks existing in 2009	Sample coverage: number of banks for 2009 (in %)	Total assets of banks existing in 2009 (in trillion RMB)	Sample coverage: total assets for 2009 (in %)	Sample coverage: total assets for 2012 (in %)		
Large banks	5	5	100	37.9	100	100		
Joint-stock banks	12	12	100	11.2	100	100		
City banks	94	143	63.6	5.3	88.7	77.2		
Rural banks	36	239	14.6	2.9	79.3	28.0		
Total	147	399	35.8	57.3	97.9	92.2		

Panel B: Ownership and Boards Structure of Banks in the Sample for 2009								
Type of bank	Banks with different ownership				Banks with politicians as the chairmen of the boards			Representation of politicians in the boards of private-owned banks as chairmen (in %)
	Number of banks in the sample for 2009	Share of state owned banks (in %)	Share of state legal person owned banks (in %)	Share of private owned banks (in %)	Number of banks with available politician data for 2009	Share of banks with politicians in the board of directors (in %)	Share of banks with politicians in the board of supervisors (in %)	
Large banks	5	100	0	0	5	80.0	80.0	---
Joint-stock banks	12	8.3	50.0	41.7	11	90.9	54.5	100
City banks	91	48.4	26.4	25.2	74	83.8	75.7	76.2
Rural banks	35	0	20.0	80.0	29	65.5	62.1	66.7
Total (local)	126	34.9	24.6	40.5	103	78.6	71.8	71.1
Total	143	35.0	25.9	39.1	119	79.8	70.6	73.5

Note: For Panel A, since banks in the sample require at least 4-year observations (i.e. being established no later than 2009), we compare the sample with the banking sector in 2009.

For Panel B, state owned and state-legal person owned banks are defined by the nature of the capital which accounts for the largest share. State-legal person owned capital is held by state-owned firms and other institutions with legal person certificates. These firms and institutions invest in companies which are independent from them with their own legal assets or through other legal procedures. State owned capital is held by states, i.e. state institutions invest in companies with state-owned assets. "Politicians" refers to those who are working or were working in local government institutions. Since the ownership and board structure of a bank may change during our sample period, Panel B shows the structure of banks in 2009.

Table 3 Summary Statistics

Variables		N	Mean	Std.dev.	Minimum	Maximum
Key variables	z-score (in log)	1051	3.38	0.80	0.33	9.35
	Promotion	1051	3.59	1.77	0	9
Composition of the boards	Chairman_DP	745	0.12	0.32	0	1
	Chairman_DC	745	0.66	0.47	0	1
	Non-chairman_DP	745	0.21	0.41	0	1
	Non-chairman_DC	745	0.68	0.47	0	1
	Chairman_SP	745	0.13	0.34	0	1
	Chairman_SC	745	0.59	0.49	0	1
	Non-chairman_SP	745	0.16	0.36	0	1
	Non-chairman_SC	745	0.60	0.49	0	1
Channel specific variables	Liquidity ratio (in %)	832	52.50	16.32	9.71	129.42
	Medium and long term loan ratio (in %)	294	24.41	17.05	0.23	71.01
	Return on asset (in %)	1023	0.96	0.49	0	2.98
	Net interest margin (in %)	743	2.66	2.43	0.38	21.91
	Growth rate of loans (in %)	1012	25.27	16.90	-65.03	142.96
	Loan to deposit ratio (in %)	888	63.21	9.76	20.62	91.48
	Non-performance loan ratio (in %)	816	2.37	2.39	0	16.01
	Loan concentration (in %)	819	23.49	58.77	0.12	966.5
Industry control	Banking sector concentration (H-H index)	1051	0.11	0.01	0.10	0.13
Bank controls	Bank size (in log)	1051	17.54	1.88	11.34	23.59
	State-ownership	1051	0.39	0.49	0	1
	State-legal-person ownership	1051	0.26	0.44	0	1
Macro-controls	GDP growth rate (in %)	1051	12.85	2.77	-1.20	28.60
	Inflation (in %)	1051	3.10	2.19	-2.35	8.48
	Growth rate of housing price (in %)	1051	12.92	8.33	-10.62	56.68
	Fiscal surplus to GDP ratio (in %)	1051	-4.01	4.48	-38.90	4.86
	Deposit reserve rate (in %)	1051	15.13	4.28	7.50	20.83

Note: Composition of the boards is defined as follows: 'D' means directors, i.e. board of directors, 'S' means supervisors, i.e. board of supervisors, 'P' means past, i.e. past politicians (was working in a local government institution), and 'C' means current, i.e. current politician. Reading example: Chairman_DP means that the chairman of the board of directors is a former politician. Summary statistics of these variables are based on the sample of local banks.

Table 4 The Impact of Promotion on Bank Risk: National and Local Banks

Variables	One-period lagged approach					IV approach
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion	-0.239*	-0.214	-0.245*	-0.264*	-0.250*	-0.326*
	(0.132)	(0.129)	(0.134)	(0.135)	(0.134)	(0.184)
Banking sector concentration	-10.614***	-4.553		-2.546	---	---
	(2.426)	(4.598)		(4.647)		
Bank size		0.179		0.188*	-0.007	-0.011
		(0.109)		(0.110)	(0.099)	(0.096)
State-ownership		0.061		0.030	0.107	0.116
		(0.242)		(0.230)	(0.215)	(0.214)
State-legal-person ownership		0.178		0.195	0.225	0.230
		(0.202)		(0.201)	(0.200)	(0.199)
GDP growth rate			-0.033**	-0.046***	-0.032**	-0.034***
			(0.013)	(0.013)	(0.013)	(0.013)
Inflation			-0.025*	0.002	-0.026*	-0.025
			(0.013)	(0.011)	(0.015)	(0.016)
Growth rate of housing price			-0.001	-0.001	-0.001	-0.001
			(0.003)	(0.003)	(0.003)	(0.003)
Fiscal surplus to GDP ratio			0.025*	0.022	0.026*	0.025**
			(0.013)	(0.014)	(0.013)	(0.013)
Deposit reserve rate			0.045***	---	0.047***	0.046***
			(0.010)		(0.017)	(0.017)
Observations	980	980	980	980	980	980
R-squared	0.06	0.07	0.10	0.09	0.10	---

*Note: Regression results in the table are based on the whole sample. Promotion takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(5) report fixed-effect estimation results of the one-period lagged method: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Column (6) reports IV-regression results using fiscal decentralization as the instrumental variable for political promotion. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. More IV-regression results controlling for different variables are in Column (1) and (2) of Table A3 in Appendix A. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table 5 The Impact of Promotion on Bank Risk: Different Subsamples

Variables	Subsample by type (IV approach)		Subsample by period (IV approach)		Subsample with information about politicians (IV approach)
	National bank	Local bank	2005-2007	2008-2012	
	(1)	(2)	(3)	(4)	(5)
Promotion	0.592 (0.411)	-0.452** (0.189)	0.220 (0.217)	-0.524*** (0.198)	-0.428* (0.232)
Bank size	-0.214** (0.108)	0.085 (0.113)	-1.063* (0.543)	-0.049 (0.124)	0.233* (0.119)
State-ownership	0.204 (0.518)	0.113 (0.202)	0.385 (0.305)	-0.004 (0.396)	0.080 (0.205)
State-legal-person ownership	0.601 (0.451)	0.315* (0.178)	-0.134 (0.369)	0.183 (0.292)	0.114 (0.158)
GDP growth rate	-0.089** (0.041)	-0.051*** (0.014)	-0.040 (0.036)	-0.028* (0.015)	-0.036** (0.015)
Inflation	-0.216*** (0.052)	0.008 (0.014)	-0.080 (0.063)	-0.018 (0.016)	0.020 (0.015)
Growth rate of housing price	-0.026*** (0.007)	0.002 (0.003)	-0.011 (0.007)	0.010** (0.004)	0.004 (0.004)
Fiscal surplus to GDP ratio	0.167 (0.119)	0.020 (0.013)	0.054 (0.080)	-0.013 (0.013)	0.010 (0.023)
Deposit reserve rate	0.138*** (0.023)	0.016 (0.017)	0.114 (0.127)	0.091*** (0.027)	-0.008 (0.018)
Observations	131	849	305	675	713
R-squared	---	---	---	---	---

*Note: Regression results in the table are based on different samples. For Columns (2)-(5), promotion takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. For Column (1), promotion equals to the value of promotion index, since no threshold exists for national banks. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(5) report IV-regression results using fiscal decentralization as the instrumental variable for political promotion. Column (5) is based on the sample of local commercial banks for which information about politicians is available. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. More IV-regression results after controlling different variables can be referred to Column (3)-(10) of Table A3 in Appendix A. Regression results with the one-period lagged approach can be seen in Table A4-A7 in Appendix B. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table 6 The Impact of Promotion on Bank Risk: Role of China Development Bank

Variables	(1)	(2)	(3)	(4)	(5)
Promotion	-1.082** (0.501)	-1.163** (0.510)	-0.943* (0.514)	-1.092** (0.519)	-1.049** (0.523)
Promotion* CDB_involvement	0.315** (0.155)	0.346** (0.159)	0.256 (0.160)	0.307* (0.163)	0.296* (0.164)
Banking sector concentration	-50.836*** (6.914)	-45.000*** (12.667)		-58.273*** (14.017)	---
Bank size		0.070 (0.144)		-0.059 (0.154)	0.075 (0.146)
State-ownership		-0.451 (0.453)		-0.471 (0.451)	-0.526 (0.455)
State-legal-person ownership		-0.124 (0.373)		-0.156 (0.371)	-0.172 (0.375)
GDP growth rate			-0.006 (0.019)	-0.027 (0.018)	-0.008 (0.019)
Inflation			-0.037** (0.018)	0.028** (0.014)	-0.033 (0.020)
Growth rate of housing price			0.003 (0.005)	-0.001 (0.005)	0.002 (0.005)
Fiscal surplus to GDP ratio			-0.027 (0.021)	-0.015 (0.021)	-0.025 (0.021)
Deposit reserve rate			0.116*** (0.018)	---	0.103*** (0.030)
Observations	463	463	463	463	463
R-squared	0.16	0.17	0.17	0.19	0.17

*Note: Regression results in the table are based on the sample of local banks, as the impact of promotion on bank risk is only significant for them. Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using the sample of local banks only: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table 7 Local Politicians' Impact on Bank Risk

Variables	Board of directors		Board of supervisors	
	Chairman	Non-chairman	Chairman	Non-chairman
	(1)	(2)	(3)	(4)
Promotion	-0.014 (0.182)	-0.333** (0.156)	-0.035 (0.176)	-0.362** (0.156)
Promotion*Chairman_P	-0.416 (0.656)		-0.383 (0.687)	
Promotion*Chairman_C	-0.519** (0.246)		-0.503** (0.244)	
Promotion*Non-chairman_P		-0.169 (0.227)		-0.107 (0.250)
Promotion*Non-chairman_C		0.116 (0.209)		0.149 (0.216)
Bank size	0.242** (0.119)	0.236** (0.097)	0.241** (0.119)	0.237** (0.097)
State-ownership	0.049 (0.206)	0.059 (0.194)	0.050 (0.206)	0.061 (0.194)
State-legal-person ownership	0.116 (0.164)	0.082 (0.194)	0.116 (0.165)	0.083 (0.194)
GDP growth rate	-0.034** (0.016)	-0.034** (0.015)	-0.033** (0.015)	-0.034** (0.015)
Inflation	0.020 (0.015)	0.019 (0.015)	0.020 (0.015)	0.019 (0.015)
Growth rate of housing price	0.004 (0.004)	0.019 (0.015)	0.004 (0.004)	0.004 (0.003)
Fiscal surplus to GDP ratio	0.009 (0.025)	0.019 (0.015)	0.009 (0.025)	0.010 (0.018)
Deposit reserve rate	-0.009 (0.018)	-0.008 (0.015)	-0.008 (0.018)	-0.008 (0.015)
Observations	713	713	713	713
R-squared	0.09	0.08	0.09	0.08

*Note: Regression results in the table are based on the sample of local commercial banks only, since the impact of promotion incentive on bank risk is not significant for national banks. Promotion takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion incentive and bank risk. We only show regressions with the most control variables here. Columns (1)-(4) report fixed-effect estimation results of the one-period lagged method. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Besides, we haven't included the four cross-terms in the same regression either for the high correlation among these variables. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table 8 The Impact of Promotion on Channel-Specific Variables

Channel-specific variables	Indicators	(1)	(2)	(3)	(4)	(5)
Liquidity	Liquidity ratio	-0.040** (0.019)	-0.034* (0.019)	-0.036* (0.020)	-0.036* (0.020)	-0.038* (0.020)
	Long-term loan ratio	-0.027 (0.019)	-0.031 (0.022)	-0.035* (0.019)	-0.039** (0.019)	-0.037* (0.019)
Profitability	Return on assets	0.000 (0.001)	0.000 (0.001)	0.001* (0.000)	0.001 (0.000)	0.001* (0.000)
	Net interest margin	0.001 (0.003)	0.001 (0.003)	0.003 (0.003)	0.003 (0.003)	0.003 (0.003)
Volume	Loan to deposit ratio	0.030** (0.012)	0.020* (0.011)	0.024** (0.011)	0.017 (0.011)	0.020* (0.011)
	Growth rate of loans	0.030 (0.026)	0.020 (0.023)	0.019 (0.027)	0.012 (0.024)	0.015 (0.025)
Quality	Non-performing loan ratio	0.043*** (0.012)	0.042*** (0.012)	0.040*** (0.013)	0.039*** (0.012)	0.039*** (0.013)
	Loan concentration ratio	0.343** (0.164)	0.333** (0.164)	0.316* (0.169)	0.321* (0.170)	0.312* (0.172)

*Note: Regression results in the table are based on the sample of local commercial banks only, since the impact of promotion pressure on bank risk is not significant for national banks. Promotion takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. We only present coefficients of the promotion. Columns (1)-(5) report fixed-effect estimation results of the one-period lagged method: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table 9 The Impact of Channel-Specific Variables on Bank Risk

Channel-specific Variables	Indicators	(1)	(2)	(3)	(4)	(5)
Liquidity	Liquidity ratio	0.007*** (0.003)	0.006** (0.002)	0.007*** (0.002)	0.006** (0.003)	0.006*** (0.002)
	Long-term loan ratio	0.010 (0.008)	0.009 (0.008)	0.008 (0.008)	0.008 (0.008)	0.008 (0.008)
Profitability	Return on assets	-0.192* (0.113)	-0.221* (0.116)	-0.273** (0.114)	-0.221* (0.123)	-0.273** (0.113)
	Net interest margin	0.003 (0.012)	0.002 (0.012)	0.001 (0.012)	0.001 (0.012)	0.001 (0.011)
Volume	Loan to deposit ratio	-0.011* (0.006)	-0.009 (0.006)	-0.011* (0.006)	-0.010* (0.006)	-0.011* (0.006)
	Growth rate of loans	-0.003*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)
Quality	Non-performing loan ratio	-0.034* (0.019)	-0.036** (0.017)	-0.026* (0.015)	-0.039** (0.017)	-0.026* (0.014)
	Loan concentration ratio	-0.001*** (0.000)	-0.001** (0.000)	-0.001* (0.000)	-0.001** (0.000)	-0.001* (0.001)

*Note: Regression results in the table are based on the sample of local commercial banks only, since the impact of promotion pressure on bank risk is not significant for national banks. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. We only present coefficients of channel-specific variables. Columns (1)-(5) report fixed-effect estimation results of the one-period lagged method: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

APPENDICES

to accompany

“Politicians’ Promotion Incentives and Bank Risk Exposure in China”

Appendix A: Additional tables

Appendix B: Detailed robustness tests (extension of Section 7 of the main paper)

Appendix A: Additional tables

Table A1 Table of Major Events Related to Chinese Local Government Debts since 2008

Time	Events	
	Main Contents	Background
2009/01-2009/12	200 trillion government bonds were issued by the central government on behalf of local governments.	
2009/05	Yuechen Urban Development and Investment Corporation (one of financing platforms) was accused of fraud in bond issuing.	
2010/1	Premier Jiabao Wen warned the risk of financing platforms and stated the urgency of platform regulation.	A local debt boom emerged with
2011/03-2011/05	National Audit Office of China (CNAO) organized a first-round audit of local government debts in compliance with the arrangement of the State Council.	the implementation of stimulus packages which requires local co-financing. The potential
2011/7	Bonds issued by platforms (See section 2.1 for more information about platforms) were confronted with default risks: “Dark July”.	problems of financing platforms which provides local governments with a corporate government
2011/10	The central government allowed four subnational governments (Shanghai, Zhejiang, Guangdong and Shenzhen) to issue bonds directly for the first time after an eighteen-year ban.	structure to borrow from the market became thus more and more prominent.
2011/11	CNAO released the first-round audit results: As of the end of 2010, the balances of the local governmental debt stood at 10.717 trillion yuan	
2013/6	Another two subnational government, i.e. Shandong and Jiangsu, were allowed to issue bonds directly.	
2013/08-2013/09	The State Council, under Premier Keqiang Li, ordered a second-round urgent audit of local government debts.	
2013/10	Institutions such as the Standard Chartered Bank, and government officials, like Huaicheng Xiang, the former Finance Minister, all estimate the balances of the local governmental debts to be above 20 trillion yuan.	IMF warned the Chinese government of the financial risks brought about by local
2013/11	CNAO released the second-round audit results: Up to the end of June 2013, local governments at all levels throughout the country had borne the responsibility for the payment of 20.699 trillion yuan (in RMB) in debts (The number doesn't include implicit government debts).	government debts.

Reference: China Business Journal (http://www.cb.com.cn/economy/2013_1012/1016547.html); 2011 Measures for Experiment on Local Government Unauthorized Bond Issuance (promulgated by the Ministry of Finance, Oct.17, 2011, effective Oct.17, 2011); 2013 Measures for Experiment on Local Government Unauthorized Bond Issuance (promulgated by the Ministry of Finance, Jun.25, 2013, effective Jun.25, 2013); Audit Report by National Audit Office of the People's Republic of China (No.35 of 2011 and No.32 of 2013, <http://www.audit.gov.cn>)

Table A2 The Impact of Promotion on Bank Risk: First-Stage Regression Results of IV Approach

Variables	Whole sample (1)	By Type		By Period	
		National Bank (2)	Local Bank (3)	2005-2007 (4)	2008-2012 (5)
Fiscal	-0.589***	-0.499*	-0.644***	-0.811***	-0.681***
Decentralization	(0.076)	(0.258)	(0.130)	(0.064)	(0.121)
Bank size	-0.017 (0.019)	-0.097 (0.074)	-0.031 (0.028)	-0.043 (0.061)	0.048** (0.024)
State-ownership	0.038 (0.045)	0.068 (0.126)	0.004 (0.079)	0.063 (0.038)	0.145* (0.117)
State-legal-person ownership	-0.049 (0.047)	-0.014 (0.103)	-0.105 (0.113)	0.048* (0.028)	-0.072 (0.102)
GDP growth rate	-0.010*** (0.004)	-0.011 (0.049)	-0.010* (0.005)	-0.006 (0.006)	-0.010* (0.005)
Inflation	0.008** (0.004)	-0.015 (0.030)	0.007* (0.004)	-0.003 (0.007)	0.017*** (0.005)
Growth rate of housing price	0.003*** (0.001)	-0.005 (0.006)	0.003*** (0.001)	0.001 (0.001)	0.003*** (0.001)
Fiscal surplus to GDP ratio	-0.005 (0.004)	-0.007 (0.094)	-0.006* (0.003)	-0.027** (0.013)	-0.006** (0.003)
Deposit reserve rate	-0.001 (0.003)	0.020 (0.012)	0.001 (0.004)	0.002 (0.018)	-0.023*** (0.007)
Observations	980	131	849	305	675
F-stat of first-stage	78.68	1.72	79.92	49.76	60.57
Stock-Yogo test	621.81	9.01	619.21	380.15	442.62

*Note: Regression results in the table are based on different samples. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table A3 The Impact of Promotion on Bank Risk: More IV Regression Results with Different Controls

Variables	Whole sample		National bank		Local bank	
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion	-0.303 (0.189)	-0.349* (0.187)	0.576 (0.369)	0.594 (0.401)	-0.421** (0.190)	-0.459** (0.193)
Banking sector concentration		-2.653 (4.575)		-32.790*** (5.454)		6.624 (4.991)
Bank size		0.180* (0.106)		-0.164 (0.121)		0.289** (0.125)
State-ownership		0.042 (0.230)		0.091 (0.537)		0.022 (0.214)
State-legal-person ownership		0.201 (0.200)		0.545 (0.475)		0.307* (0.168)
GDP growth rate	-0.034** (0.013)	-0.047*** (0.013)	-0.074 (0.057)	-0.104*** (0.039)	-0.047*** (0.013)	-0.064*** (0.014)
Inflation	-0.024* (0.014)	0.003 (0.011)	-0.189*** (0.042)	-0.047 (0.058)	0.002 (0.012)	0.016 (0.011)
Growth rate of housing price	-0.000 (0.003)	-0.001 (0.003)	-0.022** (0.011)	-0.015* (0.008)	0.003 (0.003)	0.002 (0.003)
Fiscal surplus to GDP ratio	0.024* (0.013)	0.021 (0.014)	0.140 (0.121)	-0.003 (0.133)	0.018 (0.013)	0.019 (0.013)
Deposit reserve rate	0.044*** (0.010)	---	0.103*** (0.014)		0.027*** (0.008)	
Observations	980	980	131	131	849	849
R-squared	---	---	---	---	---	---

*Note: Regression results in the table are based on different samples. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(10) report more IV-regression results related to Table 4 and Table 5 using fiscal decentralization as the instrumental variable for political promotion: Column (1), Column (3), Column (5), Column (7) and Column (9) control for macro-specific variables; Column (2), Column (4), Column (6), Column (8) and Column (10) control for industry-specific, bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

**Table A3 (Continued) The Impact of Promotion on Bank Risk: More IV Regression
Results with Different Controls**

Variables	2005-2007		2008-2012	
	(7)	(8)	(9)	(10)
Promotion	0.260 (0.222)	0.238 (0.217)	-0.502*** (0.204)	-0.539*** (0.197)
Banking sector concentration		4.449 (15.623)		-40.699*** (10.842)
Bank size		-0.709* (0.407)		-0.103 (0.125)
State-ownership		0.321 (0.307)		0.028 (0.389)
State-legal-person ownership		-0.180 (0.369)		0.204 (0.287)
GDP growth rate	-0.032 (0.036)	-0.037 (0.036)	-0.029** (0.015)	-0.033** (0.014)
Inflation	-0.013 (0.050)	-0.109 (0.125)	-0.015 (0.014)	0.038*** (0.014)
Growth rate of housing price	-0.017** (0.007)	-0.015** (0.006)	0.010** (0.004)	0.010** (0.004)
Fiscal surplus to GDP ratio	0.089 (0.086)	0.062 (0.092)	-0.013 (0.014)	-0.010 (0.013)
Deposit reserve rate	-0.119 (0.078)	---	0.083*** (0.013)	---
Observations	305	305	675	675
R-squared	---	---	---	---

*Note: Regression results in the table are based on different samples. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(10) report more IV-regression results related to Table 4 and Table 5 using fiscal decentralization as the instrumental variable for political promotion: Column (1), Column (3), Column (5), Column (7) and Column (9) control for macro-specific variables; Column (2), Column (4), Column (6), Column (8) and Column (10) control for industry-specific, bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table A4 The Impact of Promotion on Bank Risk: National Banks

Variables	One-period lagged approach				
	(1)	(2)	(3)	(4)	(5)
Promotion	0.181 (0.133)	0.169 (0.138)	0.154 (0.120)	0.118 (0.123)	0.124 (0.123)
Banking sector concentration	-28.652*** (5.032)	-36.077*** (6.523)		-35.660*** (6.230)	---
Bank size		-0.135 (0.136)		-0.232 (0.143)	-0.274* (0.137)
State-ownership		0.453 (0.609)		0.028 (0.583)	0.143 (0.558)
State-legal-person ownership		0.625 (0.541)		0.499 (0.520)	0.553 (0.490)
GDP growth rate			-0.076 (0.046)	-0.113*** (0.038)	-0.096** (0.039)
Inflation			-0.200*** (0.052)	-0.045 (0.057)	-0.226*** (0.045)
Growth rate of housing price			-0.026*** (0.008)	-0.018* (0.009)	-0.030*** (0.008)
Fiscal surplus to GDP ratio			0.140 (0.091)	-0.023 (0.118)	0.159 (0.101)
Deposit reserve rate			0.105*** (0.019)	---	0.147*** (0.026)
Observations	131	131	131	131	131
R-squared	0.40	0.43	0.49	0.50	0.54

*Note: Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using the sample of national banks only: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table A5 The Impact of Promotion on Bank Risk: Local Banks

Variables	One-period lagged approach				
	(1)	(2)	(3)	(4)	(5)
Promotion	-0.251* (0.134)	-0.207 (0.130)	-0.284** (0.136)	-0.281** (0.137)	-0.284** (0.136)
Banking sector concentration	-6.947*** (2.498)	3.391 (5.099)		6.837 (5.086)	---
Bank size		0.293** (0.132)		0.309** (0.131)	0.096 (0.116)
State-ownership		0.014 (0.239)		-0.006 (0.213)	0.090 (0.203)
State-legal-person ownership		0.229 (0.179)		0.285* (0.169)	0.294 (0.182)
GDP growth rate			-0.043*** (0.013)	-0.059*** (0.014)	-0.046*** (0.013)
Inflation			-0.000 (0.012)	0.014 (0.011)	0.006 (0.013)
Growth rate of housing price			0.002 (0.003)	0.002 (0.003)	0.002 (0.003)
Fiscal surplus to GDP ratio			0.019 (0.014)	0.021 (0.014)	0.022* (0.013)
Deposit reserve rate			0.029*** (0.010)	---	0.017 (0.017)
Observations	849	849	849	849	849
R-squared	0.03	0.06	0.08	0.09	0.08

*Note: Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using the sample of local banks only: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table A6 The Impact of Promotion on Bank Risk: 2005-2007

Variables	One-period lagged approach				
	(1)	(2)	(3)	(4)	(5)
Promotion	0.176 (0.171)	0.122 (0.176)	0.123 (0.193)	0.085 (0.197)	0.076 (0.199)
Banking sector concentration	3.878 (4.596)	-4.917 (6.443)		4.117 (15.912)	---
Bank size		-0.532* (0.301)		-0.720* (0.413)	-1.071* (0.550)
State-ownership		0.480 (0.267)		0.366 (0.299)	0.427 (0.297)
State-legal-person ownership		-0.213 (0.383)		-0.164 (0.372)	-0.119 (0.372)
GDP growth rate			-0.039 (0.037)	-0.045 (0.036)	-0.047 (0.036)
Inflation			-0.013 (0.051)	-0.109 (0.127)	-0.082 (0.064)
Growth rate of housing price			-0.017** (0.007)	-0.015** (0.006)	-0.011 (0.007)
Fiscal surplus to GDP ratio			0.091 (0.089)	0.063 (0.096)	0.055 (0.084)
Deposit reserve rate			-0.120 (0.079)	---	0.116 (0.128)
Observations	305	305	305	305	305
R-squared	0.01	0.04	0.05	0.09	0.10

*Note: Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using the sample between the period 2005-2007: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table A7 The Impact of Promotion on Bank Risk: 2008-2012

Variables	One-period lagged approach				
	(1)	(2)	(3)	(4)	(5)
Promotion	-0.241* (0.133)	-0.239* (0.136)	-0.306** (0.135)	-0.291** (0.137)	-0.302** (0.138)
Banking sector concentration	-37.934*** (5.872)	-41.465*** (9.323)		-43.455*** (10.834)	---
Bank size		-0.051 (0.123)		-0.101 (0.126)	-0.045 (0.124)
State-ownership		-0.024 (0.398)		-0.028 (0.388)	-0.055 (0.396)
State-legal-person ownership		0.232 (0.298)		0.185 (0.293)	0.165 (0.297)
GDP growth rate			-0.023 (0.014)	-0.026* (0.014)	-0.022 (0.015)
Inflation			-0.020 (0.013)	0.036*** (0.014)	-0.024 (0.016)
Growth rate of housing price			0.009** (0.004)	0.009** (0.004)	0.009** (0.004)
Fiscal surplus to GDP ratio			-0.010 (0.014)	-0.006 (0.013)	-0.010 (0.014)
Deposit reserve rate			0.089*** (0.017)	---	0.097*** (0.027)
Observations	675	675	675	675	675
R-squared	0.16	0.17	0.17	0.18	0.18

*Note: Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using the sample between the period 2008-2012: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table A8 The Inclusion of Possible Channel-Specific Variables in the Basic Regression

Variables	Liquidity ratio (1)	Loan to deposit ratio (2)	Non-performance loan ratio (3)	Loan Concentration (4)
Promotion	-0.145 (0.109)	-0.128 (0.097)	-0.279* (0.143)	-0.248 (0.194)
Bank size	0.129 (0.153)	0.132 (0.153)	-0.011 (0.102)	0.370*** (0.134)
State-ownership	-0.130 (0.308)	-0.021 (0.253)	0.161 (0.193)	-0.176 (0.236)
State-legal-person ownership	0.423* (0.251)	0.424** (0.208)	0.318* (0.176)	0.061 (0.158)
GDP growth rate	-0.018 (0.017)	-0.022 (0.016)	-0.014 (0.015)	-0.013 (0.012)
Inflation	-0.018 (0.019)	-0.018 (0.015)	-0.021 (0.016)	-0.007 (0.017)
Growth rate of housing price	-0.000 (0.003)	0.000 (0.003)	0.002 (0.003)	0.000 (0.004)
Fiscal surplus to GDP ratio	0.025* (0.013)	0.027* (0.014)	0.022* (0.012)	0.010 (0.026)
Deposit reserve rate	0.048* (0.026)	0.041* (0.024)	0.062*** (0.020)	0.014 (0.023)
Liquidity ratio	0.006** (0.002)			
Loan to deposit ratio		-0.011* (0.006)		
			-0.028* (0.015)	
Non-performance loan ratio				-0.001* (0.001)

Loan concentration

*Note: Regression results in the table are based on the sample of local commercial banks only, since the impact of promotion pressure on bank risk is not significant for national banks. Promotion takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. We only show regressions with the most control variables here. Columns (1)-(10) report fixed-effect estimation results of the one-period lagged method after the inclusion of corresponding channel-specific variables in our basic regression. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Appendix B: Detailed robustness tests

This Appendix B contains the detailed robustness tests which are just shortly summarized in Section 7 of the main paper. The five directions mentioned there, from (a) to (g), have the same order as the Sections B.1 to B.7 here in the appendix.

B.1 Modifying Data

Regarding data we perform five robustness checks:¹⁰ we modify (i) the bank risk measure, (ii) the political promotion index, (iii) the measure of fiscal decentralization, (iv) the sample banks, and (v) and the linear relationship between the promotion index and bank risk.

First, since the results in our paper may depend on the measurement of bank risk, we carry out our analysis again using alternative measures such as the NPL ratio (see [Table B1](#)) and the z-score of 3-year and 5-year rolling windows. Though expected default frequency and volatility of equity returns are also commonly found in the literature (Laeven and Levine, 2009; Altunbas et al., 2010), they are inadequate for capturing the risk of most banks, especially that of local banks in China because of the shortage of default and equity return data (Zhang and He, 2012). Our main results still hold when using the alternative measures, except that the impact of promotion pressure on bank risk is larger before the crisis when risk is measured by NPL ratio. This is mainly due to the tightened regulation of banks' NPL indicator after the crisis by China Banking Regulatory Commission.

The second robustness check is related to our measure of the political promotion index. In the main analysis above, we only use the GDP growth rate, fiscal surplus and employment rate to construct the promotion index since the multiple tasks of a regional government can be effectively converted to a few related tasks. Here, we will show whether our results still hold when we include more indicators in the promotion index. As Li and Zhou (2005) pointed out, local government officials have also been playing an active role in building local infrastructure and attracting foreign investment. Thus, to explicitly reflect political promotion

¹⁰ We only report part of the regression results since there is a large number of regressions here with qualitatively similar results.

pressure in attracting foreign direct investment and building infrastructure, we add foreign direct investment to the GDP ratio, total freight traffic and per capita area of paved roads in the promotion index (see [Table B2](#)).¹¹ The empirical results support our hypotheses. We further check how various definitions of the promotion pressure index affect results (see [Table B3](#)). We find that only GDP is an indispensable component for the index, which is consistent with the fact that GDP is the most important evaluation indicator in China. The absence of fiscal surplus and unemployment won't affect our results much. Moreover, our results still hold when we standardize the economic performance-based promotion index into a variable whose values are between 0 and 1. The new variable is calculated by dividing the deviation between the promotion index and the minimum value of the index by the deviation between the maximum and the minimum value. Lastly, we check if the risk of national banks can be affected by the promotion pressure of government officials in the provinces where the banks' headquarters locate (instead of the weighted average value of promotion pressure index). The effect is not significant either.

To exclude the possibility that our instrumental variable approach depends on the measure of fiscal decentralization, we use the share of local government's spending in total government spending and the Share of Local Government's Revenue in Total Government Revenue (see [Tables B4](#) and [Table B5](#)). Our IV regression results are very robust when we use share of local government's spending.

Furthermore, since some city commercial banks such as Beijing Bank, Nanjing Bank, Jiangsu Bank or Huishang Bank, have been restructured to be provincial banks or listed in the stock exchange, we eliminate these banks to exclude the possibility that they might drive our results. As the effect of political promotion on bank risk is insignificant before 2008, we test the mechanism again using only the sample during 2008-2012. Our main findings still hold after changing the sample.

Finally, we check if our results still hold after using balanced panel data. [Tables B6](#) and [B7](#) give regression results related to our main hypotheses. Our findings still hold in this case. Besides, as we have the same banks for the two sub-periods, i.e. 2005-2007 and 2008-2012, here, the

¹¹ The reason to use total freight traffic and per capita area of paved roads to reflect infrastructure building is that about 61.6% of government debts are spent on transportation and municipal constructions (National Audit Office, 2011) and almost every region reports these indicators in the sample years.

comparison between pre-crisis and post-crisis period may be more persuasive.

B.2 The Influence from a Change in Promotion Pressure on a Change of Bank Risk

Different from our main empirical model, here we examine the relations of interest by comparing changes directly: Does a change in promotion pressure affect the change of bank risk? To answer this question, we further estimate the following difference model:

$$\Delta Z_{b,t} = \tilde{\alpha}_0 + \tilde{\alpha}_1 \Delta P_{b,t-1} + \tilde{\alpha}_2 \Delta X_{b,t-1} + \tilde{\alpha}_3 \Delta Y_{t-1} + \tilde{\alpha}_4 \Delta M_{t-1} + \tilde{\eta}_b + \tilde{\mu}_{b,t} \quad (6)$$

Where $\Delta Z_{b,t}$ is the change of z-score (in logarithm) for bank b. $\Delta P_{b,t-1}$ is the change of promotion pressure corresponding to bank b. $\Delta X_{b,t-1}$ is the change of bank-level control variables, ΔY_{t-1} represents the change of macro-level control variables, ΔM_{t-1} controls for the change of banking sector's concentration.¹²

Since the impact of political promotion on bank risk is not of importance to national banks, we mainly use local bank data for the analysis in the remaining part of the paper. [Table B8](#) reports the estimation results for the above model. As before, columns (1)-(5) report fixed-effect estimation results of the one-period lagged method and column (6) reports regression results using fiscal decentralization as the instrumental variable for political promotion. As shown in Table B8, the z-score-measure decreases by 65.9 percent ceteris paribus when the promotion pressure index reaches or becomes higher than 6 (Column (6)), indicating that a variation in the change of promotion pressure can cause the change of bank risk to move in the same direction. Our basic regression model presented in equation (1) may be affected by spurious regression problems which can hardly be detected by econometric tests such as unit root test etc. as our panel data only includes 8 years of observations. The significantly negative coefficient of $\Delta P_{b,t-1}$, consistent with our basic regression, not only tells us how a change in promotion pressure affects the change of bank risk, but also supports our basic regression by showing a low probability for the basic regression to be affected by spurious regression.

¹² To give an intuitive economic explanation for all the coefficients in our regression, we take differences of the original data.

B.3 The Influence of Politicians' Characteristics on the Relationship between Promotion Pressure and Bank Risk

To further identify the effect of promotion pressure on bank risk, we also check how local politicians' characteristics may affect the impact of promotion pressure on bank risk. Therefore, we incorporate several interaction terms between politicians' characteristics and promotion pressure into our basic regression model (1):

$$Z_{b,t} = \alpha_0 + \alpha_1 P_{b,t-1} + \sum_{j=1}^4 C_{b,t-1}^j * P_{b,t-1} + \alpha_2 X_{b,t-1} + \alpha_3 Y_{t-1} + \alpha_4 M_{t-1} + \eta_b + \mu_{b,t} \quad (7)$$

Here $C_{b,t-1}^j$ ($j=1,2,3,4$) represents the j -th characteristics of politicians of the region where local bank b operates in. We consider four characteristics: (1) gender of politicians (=1, female; =0, male), (2) nationality of politicians (=1, member of the minority; =0, otherwise), (3) working experience of politicians (=1, has worked in an enterprise before; =0, otherwise), (4) tenure of politicians, namely how long has a politician been in a certain political position.¹³ We have not included the politicians' age in the model, since high correlation (0.984) exists between the interaction term for age (i.e., age*promotion pressure index) and the promotion pressure index. Information about characteristics of politicians is mainly taken from the Database for Local Party and Government Leaders in China.¹⁴ [Table B9](#) shows the estimation results for the above regression model. Columns (1)-(5) report fixed-effect estimation results. Column (6) and [Table B10](#) reports IV-regression results with different control variables. As shown in these tables, politician characteristics such as tenure have no significant effect on the relationship between promotion pressure and bank risk, indicating that the impact of political promotion pressure on bank risk doesn't depend on the tenure of a politician. Working in an enterprise before may help to decrease the bank risk which is caused by higher political promotion pressure. Moreover, higher promotion pressure of a female or minority politician may lead to lower bank risk.

¹³ Only a low correlation exists between any two of these interaction terms and between any of these interaction terms and the promotion incentive index.

¹⁴ In addition we use other official websites, such as websites of local governments, websites of the Communist Party of China, Xinhua net etc. We also search the Political Elite Dataset of Chinese Communist Party provided by National Chengchi University (Taiwan) for information not being provided by earlier mentioned sources.

B.4 Promotion Pressure vs. Local Economic Conditions

As the proxy variable for promotion pressure, i.e. the promotion pressure index, is constructed from information on local economic conditions (such as GDP growth rate and fiscal balances), one may argue that the promotion pressure in our paper may be just a proxy for local economic conditions and their influence on bank risk.

Though constructed from information on local economic conditions, the promotion pressure index clearly differs from these economic indicators because it highlights the importance of relative performance rather than the value of economic indicators themselves. Thus the ranking is conducted among local governments which are governed by the same superior level of governments. As a result, politicians of cities with a similar annual growth rate – but from different regions – may face a highly diverging promotion pressure. For example, both Cangzhou city and Suqian city realized an annual GDP growth rate of approximately 12.5% in 2011 (12.3% and 12.8% respectively). However, the former one is among the cities with the lowest promotion pressure in Hebei province while the latter is among the cities with the highest promotion pressure in Jiangsu province. Such large differences explain the low correlation coefficients¹⁵ between promotion pressure and local economic variables.

As shown above, the mechanisms through which promotion pressure and economic conditions impact bank risk are very different. For example, the impact of GDP growth rate on bank risk is uncertain according to Section 3.2.3 while for promotion pressure a positive effect on bank risk is expected. Based on the regression results, we even find that the relationship between GDP growth rate and bank risk changes with the measures for risk. As shown in Table B1, higher GDP growth rate is associated with lower credit risk measured by banks' non-performing loan ratio. However, when we consider a broader measure of risk, i.e. the z-score, which encompasses both credit risk and market risk (Marques et al., 2013), a positive relationship is found, especially for local banks and for the period 2008-2012. This is consistent with the findings of Xu and Chen (2012) and Zhang and Wang (2012). Banks in

¹⁵ As shown before, the correlation coefficients between promotion index and GDP growth rate and fiscal surplus to GDP ratio are -0.12 and -0.39, respectively. Besides, we also calculate correlation coefficients for different subgroups of banks in our paper: For national banks, the correlation coefficients between promotion index and GDP growth rate and fiscal surplus to GDP ratio are respectively -0.06 and -0.03; for local banks, the correlation coefficients are -0.14 and -0.4, respectively.

regions with higher regional GDP growth rate tend to have lower non-performance loans in China. However, they may take higher risks in other respects, possibly because they are more optimistic and tolerant to risks. In contrast, when it comes to the impact of promotion pressure on bank risk, higher pressure is usually associated with both credit risk measured by higher non-performance loan ratio (Table B1) and other risks reflected by the z-score.

B.5 Local Economic Conditions and Bank Risk

After illustrating the relationship between promotion pressure index and local economic conditions, we carry out an experiment based on MacKinnon (2008)'s method: If promotion pressure were only to be an intermediate variable that link local economic conditions and bank risk, the inclusion of the proxy of promotion pressure in a regression model which contains these local economic conditions would decrease the significance of the impact local economic conditions have on bank risk. That is to say, when conditioning on the assumption that promotion pressure would be only an intermediate variable, we can expect that the coefficients of GDP growth and fiscal balances will become more significant after deleting the variable "promotion pressure" from our regression model. However, as shown in Table B11, significance of the impact of GDP growth and fiscal balances on bank risk has not been improved after this experiment. Moreover, the positive relationship between GDP growth rate and bank risk prevails. Thus, we can conclude that the variable "promotion pressure" in our paper, though constructed from local economic variables, is not merely an intermediate variable through which local economic conditions exert influence on bank risk. It is the promotion pressure of local politicians itself that causes higher bank risk in China: Stronger promotion pressure of local politicians tend to increase bank risk through the "liquidity channel", the "volume channel" and the "quality channel".

B.6 Nonlinearity of the relationship.

To check the nonlinearity of the impact of promotion index on bank risk, we (i) allow for non-linear effects with quadratic form in the regression model, (ii) use a threshold model, and (iii) a dummy-approach.

We first introduce a quadratic term of the promotion index into the model. High

correlation exists between this quadratic term and the promotion index (0.96), causing a serious multicollinearity problem for this model. Moreover, a likelihood ratio test shows that introducing this quadratic form does not help much in enhancing the fit of our model.¹⁶

Then, we use a threshold model and a dummy-approach to check a non-linear effect of promotion on bank risk. Regression results are presented in [Table B12](#) and [Table B13](#). Column (1) to Column (6) in Table B12 report results of threshold models for different samples. Almost for all the samples, except the sample of national banks (Column 3 and Column 4), the significant relationship holds only when promotion pressure reaches or gets bigger than 6, but is not significant otherwise. This indicates a non-linear relationship for the whole sample and the sample of local banks, and a linear relationship for the sample of national banks. The p-values of threshold tests (Table B12) also support this.

Table B13 reports results of a dummy-approach for the case where the promotion index is constructed based only on the most important indicator, i.e. GDP performance. Results show that a significant impact from promotion pressure only exists for the two less performing categories.

Since both methods indicate the existence of non-linear effects with a certain threshold, we define our promotion variable as follows for the whole sample and the sample of local banks: Promotion takes a value of 1 if promotion index equals or is bigger than 6, and takes a value of 0 otherwise.

B.7 Alternative instrumental variable

We propose the relative economic performance of competing regions as a new instrumental variable for the political promotion index. The argument runs as follows: a higher average real GDP growth rate of a region's competing regions gives local politicians of the region more pressure in promotion in the context of "an economic performance-based promotion system". At the same time, real GDP performance of a region's competing regions, which is mainly affected by resource allocation decision of local politicians in their own regions, cannot directly impact GDP and credit of this region.

¹⁶ The p-value of the likelihood ratio test is 0.27.

Let $g_{i,t}$ be the real GDP growth rate of region i in period t , $g_{j,t}(j \neq i)$ be the real GDP growth rate of region i 's competing region, N_t be the total number of these competing regions. Then our IV is constructed as follows:

$$IV_{1,t} = \frac{\sum_{j(j \neq i)} (g_{j,t} + g_{j,t-1}) / 2}{N_t}$$

To construct this IV, we first have to make a decision which regions are seen to be competing. For the 283 prefecture-level cities, a comparison will be made among the cities in the same province rather than among all cities all over the country, since province-level leaders have the power to hire and fire staff in prefecture-level cities (Xu, 2011). For the 31 province-level regions, the comparison refers to all provinces in the country. We also consider economic performance in past years when constructing this IV, as relative economic performance in past years may also impact the appointment of politicians. [Table B14](#) gives results based on this new IV.

To show the appropriateness of economic performance of competing cities as an instrument of political promotion in an econometric sense, we also conduct several tests, such as F-tests and Stock-Yogo tests. Results related to first-stage regressions are shown in [Table B15](#) in the Appendix. The first-stage regression results show that economic performance of competing cities is significant and positively related to the promotion pressure. Besides, the F-test is always above 10 and Stock-Yogo test is way above 10% maximal IV size (except national banks), which further support the appropriateness of IV for the whole sample and the sample of local banks.

We also check if our results of IV regressions still hold when we use (1) alternative weights and periods in evaluating economic performance of competing cities; (2) the gap in economic performance between region i and its competitors.

[Table B16](#) gives regression results of IV approach using alternative weights and periods in evaluating economic performance of competing regions. Column (1) to Column (3) report the results when more weight is given to the current period in IV, i.e.

$$IV'_{1,t} = \frac{\sum_{j(j \neq i)} g_{j,t} * 0.6 + g_{j,t-1} * 0.4}{N_t}. \text{ Column (4) to Column (6) show the results when we}$$

consider the average economic performance of recent three years in IV, i.e.

$$IV_{1,t}^n = \frac{\sum_{j(j \neq i)} \frac{g_{j,t} + g_{j,t-1} + g_{j,t-2}}{3}}{N_t}. \text{ Table B17 gives regression results of IV approach using the}$$

gap in real GDP growth rate between region i and its competitors, i.e.

$$IV_{1,t}^m = \frac{(g_{i,t} + g_{i,t-1})}{2} - \frac{\sum_{j(j \neq i)} \frac{(g_{j,t-1} + g_{j,t-1})}{2}}{N_t}. \text{ As shown in the tables, our main results still hold.}$$

Actually, results in Table B16 are two representatives of the cases with alternative weights and periods. Our results still hold in other cases when more recent period is assigned with larger/equal weight.

One may argue that the real GDP growth rate of region i 's competing regions may impact region i 's GDP growth via trade or mobile labor forces. Thus we (i) check the correlation coefficients of GDP growth rate between region i and its competitors. The correlation coefficients are 0.599 (correlation between i and its competitors) and 0.251 (correlation between i and the gap to its competitors) respectively, which are not very high. (ii)

We construct two new IVs : $IV_{2,t} = \underset{j \neq i}{\text{Max}} \frac{(g_{j,t-1} + g_{j,t-1})}{2}$;

$$IV_{2,t}' = \frac{(g_{i,t} + g_{i,t-1})}{2} - \underset{j \neq i}{\text{Max}} \frac{(g_{j,t-1} + g_{j,t-1})}{2}, \text{ where } \underset{j \neq i}{\text{Max}} \frac{(g_{j,t-1} + g_{j,t-1})}{2} \text{ are the maximum}$$

growth rate among region i 's competitors. On the one hand, they can alleviate the impact via trade or mobile labor forces, as GDP growth of region i can hardly be impacted strongly by the trade or mobile labor forces vis-a-vis only one of its competing regions. On the other hand, the higher the maximum real GDP growth rate of region i 's competitors, the higher promotion pressure might be felt by politicians in region i as they are frequently compared with the best one in a Chinese "performance-based promotion system". Our results also hold when region i is compared with the worst one among its competitors.

Table B1 The Impact of Promotion on Bank Risk: With NPL Ratio as Risk Measure

Variables	Whole sample (1)	By type		By period	
		National bank	Local bank	2005-2007	2008-2012
		(2)	(3)	(4)	(5)
Promotion	0.031** (0.012)	-0.003 (0.009)	0.039*** (0.013)	0.050*** (0.007)	0.021*** (0.006)
Bank size	0.005 (0.005)	-0.003 (0.009)	0.007** (0.003)	-0.027 (0.028)	0.004** (0.001)
State-ownership	0.001 (0.018)	-0.030 (0.076)	0.001 (0.003)	-0.049 (0.055)	0.004 (0.003)
State-legal-person ownership	0.003 (0.022)	-0.027 (0.062)	-0.003 (0.003)	-0.090 (0.090)	-0.000 (0.003)
GDP growth rate	-0.005*** (0.001)	-0.016*** (0.004)	-0.001*** (0.000)	-0.001 (0.002)	-0.001** (0.000)
Inflation	0.004*** (0.001)	0.006 (0.004)	0.003*** (0.000)	0.005* (0.003)	0.002*** (0.000)
Growth rate of housing price	0.000 (0.000)	-0.002** (0.001)	0.000*** (0.000)	0.000 (0.000)	0.000** (0.000)
Fiscal surplus to GDP ratio	-0.003** (0.002)	-0.001 (0.007)	0.001 (0.001)	-0.000 (0.004)	0.001** (0.000)
Deposit reserve rate	-0.006*** (0.001)	-0.013*** (0.004)	-0.004*** (0.000)	-0.000 (0.006)	-0.002*** (0.000)
Observations	980	131	849	305	675
R-squared	0.34	0.57	0.34	0.28	0.29

*Note: Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using different samples. Bank risk is measured by NPL ratio here, thus significantly positive coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Since observations of the change of deposit reserve rate and the change of banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B2 The Impact of Promotion on Bank Risk: With More Indicators in the Promotion Index

Variables	Whole sample (1)	By type		By period	
		National bank (2)	Local bank (3)	2005-2007 (4)	2008-2012 (5)
Promotion	-0.290** (0.125)	0.092 (0.165)	-0.340*** (0.144)	0.061 (0.146)	-0.449*** (0.185)
Bank size	-0.031 (0.105)	-0.334* (0.176)	0.048 (0.122)	-1.095** (0.547)	-0.057 (0.130)
State-ownership	0.148 (0.223)	0.033 (0.567)	0.132 (0.206)	0.454 (0.290)	-0.028 (0.408)
State-legal-person ownership	0.229 (0.201)	0.602 (0.498)	0.303* (0.171)	-0.093 (0.377)	0.219 (0.287)
GDP growth rate	-0.020 (0.013)	-0.258*** (0.083)	-0.037*** (0.013)	-0.049 (0.036)	-0.015 (0.016)
Inflation	-0.043*** (0.015)	-0.200*** (0.043)	-0.012 (0.012)	-0.084 (0.063)	-0.031** (0.014)
Growth rate of housing price	-0.002 (0.003)	-0.043*** (0.010)	0.001 (0.003)	-0.011 (0.007)	0.010** (0.004)
Fiscal surplus to GDP ratio	0.033*** (0.012)	0.308** (0.103)	0.029** (0.013)	0.053 (0.008)	0.008 (0.018)
Deposit reserve rate	0.044** (0.018)	0.173*** (0.034)	0.016 (0.018)	-0.113 (0.129)	0.130*** (0.036)
Observations	850	114	736	305	545
R-squared	0.07	0.54	0.06	0.10	0.16

*Note: Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using different samples. Promotion variable takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. Bank risk is measured by z-score here, thus significantly negatively coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Promotion index is constructed by the following economic indicators: GDP growth rate, fiscal surplus and employment rate, foreign direct investment to the GDP ratio, total freight traffic and per capita area of paved roads. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B3 The Impact of Promotion on Bank Risk: Different Composition of Promotion Index

Variables	With one variable in the index			With two variables in the index		
	GDP	Fiscal surplus	Unemployment	GDP and fiscal surplus	GDP and unemployment	Fiscal surplus and unemployment
Promotion	-0.081** (0.039)	-0.014 (0.202)	-0.074 (0.060)	-0.071 (0.049)	-0.074** (0.030)	-0.017 (0.050)
Bank size	0.057 (0.128)	0.054 (0.126)	0.051 (0.128)	0.053 (0.128)	0.053 (0.129)	0.054 (0.127)
State-ownership	0.163 (0.209)	0.120 (0.210)	0.106 (0.208)	0.156 (0.210)	0.144 (0.207)	0.117 (0.208)
State-legal-pers on ownership	0.335* (0.179)	0.332* (0.181)	0.345* (0.177)	0.336* (0.180)	0.348* (0.175)	0.335* (0.180)
GDP growth rate	-0.045*** (0.014)	-0.030** (0.013)	-0.032** (0.013)	-0.044*** (0.015)	-0.045*** (0.013)	-0.031** (0.014)
Inflation	-0.010 (0.013)	-0.014 (0.013)	-0.013 (0.012)	-0.010 (0.014)	-0.010 (0.013)	-0.014 (0.013)
Growth rate of housing price	0.001 (0.003)	0.000 (0.003)	0.001 (0.003)	0.001 (0.003)	0.001 (0.003)	0.001 (0.003)
Fiscal surplus to GDP ratio	0.031** (0.013)	0.029 (0.020)	0.030** (0.013)	0.025* (0.014)	0.030** (0.012)	0.029** (0.013)
Deposit reserve rate	0.015 (0.019)	0.015 (0.019)	0.015 (0.018)	0.013 (0.019)	0.014 (0.019)	0.015 (0.019)
Observations	849	849	849	849	849	849
R-squared	0.05	0.04	0.04	0.05	0.05	0.04

*Note: Regression results in the table are based on the sample of local banks. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(6) report fixed-effect estimation results of the one-period lagged method: Column (1) use promotion index constructed from GDP growth; Column (2) use promotion index constructed from fiscal surplus; Column (3) use promotion index constructed from unemployment; Column (4) use promotion index constructed from GDP growth and fiscal surplus; Column (5) use promotion index constructed from GDP growth and unemployment; Column (6) use promotion index constructed from fiscal surplus and unemployment. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table B4 The Impact of Promotion on Bank Risk: With the Share of Local Government's Spending in Total Government Spending as IV

Variables	Whole sample (1)	By type		By period	
		National bank (2)	Local bank (3)	2005-2007 (4)	2008-2012 (5)
Promotion	-0.672 (0.427)	0.576 (0.797)	-0.748* (0.448)	-0.179 (0.289)	-1.113** (0.508)
Bank size	-0.029 (0.097)	-0.216 (0.164)	0.067 (0.116)	-1.083** (0.538)	0.059 (0.129)
State-ownership	0.153 (0.231)	0.202 (0.540)	0.153 (0.223)	0.502* (0.283)	0.130 (0.463)
State-legal-person ownership	0.254 (0.201)	0.600 (0.476)	0.351* (0.182)	-0.093 (0.361)	0.230 (0.315)
GDP growth rate	-0.043*** (0.016)	-0.089** (0.037)	-0.060*** (0.018)	-0.060 (0.041)	-0.044** (0.020)
Inflation	-0.021 (0.016)	-0.216*** (0.054)	0.012 (0.014)	-0.083 (0.063)	-0.004 (0.021)
Growth rate of housing price	-0.000 (0.003)	-0.026*** (0.009)	0.003 (0.003)	-0.011 (0.007)	0.012** (0.005)
Fiscal surplus to GDP ratio	0.022 (0.011)	0.167 (0.126)	0.017 (0.012)	0.056 (0.087)	-0.021 (0.015)
Deposit reserve rate	0.045*** (0.017)	0.138*** (0.033)	0.014 (0.018)	0.120 (0.127)	0.075** (0.032)
Observations	980	131	849	305	675
R-squared	---	---	---	---	----

*Note: Regression results in the table are based on different samples. Columns (1)-(5) report IV-regression results using alternative fiscal decentralization as the instrumental variable for political promotion. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B5 The Impact of Promotion on Bank Risk: With the Share of Local Government's Revenue in Total Government Revenue as IV

Variables	Whole sample (1)	By type		By period	
		National bank (2)	Local bank (3)	2005-2007 (4)	2008-2012 (5)
Promotion	-0.119 (0.207)	0.253 (1.695)	-0.285 (1.613)	-0.532 (0.791)	-0.656* (0.385)
Bank size	0.638 (1.202)	1.710 (1.091)	0.079 (2.042)	-0.903** (0.447)	0.149 (0.285)
State-ownership	-1.200 (2.290)	-3.416 (2.275)	0.497 (2.241)	1.931 (2.555)	1.373 (1.783)
State-legal-person ownership	-0.622 (1.728)	-2.813 (2.202)	0.833 (1.807)	0.381 (0.974)	0.669 (1.143)
GDP growth rate	-0.263** (0.122)	-0.699** (0.340)	-0.056*** (0.017)	-0.314 (0.417)	-0.194** (0.091)
Inflation	-0.172 (0.239)	-0.343 (2.289)	-0.164 (0.407)	-0.127 (0.109)	-0.131 (0.152)
Growth rate of housing price	-0.019 (0.034)	-0.060 (0.414)	-0.006 (0.146)	-0.014 (0.016)	0.029 (0.020)
Fiscal surplus to GDP ratio	0.131 (0.198)	0.302 (1.845)	0.202 (0.468)	0.095 (0.262)	-0.090 (0.081)
Deposit reserve rate	0.092*** (0.027)	0.157** (0.075)	0.093*** (0.030)	0.000 (0.087)	0.072 (0.161)
Observations	980	131	849	305	675
R-squared	---	---	---	---	----

*Note: Regression results in the table are based on different samples. Columns (1)-(5) report IV-regression results using alternative fiscal decentralization as the instrumental variable for political promotion. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B6 The Impact of Promotion on Bank Risk: with Balanced Panel Data

Variables	Whole sample		National bank		Local bank	
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion	-0.352* (0.184)	-0.364* (0.185)	0.036 (0.084)	-0.024 (0.069)	-0.396** (0.187)	-0.408** (0.190)
Bank size		0.009 (0.114)		-0.428*** (0.095)		0.230** (0.132)
State-ownership		0.192 (0.281)		0.310 (0.544)		0.170 (0.271)
State-legal-person ownership		0.285 (0.242)		0.461* (0.478)		0.437* (0.228)
GDP growth rate	-0.038** (0.015)	-0.037** (0.015)	-0.076 (0.048)	-0.105** (0.043)	-0.054*** (0.015)	-0.064*** (0.015)
Inflation	-0.024 (0.017)	-0.025 (0.020)	-0.173*** (0.052)	-0.205*** (0.047)	0.007 (0.015)	0.022 (0.017)
Growth rate of housing price	-0.000 (0.004)	-0.000 (0.004)	-0.027*** (0.009)	-0.032*** (0.008)	0.004 (0.004)	0.003 (0.004)
Fiscal surplus to GDP ratio	0.030** (0.013)	0.032** (0.012)	0.118 (0.095)	0.137 (0.100)	0.024* (0.014)	0.029** (0.013)
Deposit reserve rate	0.048*** (0.010)	0.048*** (0.019)	0.096*** (0.019)	0.157*** (0.025)	0.030*** (0.011)	-0.001 (0.019)
Observations	704	704	128	128	576	576
R-squared	0.13	0.13	0.47	0.56	0.10	0.11

*Note: Regression results in the table are based on different samples. The results in the table are based on a balanced panel data of 704 observations. Bank risk is measured by z-score here. Columns (1)-(10) report results of one-period lag approach: Column (1), Column (3), Column (5), Column (7) and Column (9) control for macro-specific variables; Column (2), Column (4), Column (6), Column (8) and Column (10) control for industry-specific, bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B7 The Impact of Promotion on Bank Risk: with Balanced Panel Data

Variables	2005-2007		2008-2012	
	(7)	(8)	(9)	(10)
Promotion	0.182 (0.162)	0.176 (0.167)	-0.461** (0.191)	-0.492** (0.196)
Bank size		-1.068* (0.570)		-0.011 (0.160)
State-ownership		0.233 (0.310)		-0.001 (0.705)
State-legal-person ownership		-0.180 (0.373)		0.649* (0.529)
GDP growth rate	-0.031 (0.042)	-0.033 (0.041)	-0.025 (0.022)	-0.025 (0.024)
Inflation	-0.001 (0.047)	-0.051 (0.055)	-0.025 (0.018)	-0.026 (0.023)
Growth rate of housing price	-0.019*** (0.007)	-0.014** (0.007)	0.010* (0.005)	0.009* (0.005)
Fiscal surplus to GDP ratio	0.105 (0.102)	0.075 (0.100)	-0.013 (0.015)	-0.012 (0.015)
Deposit reserve rate	-0.170** (0.079)	-0.059 (0.134)	0.106*** (0.022)	0.107*** (0.036)
Observations	264	264	440	440
R-squared	0.07	0.11	0.22	0.23

*Note: Regression results in the table are based on different samples. The results in the table are based on a balanced panel data of 704 observations. Bank risk is measured by z-score here. Columns (1)-(10) report results of one-period lag approach: Column (1), Column (3), Column (5), Column (7) and Column (9) control for macro-specific variables; Column (2), Column (4), Column (6), Column (8) and Column (10) control for industry-specific, bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B8 How a Change in Promotion Pressure Affects the Change of Bank Risk

Variables	One-period lagged approach					IV approach
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion	-0.137 (0.089)	-0.137 (0.088)	-0.186* (0.101)	-0.167 (0.101)	-0.187* (0.101)	-0.659** (0.324)
Banking sector concentration	19.373*** (6.544)	19.230*** (6.561)		21.554*** (7.452)	---	---
Bank size		0.029 (0.035)		0.030 (0.035)	0.037 (0.035)	0.032 (0.031)
State-ownership		0.481** (0.213)		0.477** (0.207)	0.474** (0.201)	0.494** (0.186)
State-legal-person ownership		0.311* (0.161)		0.308* (0.157)	0.294* (0.156)	0.326** (0.156)
GDP growth rate			-0.018 (0.015)	-0.017 (0.015)	-0.017 (0.016)	-0.033** (0.016)
Inflation			-0.006 (0.019)	-0.005 (0.010)	-0.006 (0.019)	0.004 (0.019)
Growth rate of housing price			-0.001 (0.002)	0.001 (0.002)	-0.001 (0.002)	0.001 (0.002)
Fiscal surplus to GDP ratio			-0.003 (0.010)	-0.005 (0.010)	-0.007 (0.010)	-0.016 (0.012)
Deposit reserve rate			0.016 (0.032)	---	0.018 (0.032)	0.013 (0.032)
Observations	723	723	723	723	723	723
R-squared	0.03	0.03	0.01	0.04	0.02	---

*Note: Dependent and independent variables in this table are in difference forms. Regressions are based on the sample of local commercial banks only, since the impact of promotion pressure on bank risk is not significant for national banks. Bank risk is measured by z-score here, thus significantly negative coefficients of the change of promotion index indicate a positive relationship between the variation of promotion pressure and the variation of bank risk. Columns (1)-(5) report fixed-effect estimation results of the one-period lagged method: Column (1) controls for industry-specific variables; Column (2) controls for industry-specific and bank-specific variables; Column (3) controls for macro-specific variables; Column (4) controls for industry-specific, bank-specific and macro-specific variables; Column (5) controls for bank-specific and macro-specific variables. Column (6) reports IV-regression results using fiscal decentralization (measured by the ratio of local government's own revenue to its total expenditure) as the instrumental variable for political promotion. Since observations of the change of deposit reserve rate and the change of banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B9 Politicians' Characteristics and the Relationship between Promotion Pressure and Bank Risk

Variables	One-period lagged approach					IV approach
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion*gender	0.316* (0.189)	0.239 (0.215)	0.244 (0.196)	0.163 (0.209)	0.217 (0.201)	0.777* (0.466)
Promotion*nation- Ality	0.579*** (0.143)	0.510*** (0.150)	0.595*** (0.143)	0.505*** (0.160)	0.546*** (0.149)	0.622** (0.197)
Promotion*working Experience	0.376** (0.169)	0.440*** (0.166)	0.389** (0.172)	0.435** (0.182)	0.408** (0.178)	0.429** (0.218)
Promotion*tenure	0.006 (0.036)	0.010 (0.035)	-0.001 (0.033)	0.005 (0.035)	0.002 (0.347)	0.050 (0.055)
Promotion	-0.603*** (0.212)	-0.477** (0.226)	-0.534** (0.222)	-0.450** (0.224)	-0.506** (0.219)	-1.280* (0.666)
Banking sector concentration	-7.572*** (2.783)	8.079 (5.335)		10.699* (5.525)	---	---
Bank size		0.457*** (0.133)		0.450*** (0.130)	0.231** (0.112)	0.211* (0.108)
State-ownership		-0.133 (0.237)		-0.139 (0.223)	-0.043 (0.213)	-0.045 (0.209)
State-legal-person ownership		0.188 (0.199)		0.219 (0.199)	0.209 (0.209)	0.217 (0.204)
GDP growth rate			-0.036** (0.015)	-0.053*** (0.016)	-0.041*** (0.016)	-0.041*** (0.016)
Inflation			0.000 (0.013)	0.013 (0.011)	0.015 (0.015)	0.017 (0.015)
Growth rate of housing price			0.005 (0.004)	0.003 (0.004)	0.004 (0.004)	0.004 (0.004)
Fiscal surplus to GDP ratio			0.020 (0.013)	0.023** (0.011)	0.024** (0.011)	0.021* (0.012)
Deposit reserve rate			0.034*** (0.011)	---	0.002 (0.018)	0.003 (0.018)
Observations	673	673	673	673	673	673
R-squared	0.05	0.09	0.09	0.12	0.10	---

*Note: Regressions are based on the sample of local commercial banks only, since the impact of promotion pressure on bank risk is not significant for national banks. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. More IV-regression results after controlling different variables can be referred to Table B10. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B10 Politicians' Characteristics and the Relationship between Promotion Pressure and Bank Risk: More IV Regression Results with Different Controls

Variables	IV approach				
	(1)	(2)	(3)	(4)	(5)
Promotion*gender	0.834* (0.449)	0.747* (0.442)	0.833* (0.477)	0.835* (0.476)	0.673 (0.450)
Promotion*nation- ality	0.645*** (0.192)	0.598*** (0.190)	0.670*** (0.194)	0.648*** (0.201)	0.576*** (0.202)
Promotion*working Experience	0.394* (0.213)	0.434** (0.201)	0.413* (0.218)	0.421* (0.228)	0.452** (0.215)
Promotion*tenure	0.049 (0.056)	0.047 (0.055)	0.049 (0.055)	0.055 (0.056)	0.048 (0.055)
Promotion	-1.314** (0.668)	-1.173* (0.653)	-1.348** (0.678)	-1.413** (0.687)	-1.155* (0.655)
Banking sector concentration	-7.342*** (2.718)			-3.686 (3.015)	9.943* (5.429)
Bank size		0.278*** (0.070)			0.420*** (0.123)
State-ownership		-0.061 (0.220)			-0.135 (0.220)
State-legal-person ownership		0.200 (0.201)			0.225 (0.196)
GDP growth rate			-0.036** (0.015)	-0.056*** (0.014)	-0.052*** (0.016)
Inflation			0.004 (0.013)	0.027** (0.012)	0.016 (0.012)
Growth rate of housing price			0.006 (0.004)	0.006 (0.004)	0.004 (0.004)
Fiscal surplus to GDP ratio			0.017 (0.013)	0.005 (0.017)	0.020* (0.011)
Deposit reserve rate			0.031*** (0.011)	---	---
Observations	673	673	673	673	673
R-squared	---	---	---	---	---

*Note: Regressions are based on the sample of local commercial banks only. Bank risk is measured by z-score here. Columns (1)-(5) report more IV-regression results related to Table B9 using fiscal decentralization as the instrumental variable for political promotion after controlling different variables. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B11 An Experiment to Check a Weak Identification Problem

Variables	Whole sample (1)	By type		By period	
		National bank	Local bank	2005-2007	2008-2012
		(2)	(3)	(4)	(5)
Bank size	0.006 (0.102)	-0.291** (0.136)	0.144 (0.120)	-1.074* (0.548)	-0.040 (0.124)
State-ownership	0.081 (0.212)	0.127 (0.554)	0.051 (0.203)	0.450 (0.283)	-0.124 (0.389)
State-legal-person ownership	0.208 (0.204)	0.541* (0.489)	0.260 (0.193)	-0.111 (0.367)	0.140 (0.260)
GDP growth rate	-0.026** (0.013)	-0.097** (0.039)	-0.038*** (0.013)	-0.051 (0.035)	-0.014 (0.014)
Inflation	-0.029* (0.015)	-0.229*** (0.043)	0.002 (0.013)	-0.082 (0.064)	-0.031** (0.015)
Growth rate of housing price	-0.001 (0.003)	-0.032*** (0.008)	0.001 (0.003)	-0.011 (0.007)	0.008* (0.004)
Fiscal surplus to GDP ratio	0.028** (0.014)	0.158 (0.096)	0.025* (0.014)	0.055 (0.084)	-0.006 (0.014)
Deposit reserve rate	0.048*** (0.017)	0.150*** (0.026)	0.018 (0.017)	0.117 (0.128)	0.106*** (0.028)
Observations	980	131	849	305	675
R-squared	0.10	0.22	0.09	0.10	0.16

*Note: Columns (1)-(5) report fixed-effect estimation results of one-period lagged method using different samples. Promotion index is excluded from our regression model. Bank risk is measured by z-score here. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table B12 Test of Non-linearity: A Threshold Model

(Promotion pressure is measured for categories [1 to 5] (= Promotion)
and categories [6 to 10] = Promotion(2); see Section 4(a) in the main text)

Variables	Whole sample		National bank		Local bank	
	(1)	(2)	(3)	(4)	(5)	(6)
Promotion	-0.035	-0.035	-0.154	0.348	-0.047	-0.047
(<threshold = 6)	(0.031)	(0.031)	(0.124)	(0.200)	(0.033)	(0.032)
Promotion(2)	-0.120*	-0.121*	-0.076	0.195	-0.134**	-0.135**
(≥threshold = 6)	(0.069)	(0.069)	(0.096)	(0.121)	(0.069)	(0.069)
Bank size		0.014		-0.439***		0.241*
		(0.116)		(0.090)		(0.135)
State-ownership		0.169		0.443		0.139
		(0.292)		(0.523)		(0.284)
State-legal-person ownership		0.253		0.506		0.388
		(0.246)		(0.458)		(0.242)
GDP growth rate	-0.041**	-0.041**	-0.076	-0.113**	-0.059***	-0.068***
	(0.015)	(0.016)	(0.053)	(0.041)	(0.017)	(0.017)
Inflation	-0.017	-0.023	-0.173***	-0.208***	0.009	0.025
	(0.018)	(0.020)	(0.053)	(0.049)	(0.016)	(0.018)
Growth rate of housing price	-0.001	-0.001	-0.030***	-0.034***	0.003	0.002
	(0.004)	(0.0034)	(0.009)	(0.008)	(0.004)	(0.004)
Fiscal surplus to GDP ratio	0.026*	0.027*	0.102	0.140	0.019	0.024
	(0.015)	(0.015)	(0.102)	(0.112)	(0.016)	(0.016)
Deposit reserve rate	0.047***	0.047**	0.093***	0.157***	0.030***	-0.002
	(0.010)	(0.020)	(0.018)	(0.023)	(0.011)	(0.020)
Observations	704	704	128	128	576	576
Threshold	6	6	3.69	3.05	6	6
P-value for threshold test	0.06	0.06	0.63	0.46	0.06	0.05

*Note: Regression results in the table are based on different samples. The results in the table are based on a balanced panel data of 704 observations. Bank risk is measured by z-score here. Columns (1)-(10) report results of threshold models: Column (1), Column (3), Column (5), Column (7) and Column (9) control for macro-specific variables; Column (2), Column (4), Column (6), Column (8) and Column (10) control for bank-specific and macro-specific variables. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level. The null hypotheses for threshold test is: A linear model (i.e. no threshold exist).*

Table B13 The Impact of Promotion on Bank Risk: With Dummy Variables to Present Each Value of Promotion Index

Variables	Whole sample (1)	By type		By period	
		National bank (2)	Local bank (3)	2005-2007 (4)	2008-2012 (5)
Promotion _dummy_1	-0.054 (0.096)	-0.312 (0.344)	-0.003 (0.099)	-0.006 (0.162)	-0.024 (0.094)
Promotion _dummy_2	-0.137 (0.103)	-0.365 (0.365)	-0.163 (0.108)	-0.004 (0.313)	-0.197** (0.083)
Promotion _dummy_3	-0.148* (0.089)	0.284 (0.378)	-0.250** (0.120)	-0.325 (0.273)	-0.219** (0.105)
Bank size	0.013 (0.042)	-0.277** (0.131)	0.054 (0.116)	-1.237** (0.608)	-0.008 (0.144)
State-ownership	0.285* (0.159)	0.036 (0.537)	0.138 (0.193)	0.023 (0.235)	0.021 (0.347)
State-legal-person ownership	0.197 (0.180)	0.432 (0.514)	0.255 (0.182)	-0.768 (0.292)	0.061 (0.266)
GDP growth rate	-0.017 (0.013)	-0.099** (0.044)	-0.052*** (0.013)	-0.102** (0.047)	-0.029* (0.017)
Inflation	-0.034** (0.015)	-0.247*** (0.049)	0.001 (0.013)	-0.006 (0.066)	-0.015 (0.017)
Growth rate of housing price	-0.002 (0.003)	-0.032*** (0.009)	0.002 (0.003)	-0.003 (0.007)	0.009** (0.005)
Fiscal surplus to GDP ratio	0.021 (0.015)	0.203* (0.100)	0.027** (0.012)	0.051 (0.080)	0.004 (0.012)
Deposit reserve rate	0.050*** (0.012)	0.146*** (0.029)	0.024 (0.017)	0.224 (0.145)	0.087*** (0.030)
Observations	980	131	849	305	675
R-squared	0.10	0.19	0.08	0.15	0.15

*Note: Promotion index is represented by several dummy variables rather than in “linear” form. Here we present the case in which promotion index is constructed by only GDP indicator as it is the most important indicator to construct the index. Thus promotion index vary between [0,3] and three dummy variables are introduced in this case: Promotion_dummy_i=1 represents promotion index=i where i=1,2,3. Bank risk is measured by z-score here, thus significantly negative coefficients of Promotion_dummy_i indicate higher bank risk when compared with the benchmark group (i.e. the group with promotion index=0). Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table B14 The Impact of Promotion on Bank Risk: Alternative IV

Variables	Whole Sample (1)	Subsample by type		Subsample by period		Subsample with information about politicians (6)
		National bank (2)	Local bank (3)	2005-2007 (4)	2008-2012 (5)	
Promotion	-1.820** (0.708)	-4.152 (79.383)	-2.006*** (0.656)	-3.246 (6.735)	-0.911* (0.499)	-3.156*** (1.053)
Bank size	-0.090 (0.101)	-0.829 (10.246)	-0.013 (0.126)	-1.237* (0.723)	-0.055 (0.101)	0.069 (0.147)
State-ownership	0.276 (0.252)	-4.13 (9.994)	0.326 (0.250)	1.406 (2.089)	0.084 (0.360)	0.520 (0.361)
State-legal-person ownership	0.334 (0.232)	0.114 (7.871)	0.503** (0.236)	0.224 (0.909)	0.214 (0.250)	0.425 (0.423)
GDP growth rate	-0.071*** (0.020)	-0.158 (1.083)	-0.097*** (0.022)	-0.214 (0.328)	-0.039** (0.019)	-0.096*** (0.027)
Inflation	-0.008 (0.019)	-0.324 (1.837)	0.029 (0.018)	-0.106 (0.098)	-0.009 (0.019)	0.044* (0.023)
Growth rate of housing price	0.002 (0.003)	-0.069 (0.706)	0.006* (0.004)	-0.009 (0.010)	0.011** (0.005)	0.009** (0.004)
Fiscal surplus to GDP ratio	0.012 (0.013)	0.092 (1.402)	0.003 (0.014)	0.076 (0.200)	-0.018 (0.017)	-0.018 (0.039)
Deposit reserve rate	0.041** (0.019)	0.233 (1.590)	0.007 (0.021)	0.171 (0.201)	0.081*** (0.025)	-0.015 (0.024)
Observations	980	131	849	305	675	713
R-squared	---	---	---	---	---	---

*Note: Regression results in the table are based on different samples. For Columns (1), (3)-(6), promotion takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. For Column (2), promotion equals to the value of promotion index, since no threshold exists for national banks. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Columns (1)-(6) report IV-regression results using average economic performance of competing cities as the instrumental variable for political promotion. Column (6) is based on the sample of local commercial banks for which information about politicians is available. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table B15 The Impact of Promotion on Bank Risk: First-Stage Regression Results of Alternative IV

Variables	Whole sample		Local bank		2008-2012	
	(1)	(2)	(3)	(4)	(5)	(6)
Economic performance of competing cities	0.047*** (0.010)	0.047*** (0.010)	0.058*** (0.011)	0.058*** (0.011)	0.064*** (0.013)	0.064*** (0.012)
Banking sector concentration	-1.778 (1.163)	---	-1.854 (1.420)	---	6.937 (3.586)	---
Bank size	-0.080** (0.032)	-0.061* (0.034)	-0.099** (0.039)	-0.081* (0.042)	-0.021 (0.045)	-0.036 (0.034)
State-ownership	0.084 (0.087)	0.069 (0.089)	0.116 (0.094)	0.103 (0.096)	0.187 (0.140)	0.193* (0.100)
State-legal-person ownership	0.057 (0.092)	0.050 (0.094)	0.106 (0.112)	0.104 (0.114)	0.070 (0.180)	0.073 (0.119)
GDP growth rate	-0.381*** (0.007)	-0.039*** (0.007)	-0.047*** (0.008)	-0.048*** (0.008)	-0.041*** (0.006)	-0.041*** (0.007)
Inflation	0.019*** (0.004)	0.017*** (0.005)	0.020*** (0.005)	0.018*** (0.005)	0.018*** (0.005)	0.026*** (0.006)
Growth rate of housing price	0.001 (0.001)	0.001 (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)	0.002* (0.001)
Fiscal surplus to GDP ratio	-0.004 (0.007)	-0.004 (0.007)	-0.006 (0.006)	-0.006 (0.006)	-0.009* (0.005)	-0.008 (0.010)
Deposit reserve rate	---	0.003 (0.005)	---	0.003 (0.006)	---	-0.014* (0.008)
Observations	980	980	849	849	675	675
F-test	30.38	28.36	34.82	32.74	22.54	21.74
Stock-Yogo test	23.98	23.99	28.01	28.79	23.01	26.22

*Note: Regression results in the table are first-stage regression results of IV approach using average economic performance of competing cities as the instrumental variables for political promotion based on different samples. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*

Table B16 The Impact of Promotion on Bank Risk: IV Approach with Alternative Weights and Periods in Evaluating Economic Performance of Competing Regions

Variables	More weight to current period under two years			Average economic performance of recent three years		
	Whole sample (1)	Local bank (2)	2008-2012 (3)	Whole sample (4)	Local bank (5)	2008-2012 (6)
Promotion	-2.117*** (0.800)	-2.300*** (0.747)	-1.100* (0.620)	-2.370*** (0.800)	-2.626*** (0.774)	-0.926* (0.548)
Bank size	-0.106 (0.106)	-0.031 (0.135)	-0.059 (0.129)	-0.119 (0.109)	-0.052 (0.141)	-0.056 (0.128)
State-ownership	0.308 (0.266)	0.366 (0.266)	0.127 (0.423)	0.335 (0.281)	0.411 (0.287)	0.087 (0.439)
State-legal-pers on ownership	0.355 (0.248)	0.539** (0.261)	0.229 (0.312)	0.372 (0.261)	0.579** (0.286)	0.215 (0.303)
GDP growth rate	-0.078*** (0.022)	-0.105*** (0.024)	-0.044** (0.022)	-0.084*** (0.024)	-0.115*** (0.027)	-0.039* (0.022)
Inflation	-0.004 (0.020)	0.033* (0.019)	-0.004 (0.023)	-0.001 (0.021)	0.038* (0.020)	-0.008 (0.020)
Growth rate of housing price	0.002 (0.004)	0.007* (0.004)	0.012** (0.005)	0.002 (0.004)	0.008* (0.004)	0.011** (0.005)
Fiscal surplus to GDP ratio	0.010 (0.014)	0.000 (0.014)	-0.020 (0.016)	0.007 (0.015)	-0.003 (0.015)	-0.018 (0.015)
Deposit reserve rate	0.040** (0.019)	0.005 (0.022)	0.076** (0.032)	0.039* (0.020)	0.004 (0.023)	0.080*** (0.031)
Observations	980	849	675	980	849	675
R-squared	---	---	---	---	---	---

*Note: Columns (1)-(3) report IV-regression results using alternative weights when evaluating economic performance. Columns (4)-(6) report IV-regression results using alternative periods when evaluating economic performance. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level*

Table B17 The Impact of Promotion on Bank Risk: IV Approach with the Gap in Economic Performance between A Region and Its Competitors as An IV

Variables	Whole Sample (1)	Subsample by type		Subsample by period		Subsample with information about politicians (6)
		National bank (2)	Local bank (3)	2005-2007 (4)	2008-2012 (5)	
Promotion	-3.923** (1.773)	1.913 (2.941)	-4.076** (1.676)	2.926 (4.198)	-2.015* (1.143)	-5.017** (2.418)
Bank size	-0.201 (0.164)	-0.042 (0.372)	-0.143 (0.213)	-0.928 (0.670)	-0.074 (0.147)	-0.043 (0.240)
State-ownership	0.502 (0.394)	0.375 (0.749)	0.610 (0.418)	-0.412 (1.484)	0.338 (0.483)	0.820 (0.613)
State-legal-person ownership	0.480 (0.382)	0.737 (0.635)	0.755* (0.450)	-0.413 (0.715)	0.304 (0.400)	0.637 (0.685)
GDP growth rate	-0.121*** (0.041)	-0.070 (0.074)	-0.157*** (0.045)	0.096 (0.216)	-0.070** (0.034)	-0.138*** (0.047)
Inflation	0.018 (0.030)	-0.185* (0.107)	0.058* (0.031)	-0.061 (0.084)	0.019 (0.034)	0.061* (0.036)
Growth rate of housing price	0.005 (0.005)	-0.014 (0.026)	0.011** (0.005)	-0.013 (0.011)	0.014** (0.006)	0.012** (0.006)
Fiscal surplus to GDP ratio	-0.006 (0.025)	0.188 (0.248)	-0.019 (0.025)	0.036 (0.112)	-0.032 (0.021)	-0.036 (0.057)
Deposit reserve rate	0.033 (0.024)	0.111* (0.060)	-0.004 (0.029)	0.069 (0.172)	0.051 (0.040)	-0.020 (0.032)
Observations	980	131	849	305	675	713
R-squared	---	---	---	---	---	---

*Note: Regression results in the table are based on different samples. For Columns (1), (3)-(6), promotion takes a value of 0 if promotion index is smaller than the threshold, i.e. 6, otherwise it takes a value of 1. For Column (2), promotion equals to the value of promotion index, since no threshold exists for national banks. Bank risk is measured by z-score here, thus significantly negative coefficients of promotion index indicate a positive relationship between promotion pressure and bank risk. Column (6) is based on the sample of local commercial banks for which information about politicians is available. Since observations of deposit reserve rate and banking sector concentration is highly correlated, we have not included them in the same regression. Robust and clustered standard errors are in parentheses. * Significant at 0.10 level. ** Significant at 0.05 level. *** Significant at 0.01 level.*